

UNIVERSAL QUANTUM NUMBERS

WILLIAM JOHN COX

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An Introduction

by
William John Cox

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Incorporating images from papers previously published in *The Work: A Geometrical Model of the Universe, as Defined by Quantum Numbers, with the Quantification of pi, phi, e, and i* (August 2020), *Mind & Its Languages of Reason* (2019), *Millennial Math & Physics* (2015), as the print edition of the eBooks, *Mindkind: Math & Physics* (2012) and *Time Travel to Ancient Math & Physics* (2012).

Cover by Liam Newman (all-UK champion web designer of author's sites), who also prepared *The Work* cover that closes this eBook, showing the series of expanding computer-generated *UN* models, including the *UN* sphere, as a symbolic waveform of our universe set upon a Golden Spiral.

The cover of *Universal Quantum Numbers* depicts a massive triangular object with rainbow lights appearing in the night sky over distant snow-covered mountains, as seen through the windshield of a car suddenly stopped on a lonely road cut through a forest in the snow. The approaching image is a computer modeling of 13 of the 14 vertices of the *UN* sphere as three sides of a spherical tetrahedron projected onto a two-dimensional plane (as demonstrated at the Introduction).

The photograph of children's blocks following the Dedication includes an original wooden model of the *UN* sphere carved and painted by the author, oriented to the missing vertex (#1) and the flower pedals of its six triangles, each with its own color of the rainbow. They comprise the remaining $\frac{1}{4}$ triangular base of the projected plane of the spherical tetrahedron—the *UN* symbol of the Quantum One, ($\mathcal{Q}1$). Created 40-years ago, his wooden-magnetic model of a *UN* tetrahedron, with its internal *UN* octahedron, is shown on page 12.

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DEDICATION

Written for those who struggle, as did I, to memorize the rigid rules of high school algebra and geometry, while imagining shapes and colors far outside the classroom windows, instead of the chalk symbols on the board, and to those who study, research, speak, write, and teach the mathematical and scientific languages of mind in their professional, endless, skeptical quest for intellectual truth.

In particular, I would not have been able to write this paper and my earlier works, without my lifetime access to the wonderful library contributed by those with knowledge who wrote the thousands of books and articles I've encountered and read over the past 75 years, especially those by scholars and journalists who write about mathematical and scientific matters in a language I can understand.

As I document my own observations and imaginations in these matters, using my limited mathematical vocabulary, I strive to make my papers clear, interesting, and thought-provoking to young, intellectually curious, and socially and environmentally concerned, high school, undergraduate, and graduate students interested in studying math, science, history, society, philosophy—as well as art and music.

Having ready access to Wikipedia, search engines, and other marvels of the Internet, I trust the ability of these informed readers to fact check everything written here, including the history, philosophy, and the art of mathematics I offer for their interest, and I trust in them to make good use of what they learn to save the People. It is the children born into this century of crisis—using the healthy strengths of their families and societies to cure intolerance and disease—who will determine if humans survive on Earth at its end.

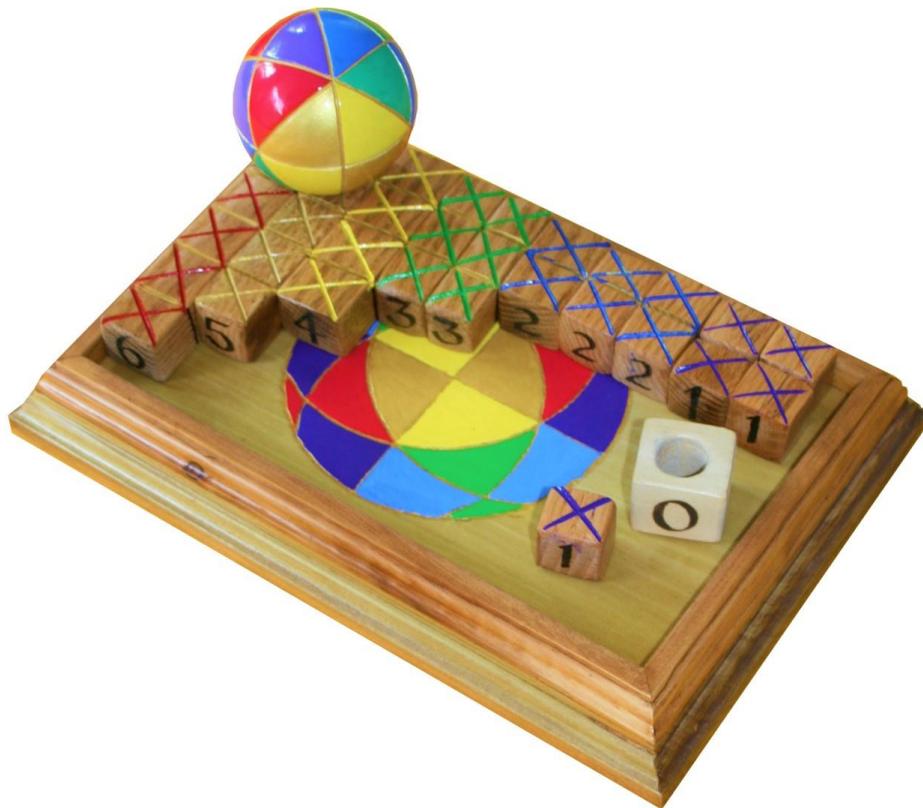
I write also for those beyond the magical years of youthful intellectual exploration and discovery—wary and uncertain now, but made wiser by the hard lessons of life, yet retaining questions about who, where, and why we exist.

