

# PRINCIPIA MATHEMATICA OF THE FOURTH DIMENSION 

Introduction and Annotated Bibliography

# PRINCIPIA MATHEMATICA OF THE FOURTH DIMENSION Introduction and Annotated Bibliography 


by
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## Mathematical Cosmology: 0-19 = 13:20

Any true cosmology must be able to be expressed by a purely mathematical formula. The full expression of the mathematical formula is that cosmology.

## $0-19$ is the mathematical cosmology of the fourth dimension

Premise: "0.1 The fourth-dimensional Law of Time $\{T(E)=$ Art $\}$ governs the synchronic order of the world of third-dimensional appearances."

Dynamics of Time
Informing and governing the synchronic order of the world of thirddimensional appearances, the fourth-dimension $>$ the third-dimension.

Being $>$ than the third dimension, the only proper cosmology for the third dimension is the fourth-dimensional mathematical cosmology expressed as the 0-19 cosmological order of fourth-dimensional mathematics.

The purpose of the Principia Mathematica is to demonstrate the mathematical cosmology of the fourth dimension as the cosmological mathematics of the $0-19$ code.

## Comprehensive definition of the two end terms of the cosmological formula:

$\{0,19\}$ : "In it \{0-19\} are all demonstrations of the wisdom that is always close and near, but which comprehends the web of galactic being and all forms of its natural order in time. Just as nineteen is the power of God's mercy, so zero is the fullness and emptiness all at once which characterize the nature of mind and all it can know."

> "Telektonon of Pacal Votan," 15:97

Any mathematics is of a mental order. The fourth dimension is the mental order that completes the physical-spatial order of the third dimension. Hence 0 is the necessary expression of mental capacity.

Fourth-dimensional order is purely expressed as a mathematical order. The fourth-dimensional cosmology is mental and not physical. Mind precedes matter.

## Fourth-dimensional $\mathbf{0}$ is not the same as third-dimensional $\mathbf{0}$ :

Third-dimensional zero is a function of the incomplete mathematical order of the decimal (10) system. 10 is the positional power of $1-9$, which only increases in a linear order of power of $10,\{10,100,1000$, etc. $\}$ and hence has no true power of exponentiality. Zero to nine is incomplete, or less than half of the true power of fourth-dimensional time (0-19).

The mathematical notational expression of the order 1-9 (0), is a linear, literate construct which has nothing to do with the mentally sensuous construct of each of the number powers of the order 1-9 (0). There is no power of two expressed by 2 , " 2 " is a mental literate construct denoting two. The same can be stated about " 7 " or any other number of the decimal order, except, perhaps for "1."

The "dot-bar" notation of the $0-19$ code is a pure holographic code in which the notational expression is the equivalent of the mentally sensuous construct of that number, hence one $=$ one dot, two $=$ two dots, three $=$ three dots, four $=$ four dots, five $=$ one bar, ten $=$ two bars... nineteen $=$ three bars, four dots.

Fourth-dimensional 0-19 is the vigesimal order of 20, expressed as 0 (20) or $20(0)$. The positional power $20(0)$ is a genuinely flexible exponential power, and not merely a linear increase according to the binary order $\left\{1,2,4,8,16,32,64,128 \ldots(0=20)^{n}\right\}$

Fourth-dimensional 0 is the positional power of exponential binary increase and emptiness simultaneously understood.

The formulation of the fourth-dimensional notation of the orders of time advances vertically, the lowest order at the bottom advancing to the higher orders. Hence fourth-dimensional time and mathematics is "vertical."

## Postulate 0.5, Dynamics of Time

Nineteen (19 = three bars, four dots) is the mentally sensuous construct that contains all number in one. When 0 is assumed as the first unit, 19 completes the vigesimal order.

Thirteen (13 = two bars, three dots) is the cyclic constant that moves the entire order (0-19). The cyclic constant (13) is so defined by virtue of the power of seven.

The relation between the cyclic constant thirteen, and the exponential constant $0(20)$ is expressed: $13=0(20-7), 0(20)=13(+7)$ where thirteen is a function of the prime power of seven ( $7=$ one bar, two dots), expressed as $13, \mathrm{f}\{7\}$.

In the sequence $1-13,7$ is the middle term with no corresponding equivalent paired unit, expressed as: 1-6 (7) $8-13$, where $\{(1=13,2=12,3=11$, $4=10,5=9,6=8)(7=7)\}$. Hence, (7) is the prime non-paired internal unit in the sequence 1-13 that defines the unique power of 13 in relation to $0(20)$, hence:

$$
13, f\{7\}(+7)=20(0-7)=13
$$

13, $\mathrm{f}\{7\}$ also defines the cosmological order $\{(0-19)(=20)\}$
$0-19$ moved by $13, f\{7\}=260\{$ two bars, three dots over positional zero $=13: 20\}$ 13:20 is the prime fractal ratio that defines " T " in the equation $\mathrm{T}(\mathrm{E})=$ Art.

## To summarize:

The cosmological order of fourth-dimensional time is mathematically expressed: $0-19=13: 20$, where the sum variable possibilities are the expression of two prime factors, a cyclic constant 13 , moving 20 notational constants $=260$, or 13:20.
$(0-19=13: 20)$ is defined as a the cosmological equation (= fractal equivalence), establishing the base matrix of 260 time vector potentialities, which may be extended into infinite grades and levels according to the power of fractal ratios. The base matrix of 260 time vector potentialities defines the cosmological complex of fourth-dimensional time as finite but infinite, a transcension of linear logic, enfolded in a logic of evolutionary unfolding.

The cosmological mathematics of the synchronic order $(0-19=13: 20)$ defining the cosmology of fourth-dimensional time is radically non-linear: now-centered, cyclic fractal, and radiative.

Expressed in its proper notational code, 0-19 (see 0-19 code) encapsulates the entire realm of possibility of the cosmology of the fourth dimension expressed as a purely mathematical cosmology: 0-19 = 13:20.