Earlier, I prepared a short Synopsis for *The Work*, and, following its publication in August 2020, I discovered how very nicely perfect and Mersenne prime numbers display themselves in Universal *UN* numbers.

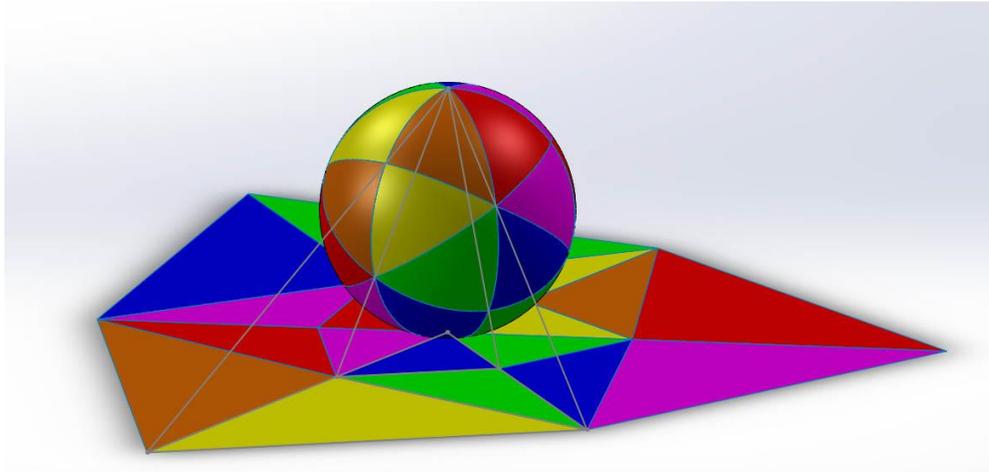
Writing a new paper on perfect numbers and incorporating the Synopsis, I began this introduction with a brief history of relevant mathematics and geometry to illuminate the path to an understanding of Universal Quantum Numbers. The paper was illustrated with 20 figures, models, and photographs from my earlier writings and files to create this little picture eBook, and to free up my mind to think about other pressing matters.

This Introduction is what I did during home isolation in October and November, as the chaos and insanity of the 2020 elections roiled U.S. national politics, as a pandemic killed more than a quarter million Americans, with another quarter-million doomed to die before the snow thaws in the spring, and as environmental and economic collapse swept around the world. (Nearing 800,000 at end of 2021) I remain connected to current events by my computer and its fiber optic Internet connection—as I do what I can to confront the matters that concern us, in seeking sane solutions to insane problems—which in the aggregate pose the realistic threat of human extinction within the lifetimes of babies being born today.

Continuing to work in my study and to rest, read, and reflect in our gardens, the time has come for thanksgiving—for two new healthy great grand babies this year, the third boy and the first girl. It is a time for the laying aside of spinning quantum matrices, and for the making of wooden toys for children to start learning their numbers. ~wm



AN INTRODUCTION TO UNIVERSAL QUANTUM NUMBERS



A MATTER OF FRACTIONS, FINGERS, AND HUMAN CALCULATORS.

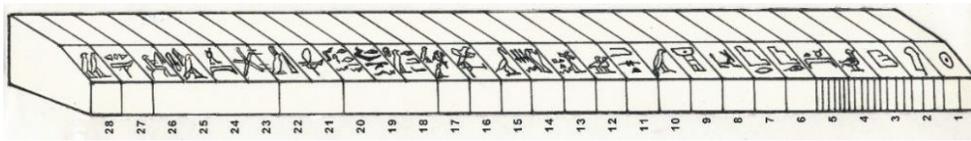
The carved leg bones of ancient baboons discovered at two different locations in Africa provide the earliest evidence of counting and the contemplation of time. Found in Swaziland and dated to 37,000 years ago, the Lebombo Bone was carved with 29 notches tracking the monthly phases of the moon. Unearthing of the Ishango Bone in the Congo, carved as early as 25,000 B.C.E., revealed a ten- and 12-based numeral system involving the addition, subtraction, multiplication, and division of numbers. The sets of notches have been interpreted to represent the doubling and halving of sub-bases three and four, with columns adding up to 48 and 60.



Employing a multi-cultural, numerical sign language evolving over thousands of years of land and sea travel, exploration, and trade, Egyptian and Sumerian civilizations used their hands and fingers to rapidly calculate, *and to communicate* complicated mathematical problems and solutions to build magnificent structures 4,500 years ago. The Sumerians employed a 60-base calculation system, founded on the multiples of 12 (being the total of three

knuckles on the four fingers of one hand) accounted for as an abacus by the five fingers of the other hand, ($5 \times 12 = 60$). When the leftover thumb of the first hand was multiplied against the lot, they arrived at ($6 \times 60 = 360$), which we continue to use in clocking time and mapping our earth and universe.

The Egyptians applied a more complex fractional number system based on the perfect numbers of six and 28 to devise their standards of measurement. They started with one hand divided into four fingers, and they joined four hands of 16 fingers into a “foot.” One-and-one-half “feet” were then combined into a “yard” consisting of six hands of 24 fingers used as the common cubit in the surveying of land and other secular matters. When another hand of four fingers was added to the common cubit, the sacred cubit consisting of seven hands and 28 fingers could be further subdivided into fractional parts by its increased divisors.

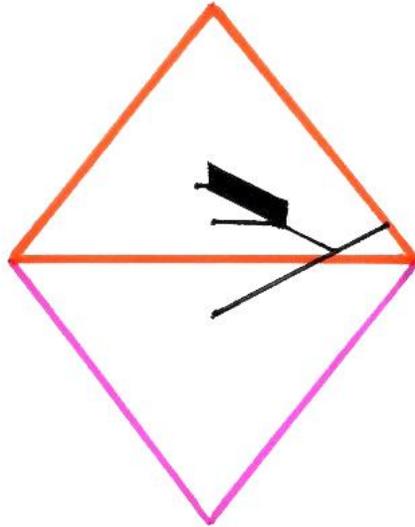


Using these fractions, Egyptian builders and surveyors could determine the area of a square (laid out on land by massive right-angle triangles of cubit-knotted ropes created by great teams of rope stretchers and stake holders) having sides of 70, which was half of a square with a side of 100, which was half of a square with a side of 140. Under this system, the diagonal of a square was both $10/7$ and $14/10$ of the side. This produced an approximate value for the square root of two ($\sqrt{2}$) as between 1.42857 and 1.4. When greater accuracy was required, the two results were averaged, $(1.42857 + 1.4) / 2$, to arrive at the close figure of 1.41428. (Base-10 scientific $\sqrt{2} = 1.41421356$.) At this point, the Egyptians were working with a fairly exact geometric value for the square root of two, and correlated that value with geometric π .

With their working value of π (3.142857) derived from one divided by seven, combined with their mastery of the π -related fractions producing the Golden Proportion, the Egyptian engineers were able to lay out and build the Great Pyramid, elevating the flat surface of a square from its center to a height equal to the radius of a circle having the same circumference as the edges of the square base.

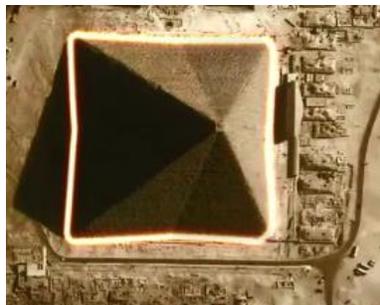
Within an imaginary clear spherical dome, the pyramid was built as the top half of a diamond-shaped octahedron (with its bottom half embedded in the

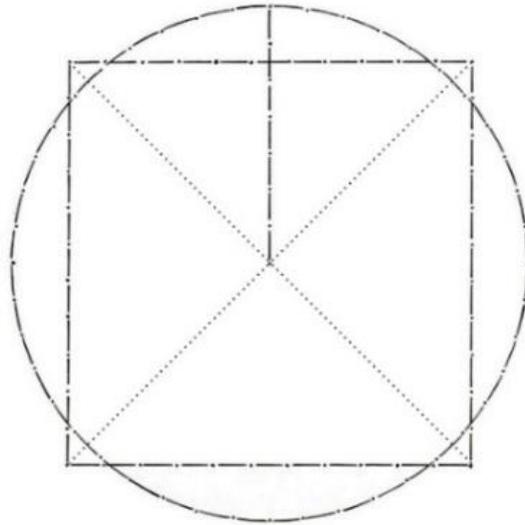
rock below, along with its own underground passageway and chamber) erected as a four-faceted hemispheric model of one half of the earth. Viewed from the east, a vertical north-south slice of the octahedron, with its eastern half removed, would reveal its entry on the north face, and its main corridors and chambers.¹



The square pyramid base was measured with long ropes, stretched around four sides of 11 cubits, for a total of 44, and a circle of the same circumference surrounded it, having a radius of seven. The ratio between the height (7) of the pyramid and one half of one side (5.5), is equal to the square root of the Golden Proportion ($4/\pi = \sqrt{\phi}$), and the area of each face is equal to the square of the height. The actual radius and height in sacred cubits were multiples of 40, with 280 for the radius, 440 for each side, and a circumference of 1,760.

¹ An aerial view demonstrates that each of the four sides are actually indented down the middle, from top to bottom.





Imagine being able to soar over this magnificent monument to geometric and engineering perfection as completed, having watched its 2.3 million, 2.5-ton foundation stones being quarried, dressed, transported, elevated, and laid to perfection, *one stone every two minutes*, more than 315 every day, ten hours a day, 365 days a year, for 20 years, without a break for bad weather, lunch, or weekends.

This timeline does not include the quarrying and slicing of massive granite slabs weighting up to 80 tons, transporting them more than 500 miles, cutting the massive shapes to exact measure, polishing the surfaces and edges to perfection, lifting them, and setting them into place within the center of the pyramid surfacing the 153-foot ascending Grand Gallery, which connects the two interior granite chambers. Nor does the timeline include the construction and placing of the gold pyramidion at its tip, and the quarrying, transportation, cutting to precise angles, polishing, and fitting with knife-thin joints, of the pure white limestone casing, from top to bottom, nor does it include the cutting and setting of the polished white paving stones of the massive plaza that surrounded the pyramid.

Zooming in from the east over the Sinai desert from the Red Sea toward the setting sun on a cloudy late afternoon, we can spot the white pyramid with its gold tip appearing over the horizon through the moving clouds, at the end of its waterway to the Nile River, adjacent to the ancient Sphinx.

Slowing to a stop as the setting sun breaks through a cloud, we can snap a quick photograph of the pyramid and its massive white square plaza. A circle may have been engraved in gold in the pavement around the pyramid base

within two gold squares (twice and three times the area of its base demonstrating the squares and roots of two), and displaying a diamond tip at the cardinal points, with its radius extending to the north.

At midday on the summer solstice, the Sun shines its rays straight down upon the north face of the white pyramid and they are reflected across the white pavement, pointing an arrow to true north with a discrepancy of less than 0.06 percent. Set as a geodetic marker at the intersection of two of the longest surface lines of latitude and longitude on Earth, half-way between the equator and North Pole, the Great Pyramid has weathered for at least 4,500 years as a one-to-43,200 scale model of the planet, and it remains far beyond our ability—with all our genius and modern technology—to replicate today.