Being radically non-linear, the fourth-dimensional mathematical cosmology
is also pre- and/or post-literate, though by virtue of exhausting all possibilities of evolutionary development, linear literacy is included as one set of its possible vector potentiated terms. For this reason the purest demonstrations of $(0-19=13: 20)$ are either holographic iconic formal or holographic notational formal, in which a $(4+1)$ color code expresses the holographic cyclic formative qualities of fourth-dimensional time. (See below: Dreamspell Journey Board, Dreamspell Oracle Board, Dreamspell Harmonics and Chromatics)

## Demonstrations of the Cosmology, 0-19 =13:20

Cosmology rightly understood is a description of the evolution and nature of the cosmos, defined as the universal order of things. Hence, cosmology cannot be a merely physical description, but of necessity, is a moral and (from the third-dimensional perspective) metaphysical description as well. What is traditionally understood as metaphysical is, from the fourthdimensional perspective, spiritually normative, while the third-dimensional perspective, per se, is defined as sub-spiritual.

The knowledge of the Law of Time differentiates between the sub-spiritual and the spiritually normative. The sub-spiritual purely third-dimensional perspective is informed by the involution of spirit into matter, while the fourth dimension is informed by the evolution of spirit from matter. Being comprehensively reflective, the fourth-dimensional perspective includes in its cosmology the involution of spirit into matter, but from a point of view in which matter is subordinate to mind or the evolution of consciousness.

With this in mind, three examples of the fourth-dimensional mathematical cosmology ( $0-19=13: 20$ ) are hereby given:

1. "Dreamspell Book of Kin: The Galactic Epic of Free Will" The cosmology of the three geneses of human consciousness (Dragon, Monkey, Moon) are encapsulated as a set of 260 galactic signatures or commands incorporating information of the $(0-19)$ positional constants, the (13) cyclic or tonal constants, and the $(4+1)$ color constants, arranged in sets of: 65 Harmonics ( 4 units each x $65=260$ ); five castles ( 52 units each $x 5=260$; and 20 wavespells ( 13 units each x $20=260$ ). The cosmology of the "Book of Kin" is applicable in a variety of ways, but most simply it codes the calendric cycle synchronically so that any given day
is coded by one of the 260 commands or signatures. Therefore, any self-reflective human may determine his or her base command according to date of birth: this is known as assuming one's galactic signature.
2. "The $\mathbf{2 6 0}$ Postulates of the Dynamics of Time" The cosmology of time as a set of 20 (0-19) sequences of thirteen logical postulates each (= 260 postulates), defines the pure order of time as the evolution of consciousness in relation to the evolution of stellar mass (space, domain of potentiality). Comprising a cyclic comprehensive whole, the 260 postulates of the Dynamics of Time describe a universal cosmology that is God-centered and variably potentiated by radically non-linear intersections of parallel time vectors. In their $(0-19=13: 20)$ wholeness, the 260 postulates of the Dynamics of Time formulate the cosmology of time as the science of time, and hence, the mathematical cosmology of fourth-dimensional time is also spiritually informative and practicable.
3. "Telektonon Prophecy of Pacal Votan" This variation of the cosmology of time is defined as a radically non-linear intersection of a parallel time potentiality (prophecy) transduced into a definitive seven-year solar-terrestrial cycle (AD 1993-2000). Expressed in a literate form within a set of $(0-19)$ sections containing a total of 126 verses \{factors $7,9\{7 \times 18\}=\{\mathbf{9} \times 14\}=126(7+9=16)$. (See below, "Telektonon" for Cube factor of $\left.\mathbb{1} 6\left(4^{2}\right)\{7+9\}\right)$. As prophetic command, $(\mathbf{0}-19)$ Telektonon is the divine revelation of the power of the cyclic constant, (13), formulated as the $\mathbf{1 3}$ Moon 28 ( 7 x 4) Day Calendar, the correct biological measure of the $13: 20$ frequency necessitated by the bios-phere-noosphere transition and the discovery of the Law of Time \{T(E) $=$ Art\}. (See below, Thirteen Moons in Motion)

## ANNOTATED EDUCATIONALLY GRADED BIBLIOGRAPHY

Having been a more or less spontaneous discovery over a time span of some fourteen years, the Principia Mathematica of the Fourth Dimension are not as yet bound into any coherent volume but are scattered through a number of texts. Future workers may extract from these texts a Principia Mathematica that is systematic, succinct, and practical.

For the purpose of education, the sources of the components of the Principia Mathematica, are arranged in a more or less graded manner through an annotated bibliography which describes the nature of the mathematical principles to be discovered therein. Included also are general texts that are helpful in giving the context of the "Discovery of the Law of Time," with special reference to the theme of Time and the Biosphere.

## 1. Turtle of the Thirteen Moons: Indigenous Time for All Humans

The Law of Time $\{\mathrm{T}(\mathrm{E})=$ Art] is not abstract or apart from living or inert form. Though expressed apart from the mathematics of space, time is not separate from space but is incorporated in the living and inert forms of space. The forms of space are functions of the projective radiative geometry of fourth-dimensional time. The power of the cyclic constant, thirteen, codes the normative pattern of scales on the back of a turtle's shell. The turtle is the oldest amphibian-land animal of the biosphere. Like the scales on the turtle's shell, the count of thirteen moons is an aboriginal indigenous constant among the people's of planet Earth. The marthematical cosmology of fourth-dimensional time $(0-19=13.20)$ is allso coded into the human form through the 20 fingers and toes and thirteen major body articulations. This introductory text can be used as a teaching manual for even the youngest children to learn the vigesimal count and the Dreamspell codes. (See below: Dreamspell, Language of Time; Dreamspell Chromatics and Harmonics, Human Holon)

## 2. Thirteen Moons in Motion: A Dreamspell Primer

The historical context of lunar calendars and time counts, as well as the analysis of the nature of the Gregorian calendar sets the stage for this complete harmonic analysis of the Thirteen Moon Calendar. Making the
definitive statement that the Dreamspell codes are a "new dispensation of time for our time," (p. 19) this text provides the pulsar codes of the Thirteen Moons (p. 13ff.) and the "Arcturian Almanac, Dreamspell Catalog of the Mayan Cycles.," (p. 19ff.) which includes a description of (11) solar-lunar synchronization cycles, and (17) galactic-solar synchronization cycles (28 cycles total). The pure form of the Thirteen Moon Calendar is the Wavespell or cyclic constant (13) of fourth-dimensional time, hence, by following the Thirteen Moon Calendar the creative cosmology of cyclic time recapitulates itself annually. (see below: "The Thirteen Unit Cyclic Constant, the Wavespell;" Arcturus Probe, Appendix, The Pulsar Codes, pp. 173-192).