HELLENISTIC AND LATIN MATH AND GEOMETRY. Adapting the arithmetic and geometry they inherited from the earlier Mycenaeans and learned in their own sea travels and trade during the thousands of years of Egyptian dynastic civilization, the classical Greeks substituted alphabetical symbols from

their linear syllabic script to represent the base-10 numbers one through nine, and for 10, 100, and their multiples.

1	α	alpha	10	ι	iota	100	ρ	rho
2	β	beta	20	κ	kappa	200	σ	sigma
3	γ	gamma	30	λ	lambda	300	τ	tau
4	δ	delta	40	μ	mu	400	υ	upsilon
5	ϵ	epsilon	50	ν	nu	500	ϕ	phi
6	ζ	vau*	60	ξ	xi	600	χ	chi
7	ζ	zeta	70	\omicron	omicron	700	ψ	psi
8	η	eta	80	π	pi	800	ω	omega
9	θ	theta	90	\koppa	koppa*	900	λ	sampi

The Greek philosopher-mathematician, Pythagoras of Samos (c. 570 – 495 B.C.E.) established a school at Croton in southern Italy where “mathematikoi,” or “learners” were taught to purify their minds by studying what was known about math and science, instead of meditating on the metaphysical and incomprehensible. Initiates were spiritually sworn to preserve the secrets of their mathematics, as they believed GOD controlled the universe with numbers—all of which could be expressed as a ratio of two whole numbers. These were the only rational numbers they could comprehend—everything else was heretical nonsense.

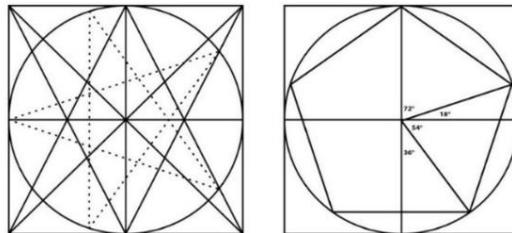
Credited to Pythagoras, but well known to the ancient Sumerians and widely used by the Egyptians for millennia to resurvey land following the annual flooding of the Nile, to measure and cut the massive granite slabs encasing the King’s Chamber of the Great Pyramid and to construct the Khafre Pyramid ($3^2+4^2=5^2$), the right-angle theorem was taught, along with the theory of proportionality, in which two quantities are directly *and* inversely related to a constant point or product by fixed ratios. The cult was bound by the inherited rules of mathematics they memorized and applied in measuring, dividing, and counting; however, the learners were not allowed to imagine the existence of irrational numbers, such as the square root of two.

The Pythagoreans had learned to reduce a solid cube by slicing off four of its opposing corners diagonally across its six flat square faces, to reveal a concealed solid tetrahedron with its four flat triangular faces, which they could hold and study. If the value of each edge of the cube is one, then the diagonal (and edges of the internal tetrahedron) is equal to the troublesome square root

of two. When they cut off half of the four tips of the tetrahedron, they revealed an internal solid octahedron with six vertices and eight triangular faces.



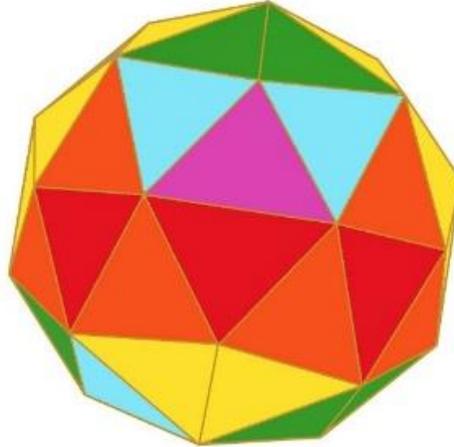
The Greeks may have reacquired much of their mathematical knowledge from the Egyptians, following the loss of the Mycenaean civilization, but their treasured secret was a method to construct a flat pentagon with a compass and ruler. A rebel mathematician, Hippiasus of Metapontum (c. 530 – c. 450 B.C.E), was ostracized and executed by his Pythagorean brothers for revealing how to draw a circle within a cube, then a pentagram star within the circle, creating five equal points and pieces of 2π . This allowed the accurate construction of the difficult pentagon, with its associated angles being useful for trigonometric functions.



Five pentagon edges were attached to the edges of 11 other flat pentagons to create a solid dodecahedron, with its 12 flat pentagon faces defined by 20 vertices and 30 edges. According to Plato, it was the dodecahedron that the gods “used for embroidering the constellations on the whole heaven.”

Each pentagonal face could be further subdivided by connecting the five corner vertices to its center, creating five additional flat triangular facets on each of the 12 pentagonal faces, for a total of 60. By extending the 12 vertices at the center of its faces to that of its corner vertices, Hippias elevated the

dodecahedron into a hexacontagon (or pentakis dodecahedron) of 60 facets, allowing him to inflate the flat facets into a near sphere. We see his spheres today as soccer balls, geodesic domes, and “Buckyball” single-layer C_{60} /graphene, with its 60 carbon atoms.



Since the pentagram and its pentagon were the secret symbols of the cult, and because he also dared to publish and expose a definitive proof of the irrationality of the square root of two, Hippasus violated his oath of intellectual castration and he discredited his brotherhood. Allegedly, he was thrown overboard from a ship under sail at sea by his fellows and left behind to drown alone in the wake of their profound self-imposed ignorance—certain they knew all that needed to be known about everything that mattered.