This easy to understand text underscores the point that, in contrast to the mechanized irregularity of mind produced by 12:60 time, the mathematics of fourth-dimensional time are an integrative cosmological whole, which, as a harmonic standard of measure, induce toward a greater harmonization of our perceptions. A calendar is a mental construct. A calendar of irregular measure creates an irregular mind. The opposite is true of a harmonic calendar.

When the four regular seven-day weeks of the Thirteen Moon Calendar are color coded with the movement of the 260 kin of the Galactic Spin, a set of harmonic patterns becomes evident:

1. The horizontal rows (weeks) establish the chromatics and harmonics.
2. Alternating vertical rows are coded by either the occult pairs or the analog pairs.
3. Antipode pairs are coded in alternating diagonal rows running from upper left to lower right.
4. The color families code the sequences of diagonal rows running from lower left to upper right.
(See below: "Primal Time Atom;" "Dreamspell Chromatics and Harmonics")
Not mentioned in Thirteen Moons in Motion is the Mayan name of, and other sources for, the Thirteen Moon Calendar, Tun Uc "Moon Cycle" or "Cycle of Power of Seven." (see Hunbatz Men, Los Calendarios Astronomicos Mayas y Hunab K’u, Mexico, Ediciones Horizonte 1983, pp. 208-11; and Hugh Harleston, Jr., El Zodaico Maya, Mexico, Edicones Diana, 1991, p. 34.)

## 3. The Telektonon of Pacal Votan

Also called "The Game of Prophecy," in actuality, the Telektonon of Pacal Votan is the preliminary technology of telepathy. Since a visual, holographic mathematics and number power are the language of the fourth dimension, and the Law of Time defines telepathy as an inherent function of the 13:20 timing frequency, the Telektonon demonstrates the integrative and comprehensive mathematical cosmology intrinsic to our role in the solar system. The vertical telepathic order operates at many levels simultaneously, hence there are many mathematically defined information levels that also function simultaneously. The simultaneous functioning describes coordinates of celestial harmonics, the fourth-dimensional fractal equations which normalize telepathy and make time travel possible.

In essence, the Telektonon demonstrates that the Thirteen Moon 28-day calendar is a harmonic totality whose conscious use ripens and integrates the latent force of telepathy now dormant within the human species. This it does by engaging the player in the process of "time-keeping." In the Telektonon, two general functions of fourth-dimensional time-keeping are practiced which yield two different information levels of defining and "reading" celestial harmonics on a daily basis:
a) Chronometry. Using a set of historically informative $52(13 \times 4)$ cards, chronometry unifies the two general vectors of time, the biotelepathic third-dimensional and the purely telepathic galactic fourth-dimensional time; and
b) Synchronometry which utilizes the "playing board," in actuality a fourth-dimensional geometry of the (10) planetary orbits synchronized as (5) telepathic circuits holding (6) different functions of consciousness within two fields, telepathy and instinct.

While the card layout of the chronometer is paced by the power of seven, the synchronometer uses thirteen moving pieces. Through the daily practice of the two time-keeping functions, there occurs a full integration of the Thirteen Moon 28 day cycle with the 260 Kin Galactic Spin (5:7 Ratio).

The "game" aspect of this introductory telepathic technology is provided by the mathematics and geometry of the Cube of the Law, function of 16
$=\left(4^{2}\right),(7+9)$ occurring between days $7-22$, the Cube of the Law sequence is the key to the psychically restorative power of the Telektonon. Through the super conscious number power of four, the cube also generates the sequence of prime harmonic number complexes: 20 ( $4 \times 5$ ); 28 ( $4 \times 7$ ), which yields the key Telektonon ratio 5:7: :20:28 $=140=(28 \times 5,20 \times 7)$ $=5: 7:: 260: 364=(52 \times 5=260,52 \times 7=364)$. The nature of the telepathic circuits and number cosmology accorded to the planetary orbits in the Telektonon is further confirmed by Bode's law which describes the orbital ratios of the planets in relation to each other and to their distance from the Sun. ("Instruction Manual," p.50). Also refer to new information, "Sixteen-Year Telektonon Cube of the Law."

## 4. Dreamspell, The Journey of Timeship Earth 2013

In its visual, holographic form, Dreamspell, the Journey of Timeship Earth $\underline{2013}$ is the complete presentation of the integrative mathematical structure of fourth-dimensional time. The comprehensive expression of the mathematical structure takes the form of two primal mandalas of a projective radiative geometry: the Dreamspell Oracle Board (Mandala of Being) and the Dreamspell Journey Board (Mandala of Becoming). The form of the boards is a pure $(4+1)$ fifth force function, where four leaves fold out from a fifth central matrix. The form is the symbol, the meaning is in the form.

The source of the $(4+1)$ form is the primal mandalic geometry of the fifth force itself, the primal time atom and its geometric projection, the color cube. The presentation of the Dreamspell components is in the order of their recapitulating the cosmology of time as an evolving system which reflects the formal properties of the radial matrix as an unfolding experiential geometry encoded by a cyclic, recombinant language of form, color, and number. (Dynamics of Time, Postulate, 3.9. "Geometry is how fourth-dimensional time incorporates third-dimensional form.")

## The Structural Origin of Time

## Primal Time Atom and Color Cube

The cosmological origin of the fifth force is referred to as the primal time atom. The primal time atom is the minimum symmetry pattern of creative form: a central and four $(4+1)$ directional components. Primal radial differentiation precedes and is more comprehensive than linguistic discrimination, hence a $(4+1)$ radial color code constant establishes the original structural language of time. Color is vibrant and mentally sensuous, expressing comprehensive qualities unable to be communicated by verbal language. Each of the $(4+1)$ fifth force radial directional components of the primal time atom is accorded a color and set of relations as follows:

## Antipode, Set One:

red (right) and blue (left) = antipode relations (1) white (above) and yellow (below) = antipode relations (2)

## Analog, Set Two:

red and white $=$ analog relations (3)
blue and yellow $=$ analog relations (4)

## Occult, Set Three:

white and blue = occult relations (5)
yellow and red = occult relations (6)

## Four plus One (4+1) Matrix

green $=4(+1)$ central component $=$ matrix, fifth force core ( 7 )
The four colors create three sets of six different color relations which cosmologically expand to form a primal cube of creation (three internal planes extend to create six sides); the $(4+1)$ green, becomes the seventh internal point of the cube. The color cube exhibits the three (3) color relations of each of the four (4) colors, to create a nested set of optical tetrahedra consisting of $12(3 \times 4)$ color triangles exhibiting the sum of all the four color constant relations. Color represents qualities of vibratory frequency of the different time vector potentials.

The fifth force $(4+1)$ structure of the primal atom of time and color cube are the cosmological origin and end-all of time and the universe. The twodimensional form of the time atom constitutes the elemental radial matrix.

The radial matrix is the origin of all mandala patterns and projective radiative geometry in general. All fourth-dimensional geometries participate in orders of the radial matrix and are known as fractal factors of time vector potentials. All geometries are universal and constant. (See: Call of Pacal Votan, "Mathematical Principles of Fourth-Dimensional Time," pp. 46-52, "Color Cube," pp. 59-62; Telektonon, Cube of the Law; Rinri Project, Cube of the Law, Heptagonon of Mind, Primal Cubic Parton and finally Dreamspell, "Color Cube.")

## The Primal Language of Time

## 1. The Thirteen Unit Cyclic Constant, The Wavespell

The thirteen tone constant is a function of the primal tetrahedron of the geometry of form. Within its elementary ratio of structure extended in time, the tetrahedron pulses an intrinsic interactive geometry of three triangulated pulsars and five overtone pulsars. The primal tetrahedron establishes itself as a fourth-dimensional time pulsar. By ratio power (1:5) of the overtone fifth implicit in the central point within the tetrahedron, the first magnetic (1) point establishes the next tetrahedral point as the Overtone (5) point. By the power of the same ratio $1: 5$, the third point of the tetrahedron is a (9), and the fourth point completing the ratio extension of the tetrahedron is a (13). Hence the primal tetrahedron ratio: $\{1: 5:: 5: 9:: 9: 13=1\}$. This ratio establishes the cyclic constant of fourth-dimensional time conserved as a moving tetrahedral order of thirteen tones which establish a recapitulative cosmology called a wavespell.

Between the Magnetic (1), Overtone (5), Solar (9) and Cosmic (13) points, the potentiality of three other number pulsars establishes the cyclic cosmology of time:

1. Lunar life pulsar (tone 2) polarizes (inert-living) which, by duration, attains rhythmic consistency (tone 6), completing itself in a perfection of planetary (tone 10) manifestation of biospheric form. (First dimension)
2. Electric sense pulsar (tone 3) activates sensitivity of life which, by duration, attains resonant capacity (tone 7), completing itself in a spectral liberation (tone 11) of sensitized life energy. (Second dimension)
3. Self-existing mind pulsar (tone 4) sensitized life becomes mentally formative which, by duration of mind, attains galactic integrity (tone 8), completing itself as a crystalline order of form complexification (tone 12). (Third dimension)

The thirteen positions of the wavespell cyclic constant are called tones because of their unconditional, yet etheric or vibrant constancy. Time is a frequency. Number is a holographic unity. The cyclic constant is mentally sensuous.

Within the wavespell the intrinsic notational kinship of the number sets between themselves creates a set of overtone pulsars:


The thirteen-tone wavespell is the cyclic form constant of fourth-dimensional time, and hence constitutes the primary thirteen-power component of the language and cosmology of fourth-dimensional time ( $0-19=13: 20$ ). (See Call of Pacal Votan, "Tetrahedrons and Tetrahedral Order," pp. 50, 51, "Wavespell and Pulsars," pp. 54-58; Arcturus Probe, Appendix, "The Pulsar Codes," pp. 173-198, see below).

## 2. Dreamspell Chromatics and Harmonics $(0-19=4+1)$

The language of the wavespell is the primal cyclic form nested within the radial structure of the $\mathbf{0 - 1 9}$ code, the complete mathematical cosmology of the fourth dimension. The 0-19 holographic notational structure provides the matrix for the establishment of the complete movement of the ( $4+1$ ) fifth force color code, where four colors moved five times yield 20 possibilities $\{4+1 \times 4=20(0-19\}$.

The ( $4+1$ ) color-coded dynamic establishes a $\mathbf{2 0}$-unit iconic code language, which overlays the purely mathematical $0-19$ code. This 20 -unit iconic code language, " 20 solar seals," establishes two basic cosmological constants:

## 1. Chromatics ( $4 \times 5$ ) of Four Clans and Five Earth Families, and <br> 2. Harmonics ( $5 \times 4$ ) of Five Time Cells and Four Color Families

While the Chromatics distinguish four vertical sets of five units each (bar, 1-4), the Harmonics are four horizontal sets of five units each.

The four ( $4 \times 5=0-19$ ) chromatics are defined by the bar, $1-4$ sequence and the common color of the first and fifth positions, hence: yellow chromatic, red chromatic, white chromatic, and blue chromatic. The chromatics are also referred to as the four clans: fire clan, blood clan, truth clan,
and sky clan. The five horizontal rows of the chromatics further distinguish the five Earth Families by one of the following notational designations: bar = polar family; one dot = cardinal family; two dot = core family; three dot = signal family; and four dot = gateway family.

The five ( $5 \times 4=0-19$ ) harmonics establish the vertical sequence of the five time cells, each time cell coded by the four color constant: red, white, blue and yellow. The horizontal rows establish the four ( x 5 ) color families, each color of which controls one of the four positions of each of the five time cells.

All chromatic and harmonic functions (0-19) are dynamics of a fifth force potentiality $(4+1)$, hence $(0-19=f\{4+1\})$.

Special applications of the 20 -unit recombinant chromatic and harmonic iconic color language of time include: Human Holon, Planet Holon, Dreamspell Genesis, and Planetary 0-19 Code.

The actual mathematical formulations implicit and explicit to these forms is described in The Call of Pacal Votan, "Mathematical Proofs and Demonstrations," pp. 53-84).

## The Primal Mandalas of Time

## Primal Matrix or Womb of Time Mandala - Dreamspell Oracle Board

The holographic geometry (radial matrix) of the fifth force time atom governs the complete presentation of the Dreamspell Oracle Board. The four exfoliated leaves recapitulate the four color code constants, while the ( +1 ) factor (green), codes the central fifth leaf. The four-plus-one leaves create the five $(4+1)$ time cells which constitute the informational biology of time: Time cell one, input red; Time cell two, store white; Time cell three, process blue; Time cell four, output yellow; Time cell five, matrix green. Each time cell is coded by a red initiating, white refining, blue transforming and yellow ripening pre-iconic number/color.