The brutal Romans copied their practical geometry and counting (and art) from the Hellenistic Greeks they conquered (including the brilliant polymath Archimedes, “The Sand Reckoner,” of Syracuse, whom they slaughtered with a sword in 212 B.C.E.). Roman lack of intellectual curiosity allowed mathematics to stagnate for a millennium, as written Latin language formulation and communication of all calculations, beyond the physical abacus and counters, were encumbered by the repetitive marks in fives and tens, written as the Roman Numeral I’s, V’s, X’s, C’s, and M’s. In doing so, the Romans regressed what little they learned from the Greeks, employing a stick method that was ancient by the time the Egyptians wrote out their more practical numbers.

Thinking and writings about scientific and philosophical matters were denounced as heresies by the Roman Catholic Church—in league with brutal kings and emperors—creating an intellectual vacuum across Europe that lasted for centuries. The age is noted in history by the insanity and cruelty of the Crusades, especially the suffering of poor young people encouraged by Christian preachers in France and Germany to fight against Islam in Palestine. Tens of

thousands endured starvation, slaughter, and enslavement in the Children's Crusades of 1212.

The wisdom of the ages contained in the great libraries were burned and forgotten as humanity under the power of GOD's representatives on Earth, were returned to the center of a universe created and judged by GOD. The imaginary epicycles of the nested spheres of the heavens, as defined by Claudius Ptolemy (c. 100 – c. 170 CE), became Roman Church dogma for centuries in its rejection of science.

The future of mathematics was saved by the “sifr” (empty, zero, naught) placeholder of the Arabs, which they had acquired from the Hindu Sages of India. The “0” symbol provided a concise method to “cipher” the repeated addition, multiplication, subtraction, and divisions of all numbers, including “decimal” fractions in their commercial and governmental affairs.

Leonardo Fibonacci of Pisa (c. 1179 – c. 1240-50) introduced the written Arabic number symbols into Europe, just as the great Kurdish Sultan Saladin (c. 1137 - c. 1193) was defeating the Holy Roman Empire's Third Christian Crusade, liberating Palestine, and becoming the Custodian of the Two Holy Mosques at Jerusalem and Mecca.

Fibonacci also commenced the European recovery of the lost libraries of Hellenistic Greek and Eastern mathematical and philosophical literature destroyed by the intolerant Romanized Christians in their centuries of book burnings and inquisitions. These works were rescued and translated by the enlightened Arabs over the centuries, as their Islamic culture of righteousness spread from Saudi Arabia to Africa and Spain, and across Turkey, Armenia, Iraq, through Iran to Afghanistan, into western China, and east through India and Indonesia to the Philippines.

Writing and calculating in Arabic numbers, the Islamic scholars developed and employed the language of algebra to solve quadratic equations. Learning the Arabic numbers and their methods while living and studying among Muslims, Fibonacci was able to sequence the Golden Ratio numbers and to demonstrate their resonance with ϕ (as each ϕ number can be multiplied by 1.2 (6/5) and then divided by the second previous number to approximate geometric ϕ).

This infusion of the intellectual freedom of the Islamic culture and its mathematics encouraged the development of the logarithmic tables and exponential functions that were essential to the development of modern scientific notation. Tragically, this freely shared Eastern knowledge also fueled

the Industrial Revolution that produced the weapons used by the West to conquer and colonize the Americas, Africa, Asia, Australia, and the Pacific Islands, to enslave their People, and to debase their ancient native and Islamic cultures.

Once freed from the Dark Ages of devastating religious and intellectual repression, the renaissance of suppressed ancient skeptical scientific curiosity flowered into new scientific discoveries and the assertion of individual freedom of thought. These were enabled by the written notational calculus of constant change in movement, space, and time that blossomed from the magnificent minds of Galileo², Descartes, Newton, Euler, Planck, Einstein, their scholarly colleagues, and their prodigy. With pen and paper calculations, slide rules, and tested formulas, they managed to make it to the moon surface and back using a computer having less capacity than a modern smartphone. Working in concert, these marvelous minds seeded the present harvest of digital computation and artificial intelligence (AI) to aid us in understanding who we are, where we are, and why we are here asking questions.

COMING OF AGE, MATHEMATICALLY. In our current endeavors to calculate the distances out to the edge of our visible universe, or back in time to its beginning, we are governed by the speed of light. And, as we peer into the core of the infinitesimally smallest probabilities in the division of a single light wave, and our calculations break down after *h-bar* before reaching zero, we are just as retarded by our continuing reliance on our ten fingers for counting and communicating numbers—as were the Pythagoreans by their rejection of irrationals, and the blockheaded Romans by their stacks of sticks. Our

² On June 22, 1633, almost 70 years old and nearly blind, Galileo was led before two Holy Office cardinals of the Roman Catholic Church and forced, upon threat of torture and death, to kneel and to “abjure, curse, and detest the aforesaid errors and heresies” that the earth circled the sun, instead of the opposite, as mandated by the Church for more than 1,300 years. Fortunately, in his remaining nine years of house arrest, Galileo studied and documented the acceleration and timing of rolling objects, allowing Newton to build upon his work and Descartes’ in creating the calculus of constant change. (Author’s photo of his beautiful equipment to measure acceleration in the Museo Galileo in Florence, Italy.)



computers have demonstrated they operate most harmoniously in base 16, as they physically process and manipulate the bits, nibbles, and bytes of electronic data using programming languages based on the (0-1, yes-no, 1-2) binary multiples and powers of two.