Within each of the $(4+1)$ time cells are a set of four patterns, coded according to the four color constants $=4$ sets $\times 5$ leaves $=20(0-19)$. Just as the four leaves fold out symmetrically from the fifth leaf at the center, so each of the $20(0-19)$ five-part fifth force oracles (time vector potential bundles) are in precisely the same form. Each time vector potential bundle (oracle) is a mathematical order, where each of the $20(0-19)$ number components is accorded one of four colors: $1=$ red, $2=$ white, $3=$ blue, $4=$ yellow, $5=$ red... $20(0)=$ yellow. Hence, there are four time vector potential bundles per time cell, each reflecting the same color pattern, but with an increase or difference of four of the number order 0-19 (20) within each time cell.

Each oracle (time vector potential bundle) is ordered by a number/color which ordains its place within the time cell. The ordering number/color is known as the destiny kin. By its number/color each destiny kin at the center of each oracle has a relation to the three other colors through a set mathematical code:

- left side, antipode $=+10$ or -10 from destiny kin;
- right side, analog = destiny kin + analog = 19;
- bottom, occult $=$ destiny kin + occult $=21$;
- above, guide $=$ same color $=$ the fifth component of each oracle, coded according to one of five possibilities possessing the same color as the central destiny kin of the oracle, including the possibility of the destiny kin itself.

The order of the guides follows the pulsar codes of the 13-tone cyclic constant (wavespell). The 13 tone fifth force guide component of each of the 20 (0-19) oracle/time vector potential bundles complete the cosmological equation: $0-19=13: 20$.

Hence the five time cells of the Oracle Board with $4(x 5=20)$ oracles or time vector potential bundles per time cell constitutes the matrix or womb of time mandala form of the equation $(0-19=13: 20)$ time vector potentials in a pure geometry of form. (See Call of Pacal Votan "Oracle Board," pp. 62-65, Dreamspell, pp. 22-26).

## Primal Actualization of Time or Mandala of Becoming - Dreamspell Journey Board

The Dreamspell Journey Board demonstrates by the power of $(4+1)$ form the radial matrix of the movement of time in its minimal $\{0-19=13: 20\}$ process which defines the dynamic actualization of time. As with the Oracle Board, the primal radial matrix of four $(+1)$, unfolds as four leaves from a fifth central leaf, which follow the same primal color coded, counter-clockwise directional movement: right leaf, red east, initiating; top leaf, white north, refining; left leaf, blue west, transforming; bottom leaf, yellow south, ripening; central leaf, green matrix, synchronizing.

The dynamic of the actualization of time is communicated by the use of the form of the thirteen tone cyclic constant, the wavespell. While each leaf of the Oracle Board/Womb of Time Mandala is distinguished by four five-part radial forms of potentiality (oracles) constituting a time cell, each of the leaves of the Journey Board/Mandala of Becoming exhibits four thirteen tone wavespells ( $=52 \mathrm{kin}$ ) constituting a castle of time. The counterpart to the five time cells are the five castles of time, corresponding to the five leaves of the Journey Board, whose functions are described above. The four wavespells of each castle participate in the same four-part color coding: red eastern wavespell, white northern wavespell, blue western wavespell, and yellow southern wavespell.

Just as there are $20(0-19)$ five-part Oracles there are $20(0-19)$ thirteen tone wavespells. While the power of thirteen is only potential in the fifth force guiding position of the oracles, the power of thirteen is totally explicit in the Journey Board Mandala of Becoming, hence the Journey Board shows all of the positions of the 260 kin described in the Dreamspell "Book of Kin" (see above). Coordinated by the Thirteen Moon Calendar, the movement of all of the different color relations - antipode, analog, occult - iconically coded according to the chromatics and harmonics, can be tracked on the Journey Board, which, thereby becomes the main reference for mapping the celestial harmonics. The $52(4 \times 13)$ kin of the four wavespells per five castles of time, in their power of motion, demonstrate the $260(52 \times 5=$ $\{0-19=13: 20\}$ ) kin galactic spin, the purely fourth-dimensional timing cycle.

The visual pattern of each Castle of Time is in the form of a swastika turning to the left. (Sanskrit: swastika = good health) This directional pattern represents the tendency of the evolution of spirit from matter, pointing ultimately to the dematerialization of the physical plane.

By their forms of presentation, both the Journey Board and the Oracle Board, can be meditated upon, as all mandalas are meant to be, in their cubic form as well. That is, the four extending leaves can be joined to create a cubic form, where the green central leaf is at the back and the other four leaves are extended out, each perpendicular to the next. In this way, the non-linear holographic power of the radial matrix of time can actually be experienced as a perception of the interior of the five sides of a cube, the sixth side being the "perceptual field" of the viewer. The mandala is a construct for holding and "training" the mind to understand that the essence of all things may be contained in one image form-constant inseparable from the mind.

Both the Oracle Board and the Journey Board reveal that time is a mandala (radial matrix) which informs space with its powers of directionality inseparable from the perceiving mind which has the power of shaping reality according to knowledge of time vector potentials. (See the Call of Pacal Votan, Mathematical Principles of Fourth-dimensional Time, pp. 46-52; "The Wavespell," pp. 54-56, and the "Galactic Spin: The Journey Board," pp. 65-67.)

## Circle and Square: The Galactic Compass and Harmonic Index

The holographic mathematical cosmology of time literally unfolded through the Dreamspell proofs of the radial matrix: the wavespell, the time atom, the color cube of time, and the mandalas of the Oracle and Journey Boards, finds completion in the radiative planar geometry of the circle and the square, represented respectively by the Galactic Compass and the Harmonic Index.

The Galactic Compass compresses through a set of seven rings, five of them moving, the entire gamut of 18,980 possibilities of coordination of the 260 kin of the Galactic Spin and the $364+1$ days of the Thirteen Moon Calendar which synchronize precisely every 52 years $\{=5: 7:: 260: 364(+1)=73$ (spins) : 52 (years)\}. Literally a digital calculator, the Galactic Compass encodes all of the information of the Book of Kin, the Oracle Board and the Journey Board in its sets of rings which demonstrate the following ratios, beginning at the center and extending outward:

1. Center four-color harmonic dial $=1: 65$
2. Five-color castle ring $=1: 52$
3. 20 wavespell ring $=1: 13$
4. 20 kin day ring $=1: 1$
5. Thirteen tone white ring $=1: 1$
6. Solar tonal sequence coordinating yellow ring $=1: 20$
7. Correlate date green ring $=1: 20$

The reverse side of the compass graphically demonstrates the synchronization dates according to the 52 -year solar-galactic synchronization cycles in expanding sets, comparable to a tree growing a ring every 52 years.

The quadratic square matrix of the Harmonic Index is the complement to the circular matrix of the Galactic Compass. Based on the Tzolkin (see below, Mayan Factor, Earth Ascending), the Harmonic Index is a purely fourth-dimensional tool. Literally a $13 \times 20(=260 \mathrm{kin})$ number matrix, the complete 13:20 fourth-dimensional mathematical code may be contemplated within the Harmonic Index. The mathematical properties include:

1. Five Time Cells (right side) $(5 \times 4=20)$ which create
2. 65 Harmonics $\{65 \times 4=260=(0-19=13: 20)\}$, each Harmonic, except the 33 rd, forming a radially paired set of:
3. 32 Inverse (occult power) Harmonics ( $32 \times 2=64,+1$ the $33 \mathrm{rd}=65$ )
4. 13 Harmonic Runs, five Harmonics or Time Cells, 20 kin per run $=260$
5. Five Castles (above) $(52 \times 5=260)$
6. the 20 Wavespells ( x 13 tones $=260 \mathrm{kin}$ )
7. Inverse symmetry of the 52 Galactic Activation Portals creating the Loom of Maya/Binary Triplet figure (see Earth Ascending, Mayan Factor).

The purity of the 13:20 matrix demonstrated by the Harmonic Index enable it to be the universal gauge or fourth-dimensional standard of measure, and the sine qua non for the study and source of the time vector potentials which constitute the realm of celestial harmonics.

The point of contemplation with both the circle Compass and square Harmonic Index is the potentiality of the radial matrix to holographically encode itself in a variety of fractally enfolded forms, each of which constitutes a high degree of information compression. Both Compass and Harmonic Index recapitulate in their totality of form and information the complete cosmology $\{0-19=13: 20\}$

## 5. The Call of Pacal Votan, Time is the Fourth Dimension

Originally written as A Treatise on Time Viewed from its own Dimension, The Call of Pacal Votan is the key compendium of the principles of fourthdimensional mathematics, especially in relation to the component parts of the Dreamspell, Journey of Timeship Earth 2013, the actual operating codes of time and the basis of a correct mathematical understanding of applied celestial harmonics.

The difference between the science and mathematics of third-dimensional space and fourth-dimensional time is elaborated as the basis of the critique and analysis of contemporary science in general as a major deviation from the course of nature, referred to as "alienation from nature." The root alienation is due to following an irregular measure and timing frequency apart from the natural order. Analysis of the deviation itself calls for the correct understanding of the science and mathematics of fourth-dimensional time. In place of the entropic third-dimensional system is the "Planetary Whole Systems Approach." which presents three fundamental premises within a unifying fourth.

## The Three Plus One Planetary Whole Systems Premises

1. The Psychophysical Premise, literally "mind-and-body" correlate assumes the primacy of mind and the inseparability of the field of perceiver and perceived; this establishes the need for an integrative mathematical order.
2. The Universal Aesthetic Premise, $\mathrm{T}(\mathrm{E})=$ Art, implicit in the extended description of the psychophysical premise that the world conforming to our multi-sensory order is actually a harmony of various ratios and mathematical proportions.
3. The Mayan Premise, the third premise recognizes that the chief contribution of the Mayan civilization was the vigesimal mathematic order of the 20 -count ( $0-19$ ) code in all of its zero-based positional permutations. Being intrinsically a harmonic complement to the psychophysical and aesthetic premises, the Mayan premise supplies a definite mathematical description otherwise lacking in the first two premises.
4. The Planetary Whole Systems Premise, is the unified compendium of the three prior premises enfolded into the full-blown elaboration of
an integrative, non-reductionist whole system in which the planetary order fulfills the minimum requirements of demonstrating a cosmically unified whole order. The biosphere is the immediate whole system holocosm for understanding and applying the principles of time. The planetary whole systems premise assumes the unifying principles of the biosphere and the resonant fields (gravitational, electromagnetic, biopsychic) which complete each other in the evolutive principle of the biosphere-moosphere transition. (see: "Rinri Project," Earth Ascending, "The Dynamics of Time," Vernadsky: Biosphere, Problems in Biogeochemistry II)

The purpose of the Law of Time and all of its adjunct principles is nothing less than the fulfillment of the biospheric premise: making conscious what was unconscious, and hence, advancing to the noosphere. The presentation of the mathematical principles of the Treatise on Time is solely for the purpose of scientifically completing the biospheric premise initiated by V.I. Vernadsky.

## Mathematical principles of fourth-dimensional time summarized:

- Radial Matrix: now-centered, self-generating, radially linked whole number pattern sets, whose power of movement is;
- Fractal, capable of maintaining symmetrical consistency across scale through;
- Ratios, information-bearing proportional constants;
- Tetrahedral, minimum, as well as root basis, of geometrical order, with maximum information capacity, constructed in time as the cyclic thirteen-tone constant or wavespell; and
- The plus one factor: for any $n$ there will always be $n+1$. This factor overcomes all stasis and assures the principle of circulation as a vortex continuum, without beginning or end.

The demonstrations and proofs of these mathematical principles of fourthdimensional time are cataloged as the mathematical descriptions of the component parts of the Dreamspell, Journey of Timeship Earth 2013. In this way, the Dreamspell can be understood as the self-referenced mathematical system and cosmology of fourth-dimensional time presented as a "tool box." The proofs and demonstrations contained in the Dreamspell include:

- 0-19 Code (Radial Matrix)
- The Wavespell and Pulsars (Tetrahedral Principle, Fractals, Ratios)
- The Color Cube, Harmonics and Time Cells (Tetrahedral Principle, Fractals)
- Chromatic or Overtone Fifth and Oracle Board (Radial Matrix, four plus one factor, Ratios)
- Galactic Spin: Journey Board (Radial Matrix, Wavespell, Fractals, Ratios)
- Spectral Fractals (special example of Fractals, Chromatics, $\{4\}$ plus one factor)
- Galactic Compass and Harmonic Index (Radial Matrix, Ratios)
- Binary Pentad (special application of Overtone Fifth, plus one factor, Ratios)


## Synthesis and Application: Advent of the Noosphere

Having presented the mathematical principles of fourth-dimensional time as they are made concrete and realizable in the component parts or tools of the Dreamspell, the Treatise on Time proceeds to the general and holonomic description of the advent of the noosphere from the logic of the principles of fourth-dimensional time. In this way the biospheric premise postulated by Vernadsky, the biosphere-noosphere transition, receives its general completion in the correspondence of planet holon (=0-19) and human holon $(=\mathbf{0 - 1 9})$, which analog the correspondence of the inert $\left(\mathrm{SO}_{2}\right)$ and organic $\left(\mathrm{CO}_{2}\right)$ components of the biosphere.