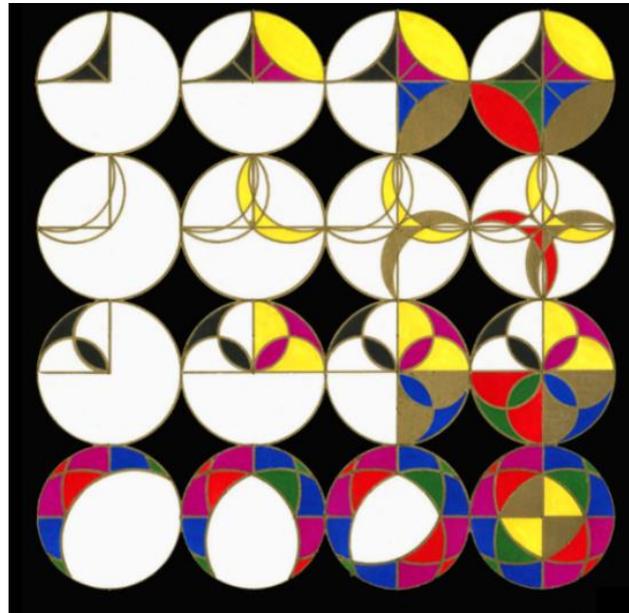
Being out of sync with the geometric progression of the powers of two (2, 4, 8, 16, 32, 64, etc.), decimal base-10 was hyped to hexadecimal ASCII by inserting A, B, C, D, E, and F as numbers between nine and ten. Overlooked was a more logical organization of 16 counting symbols into sets of the multiples and powers of two to reflect physical binary processes; their programming languages; the written entry data and formulas of the calculus; *and* to graphically display the ratios and relationships of all numbers for visual cognition, especially the lengthy ones encountered in binary coding and the sciences.

The *UNStar* numbers carry the powers of two, *1,2,3,U, 4,5,6,N, 7,8,9,S, C,X,W,10*, allowing us to visually recognize and organize sets that can be easily applied in existing *20 (32)* and *U0 (64)* bit computer programming operations, and to expand, as needed, into and beyond *N0 (128)* and *100 (256)* bit functions in a logical progression of unlimited quantifiable numbers.³

1	2	3	U
4	5	6	N
7	8	9	S
C	X	W	10

³ Base-10 numbers are underlined, and *UN* numbers are *italicized*, with thousands separated by colons (:).

The *UN* numbers can also be imagined as rainbow colors symbolically reducing a cube from its *N* (eight) corners by a series of curves to pierce its center and beyond to become an expanding sphere. These can be identified as the electronic signature of the *10 UN* base numbers, displayed, *and* transmitted spectrographically as faceted colors to be multiplied and divided, infinitely, in measuring and counting what we see geometrically.



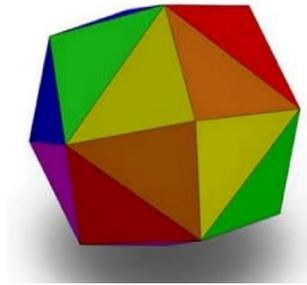
SPHERICAL QUANTUM GEOMETRY. The written *UN* symbols (especially *.12UN*) used for calculating the fractional roots *and* powers of two introduce a logical (four) *U*-place hexadecimal, bilingual, negative-positive, programming and calculating language. *UN* mathematics intersect and interact with the natural fractional divisions of a polyhedron which was never imagined by the Pythagoreans or Platonians.

Even with everything learned in the last century, we continue to gird our spherical geometry and to time the flight of light using archaic Sumerian base numbers. Confined as we are within a seventeenth century cube of Cartesian dimensions manipulated by Newtonian calculus, we are without a mathematical method to predict what exists in the negative nothingness on the other side of zero. Without light, nor vision to see in blackness, we are blind to most of what is.

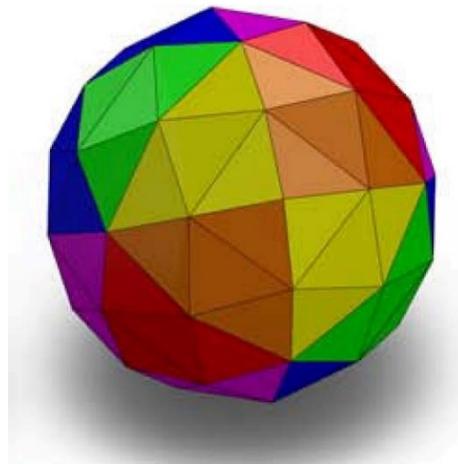
Let us imagine holding a cube in our hands and compressing it down to nothing. We can quickly reduce the lengths of the *N* (8) corner vertices of our

cube, along with the vertices of its *five* (6) faces to zero, and then go straight through—continuing without stopping—becoming the opposing vertices extending to an equal length. The compressed cube will become an expanding sphere.

Next, we can create pyramids on the six surfaces of an expanding Cartesian cube by extending each of the positive and negative x, y, z coordinates to a height equal to its corner vertices. The volume of the cube is doubled into a (24) *1N*-faceted model of Golden Proportions, having (14) *X* equal vertices. Each right-angle triangle facet has two sides equal in ratio to $(\phi/\phi^2)/2$ and a hypotenuse equal to $\phi-(\phi/\phi^2)/2$. The result is a Catalan solid designated as a tetrakis hexahedron.



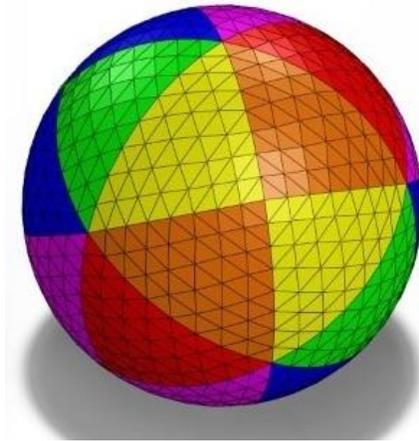
Rather than choosing the center point of each triangle to elevate, the facets of each of the *1N* triangles can be subdivided into *U* equal triangles by connecting their perimeter midpoints, creating new vertices to extend to spherical height, reflecting new flat facets, each containing its individual three-dimensional slice of volume, all the way down to zero.



Continuing to inflate the polyhedron, we can inscribe its appearing sphere upon the earth with *five* (six) perpendicular circles intersecting at their *X* (14) vertices, set on the Equator at the Greenwich Meridian. The lines tile its surface with *1N* (24) equal and congruent right-angle triangles, each having sides of ratio $3:3:U$ (3:3:4), a height of $2.N$ (2.5), or $1/U$ (1/4) π , and a perimeter equal to π times radius. Derived from one divided by its *six* (7), geometric π equals $3.2U7$, of which $2 \times 12UN = .2U7$, and $6 \times 2U7 = .WWW$, or an almost One.



Each of the *1N* right-angle triangles can be infinitely subdivided into *U* equal triangles, allowing each new right-angle facet to focus a unique polar coordinate at the center point of its three vertices as a mathematical marker, extending the center vertex of a three-sided quantum *TriStar* to spherical length on each facet. New facets are produced in the geometric series of *1N* (24), *50* (96), *1N0* (384), *500* (1,536), *1:N00* (6,144), *5:000* (24,576), etc. The following near-spherical *UN* model has *500* π facets (and *1:200* potential quantum *TriStar* facets).



It is from somewhere within this spherical geometric and mathematical framework, constructed with existing systems of coordinates and tools of calculus, that we can imagine our universe of plasma and light to be located. Of this universe, we and our minds are a quantum part and a natural progeny of the whole.

THE GEOMETRIC ROOTS OF QUANTUM ONE. This introduction commenced with a computer-generated model extending 13 of the *UN* sphere's 14 vertices and displaying 18 of its 24 right-angle facets, in projecting 3/4 of its surface area as three sides of a spherical tetrahedron onto a flat plane. (The sphere can be oriented on the projection by its yellow/gold squares surrounded by the other rainbow-colored triangles.)

The base of the projection model rests on the remaining base vertex #1 surrounded by the flower petals of its *five* (six) triangles, arrayed together as the base triangle of the spherical tetrahedron—an image of one and its perfect number of five, with its natural divisions and colors. These five facets are multiplied by *U* (4) and displayed on the sphere as *1N* (24) facets.



The “*Quantum One*,” (Q1) represents the simultaneous existence of the positive one and the negative one, unified at the transparent zero as a mirror reflection of each other, allowing (Q1)² to quantify as *two*. The inherent ability of one to reproduce itself, manifests itself as the powers of two: 2²=*U*, 2³=*N*,

and $2^U=10$. Quantumly, if +1 is yes, and —1 is no, does the (Q1) represent the simultaneous existence of both?

The following UN positive-negative number sets calibrates the inherent quantum numbers through the geometric π roots of $.12UN$, and they quantify the squares of two through the roots of e . The *Quantum One* can be divided and multiplied, mathematically, geometrically, and quantumly, in and out, from zero to infinity, powered by the merging of its positive and negative matrices, as they spin their quantum entanglements.

THE QUANTUM LEAPS OF UNIVERSAL NUMBERS. Each Positive One (+1) is composed of one billion “*One Pluses*” (1+), valued at 0.000000001 , with each little *eit* (e-it) being further quantified as a ratio reduction of the number e , commencing in binary base two ($1+ = \sqrt[7]{e}$). The ratio increases by 7s (9) in succeeding two-power bases, including the UN base-100 (256) positive number matrix, in which the *eit* is calibrated and quantified at $(1+) = \sqrt[UN]{e}$. ($UN=72$).

The bi-lingual UN quantum number languages introduce the mirroring of these probable positive numbers with their proximate inverse negative numbers using a representative WS - (252) base, U - (four) place, numeral language commencing with the tiny counting number $.010U$. When multiplied by WS , $.010U$ produces $.WWW0$. This is the fractional Negative One (—1), the proximate equivalent of the whole Positive One (+1).

Quantified at $.010U$, the *iit* (i-it), or “*One Minus*” (1-), is the *millionth* quantum element of the Negative One (—1). Twelve (18) *iits* add up to a $.12UN$ (“*2bit*”), and X (14) *2bits* equal $0.WWW$, or a “*buck*.”

In the U -place counting series, $.010U$, $.020N$, $.030S$, $.0U10$, etc., the left two columns advance by one whole number and the right two columns add up from $.0100$ to $.01WW$, WW (255) times, advancing by U 's. This allows each whole number to inherently contain WW demonstrable fractional numbers, and three quantum numbers (e.g. $.0101$, $.0102$, $.0103$, $.010U$).