The fractal transposition of the radial logic of the 0-19 code results in a fractal equivalence between the whole system "planet" and the whole system "human." This is holonomically correct, since the principle of holonomics states that the "whole is in the part, every part is holy." The one-to-one correspondence of the 20 -digited, four-limbed, five-centered human with the tetrahedralicosahedral fourth-dimensional structure of the planet holon is a fact of the profoundest significance for initiating the biosphere-noosphere transition.

To coordinate the three resonant fields of the planet within the planet holon, corresponding to different elements of the human holon, a chronosphere is postulated. The chronosphere is the planetary whole system timing regulator which synchronizes all orders according to the telepathically activating and all-unifying law of time. The chronosphere is a function of and another term for the psi bank, the planetary whole systems memory storage and evolutionary program guide. The purpose of the biosphere-noosphere transition is to consciously activate the chronosphere, otherwise known as opening the psi bank plates. (see: Rinri Project)

## Formula of the Overtone Fifth and Vernadsky's Biomass Constant Transition to the Noosphere

The biogeochemical purpose for entraining the human biomass once again, and now consciously, within the 13:20 timing frequency is ultimately to balance the inert cyclic order $\left(\mathrm{SO}_{2}\right)$ and the organic cyclic order ( $\mathrm{CO}_{2}$ ). (See Dynamics of Time, Sections 7-10)

The initial stage involves consciously activating the correspondence between the planet and human holons. The ( $0-19$ ) of the planet holon consists of three weaves which correspond to the three resonant fields:

1. Gravitational field = four root races (color families), moving from lower left to upper right;
2. Electromagnetic field = four clans (chromatics), moving diagonally from upper left to lower right; and
3. Biopsychic field = five Earth Families, moving horizontally in five bands (polar family - north pole, cardinal family - north temperate, core family - equatorial, signal family - south temperate, gateway family - south pole).
"The interaction of the three fields with the icosahedral weave pulsed by the series of 13 -kin wavespells generates the psi bank, the resonant information 'storage facility' of the chronosphere." (p. 109) This triple weave, bound together and activated by the chronosphere, is moved by the thirteen tonal wave sequences of the cyclic wavespell constant to synchronize the planet holon with the solar-galactic timing frequency.

The solar-galactic timing frequency is expressed by the ratio 5:7. This ratio synchronizes the galactic cycle (5) to the solar cycle (7), as in 260:364 = 5:7; or inversely, 52 years (7):73 Spins (5) $=7: 5$. The key complex terms defined by the $5: 7$ ratio are 52 ( 52 weeks, 52 solar years) and 73 ( 73 spins, 73 Overtone Chromatics). Defining the number of Overtone Chromatics equal to 52 weeks ( $5 \times 73=7 \times 52(+1)$ ), 73 is the number of the biomass constant.

The Overtone Chromatics are defined by the four-dot Gateway Family which synchronizes the solar-galactic years with the thirteen moon cycle every Magnetic Moon 1 (July 26 old style). Since it is the regularity of the Overtone Fifth through the Overtone Chromatic that maintains the minimum base cycle of the biomass constant, 73 , it is the identification of the human holon
with this regularized motion of the overtone fifth that is the key for engaging the human holon with the planet holon, thereby establishing the biospherenoosphere transition. (see: Rinri Project, "The 73 Chromatics of the Biomass Constant: Coordinating the Human and Planet Holon," pp. 21-24).

Since the Overtone Chromatic is a function of the biopsychic field, movement of the five Earth Families, the human holon correspondence with the planet holon is achieved through a daily one-to-one kin correspondence between Earth Family of the Planet Holon with corresponding psychophysical center (chakra) of the human holon. This identification establishes a conscious rapport between the human and the psi bank, as well as between the organic $\left(\mathrm{CO}_{2}\right)$ and the inert $\left(\mathrm{SO}_{2}\right)$ which hastens the biosphere-noosphere transition and the manifestation of the psi bank, the chronosphere's evolutionary auto-regulator.

## Vernadsky's Biomass Constant: An Equation in Time

The entire logical and mathematical exposition of the function of the biomass constant $\{73(5)\}$ is laid out in $\mathbf{3 7}$ Postulates (pp. 114-124). This set of postulates gives the biosphere-noosphere transition both a precise mathematical definition, and, by making conscious the Law of Time, establishes an actual and equally precise chronology or time table for the completion of this hypercritical evolutionary transition. The 37 postulates of the biomass constant $\{73(5)\}$ unify and complete all of the principles of the biosphere as described and defined by Vernadsky. By making logically and mathematically precise all of the key principles of the biosphere, the 37 Postulates of the Biomass Constant satisfy all of the requirements of a genuinely objective cosmology: that it can be expressed mathematically and that the mathematics of its expression recapitulates the cosmology.

An Appendix (pp. 125-129) gives an Index and ephemeris of the 73 Annual Overtone Chromatics in fractal relation to the Thirteen Moons, and to the Haab or 18 Vinal + 1(5-day) Uayab Solar cycles. (Haab: $18 \times 20=360=$ 72 Overtone Chromatics, Uayab $=73$ rd Overtone Chromatic) (See Above: Telektonon of Pacal Votan).

## 6. The Arcturus Probe, Tales and Reports of an Ongoing Investigation

"All true science is applied cosmology."
(Arcturus Probe, "Appendix: The Pulsar Codes," p. 175)

Written as an imaginal reflex formulating the mythic or historic dimension of the cosmology of time encoded as the $\mathbf{2 0}(=\mathbf{0 - 1 9})$ "tribes of time," the Arcturus Probe creates an interdimensional vision of the evolution of the galactic memory now encoded within the human species and its biosphere.

The key value of this imaginal text for the Principia Mathematica is the Appendix Pulsar Codes, pp. 173-192. The pulsar codes (see Above: The Wavespell) assume an entire scientific cosmology that is interdimensional rather than restricted to descriptions of third-dimensional domains, inclusive of the electrical composition of the galactic beams and the disposition of the RANG: the generative basis of life from a primal disharmonic pulsation or "sound," generating its own harmonic feedback.

The primal feedback transductions of RANG are formulated as four "tones," which constitute the essence of a type of $\mathbf{g}$-force beam radiated from certain interdimensional stellar points referred to as CSR (Central Stellar Radion). The four primary "tones" are:

- Magnetic (1), fourth-dimensional tone (primal attractive tone establishing by primal projective geometrical power the tetrahedral ratio)
- Lunar (2), first-dimensional tone (primal disharmonic polarization)
- Electric (3), second-dimensional tone (primal harmonic activation)
- Self-Existing (4), third-dimensional tone (primal synthesis of polarityelectricity as form)

These four tones or dimensions, the g -force building blocks, spontaneously generate by the power of the tetrahedral ratio $\{(1: 5):: 5: 9:: 9: 13=1\}$, the

- Overtone (5) fifth-dimensional tone, the "propelling" power of the g -force beam, which, with the magnetic tone establishes the building blocks of the beam.

Once established, the interactive motion of the five primary tones extends to create the galactic order, tones six through eight, which, by overtone pulsar power, amplifies the first three dimensions. The ninth tone, then, is the overtone extension of the fourth-dimensional pulsar into a solar (stellar) tone, which, as the primal core of any star, completes the galactic order $\{(1: 5:: 5: 9)=$ magnetic + overtone $=$ solar $\}$.

From the solar tone (9), there is a stepping down of the impulses of the first three dimensional tones, converting the beam to a "planetary" level. The twelfth or crystal tone represents both the final complexification of
form and the highest state of mind in relation to phenomenal reality. The thirteenth or cosmic tone $\{(1: 5:: 5: 9:: 9: 13)$ magnetic + overtone + solar $=$ cosmic\}, subsumes all the previous tones and transports the tonal force of the beam into a spontaneous recapitulation of the magnetic tone, whence the process regenerates itself. This cyclic recombinant tonal cosmology maintains the $g$-force ratio ( $13: 20$ ) as the universal constant or natural timing frequency $(\mathrm{T})$ in the equation $\mathrm{T}(\mathrm{E})=$ Art.

Generated as the wavespells of time, minimum of $20(=0-19)$ per 260-kin galactic spin, (13:20 ratio), the pulsar cosmology is elaborated as the pulsar harmonics for the generation of galactic electricity. Composed of seven types of radion, galactic or cosmic electricity is an interdimensional bonding fluid. The purpose of the pulsars is to activate and release the types of radion. (see below: Rinri Project, "Heptagonon of Mind")

There are $65(5 \times 13)$ harmonics per galactic spin, or five castles with thirteen types of tonal harmonics in each castle. Each of the thirteen types of tonal harmonics are distinguished by a tonal number. The sequencing of the tonal number is characterized by differences of two number orders, nine and four $(9+4=13,9-4=5$, the cosmic 13 and overtone 5 are the key tones establishing the range of $65(13 \times 5)$ pulsar harmonic possibilities. The first four types of pulsar harmonics (1-4) are distinguished by a descending interval number frequency difference of nine. Between the fourth and the fifth tonal harmonics there is an ascending interval number frequency difference of four. This four distinguishes the interval frequencies between the nine positions (4-13). The difference between the cosmic (13) tonal number (46) and the magnetic (1) tonal number (37) is the first of the four differences of nine. (see pp. 178-183, for complete description and indices of pulsar and pulsar harmonic types and the breakdown of the varieties of tonal number sequences)
> "Since the frequency numbers of the pulsars and overtone pulsars are based on tonal sums, and since the tones are transduced manifestations of the primordial RANG, these are important clues for the use of the pulsar harmonic frequency information.

## "If there is a rite for every RANG, how much RANG can you rite?" (p.183)

For any of the five castles of time $\{52$ kin $\mathrm{x} 5=260=13: 20(0: 19)\}$, there are four wavespells, each of which begins with one each of the four building block tonal harmonics. These four harmonics are subdivided into two antipode sets which establish the basis of cosmic electricity within each of the five castles of time. The formula for these antipode sets of harmonics
establishing the four wavespells of any castle is:
Red Eastern: Self-Existing +
Blue Western: Lunar = ground
White Northern: Electric +
Yellow Southern: Magnetic = force field
(See pp. 183-190 for complete elaboration of "implications and applications" of the pulsar technology, including fractal resonances (celestial harmonics), radiosonics, and physical displacement. This material is complemented by the complete theoretical and logical elaboration of the constructs for celestial harmonics in the "Dynamics of Time.")

Finally, (pp. 190-92) there is a description and catalog of the $\mathbf{2 6}$ pulsar vertices establishing the 26 lines of telepathic resonance between the four pulsars and the five overtone pulsars which constitute the Wavespell geometry. The differences and the sums between the axis vertice points create frequency number intervals. The sum of the tonal frequencies of the thirteen wavespell positions is 364 ( $13 \times 28$ ); the sum of the sums of the 26 pulsar vertices is also 364 - the number of days in one Thirteen Moon year. This information points to and is complemented by the Telektonon of Pacal Votan. By displaying the Thirteen Moon 28-day circuit as a telepathic "switchboard" for monitoring the daily chronometry and synchronometry, the Telektonon allows the pulsar codes their play within the celestial harmonics which distinguish the meanings and movements of the synchronic order.

The Glossary of the Arcturus Probe (pp. 193-205) may also be of some use in furthering a description of the profoundly now-centered fourth- and fifth-dimensional cosmology, which is ultimately mathematical in nature.

Forthcoming annotation to be continued for the following:
7. Discovery of the Law of Time
8. The Dynamics of Time: 260 Postulates
9. The Rinri Project
10. Earth Ascending
11. The Mayan Factor: Sub-Theme, Time and the Biosphere
12. The Story of Time, The Story of Turtle and Tree
13. The Biosphere
14. Problems in Biogeochemistry II

Submitted by Rinri Preceptor, Valum Votan
Prior to reception of the Sixteen-Year Telektonon Cube of the Law
Navigation Tower of Timeship Earth 2013