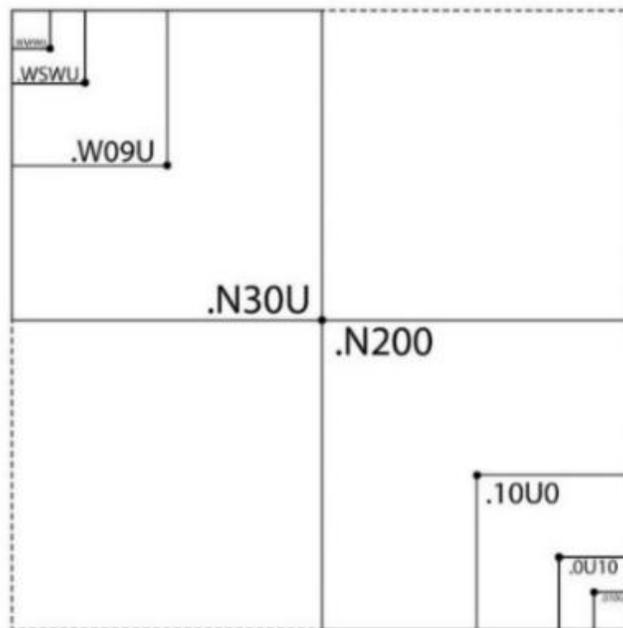
Not only can these internal quantum numbers symbolize the three current fixed qubits of quantum computing (yes, no, and both), but they can also serve as quantum \mathcal{Q}_x , \mathcal{Q}_y , and \mathcal{Q}_z , identifying N (eight) possible combinations. This allows the display of N uniquely colored (black, violet, blue, green, white, yellow, gold, red) spectrographic identities of the three (positive-negative-neutral) quantum possibilities for each counting number in the negative matrix, as calibrated in sets of N .

This quantum leap allows N to the N th to equal $1:000:000$ —the number of basic elements in the Negative One (-1), each having a unique signature of light—with the ability to fragment further as needed.

Moreover, numerical ratios of whole UN numbers *one* through W (as in the base-10 fractions $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{1}{6}$, $\frac{1}{7}$, $\frac{1}{8}$, and $\frac{1}{9}$) smoothly translate into UN , calibrated by $.010U$ at $1/WS$ ($\frac{1}{252}$), providing logical four U -place, fractional sub-matrices, especially the divisions of one by *six*, N , and *seven*. While these fractional numbers cannot be directly multiplied against each other within the matrices, they can be multiplied and divided by whole numbers. Quantumly, they have an entangled geometric relationship with each other across the matrix, connecting any two calculating numbers by the value of the hypotenuse of their right-angle triangle.

In combination, the complexity of these fractional relationships, and the ease of AI assumptions, should accurately and instantly reflect a unique, calculable, and visually identifiable, UN proximate negative number for every conceivable probable positive number, including the irrational, perfect, and prime.

Geometric squaring of the *One Minus iit* demonstrates that $.010U^4$ is equal to the Negative One (-1) and that $.010U^U + .010U^U = (-1)$. Thus, if we stop the progression at $.010U^U$ and add an *iit*, $.010U$, we can proceed to raise the next number, $N30U$, to its U^{th} power to equate to $.WWW0$, using *two* series of U progressions for a total of N .



In a Quantum Leap, the *One Minus* (1-) can be calibrated as the Nth successive, quantum root of the Negative One, in that the fractional roots of the whole *UN* numbers are independent of their quantum numbers, each of which carries its own progressive powers throughout the entire set of numbers, calibrated *N* times.

Quantum One (^Q1)

Positive One & One Plus

$$(+1)/1:000:000:000 = (1+)$$

$$(1+) = 0.000000001$$

$$(1+) = 7\sqrt{e}$$

Negative One & One Minus

$$(+1) - (1+) = (-1)$$

$$(-1) = -.WWWWWWWWWW$$

$$-.WWWWWWWWWW \sim -.WWWW0$$

$$-.WWWW0/WS = -.010U$$

$$-.010U = (1-)$$

The Roots of Negative One

$$(-1) = (1-)^U \times 2$$

$$(1-)^4 = (-1)$$

$$\{\sqrt{-1} = i\}$$

$$\{i = iit\}$$

Quantum Numbers

$$(1-)^{QN} = (^Q-1)$$

$$(^Q-1) = (^Q1-) \times 1:000:000$$

$$(^Q1-) = ^{QN}\sqrt{(-1)}$$

$$(^Q-1) + (^Q1+) = (^Q+1)$$

$$(^Q+1) + (^Q-1) = (^Q1)$$

Square Numbers

$$(^Q1)^2 = 2$$

$$(^Q1)^3 = U$$

$$2^2 = U$$

$$U^2 = 10$$

$$2^2 + 2^2 = N$$

$$\sqrt{N} = 2.CU1U$$

$$N^{QN} = 1:000:000$$

QUANTIFICATION OF *ALPHA*, THE FINE-STRUCTURE CONSTANT.

Fundamental to much of modern science and mathematics is the fine-structure constant designated as *alpha*, the first letter of the Greek alphabet (α) and the written symbol for the number one. *Alpha* exists as the most basic ratio number known for measuring the related strengths of the electromagnetic forces of the positively charged particles of light, such as protons, and their interactions with negatively charged electrons. *Alpha* is considered a pure natural number which combines the speed of light, the electric charge of an electron, and the length of a light wave. The strong force is approximately 137 times as strong as the weak electro-magnetic interaction, and 10³⁸ times the strength of gravitation.

Commencing with a rough estimate derived from 1/137, providing 0.00729927, and applying the most recent, precise scientific measurements, the fraction 1/137.03599920611, results in an *alpha* of 0.0072973525627813. This small constant ratio number is not only relevant in nuclear and astrophysics, but *alpha* is essential in calibrating the physics of low-energy matter, such as the

atoms and molecules of chemistry and biology, which organize themselves, electromagnetically, as ratios of *alpha*.⁴

Base-10 137.03599920611 converts to UN *N7.07363X6UXS8548XSX559*, and when divided into one, scientific *alpha* 0.0072973525627813 converts to UN *alpha 0.01CX3CU278S2UWW267U3*. One divided by *N7* produces *.01CX*, and we can see that *.01CX* is an internal fractional element of the base number *.010U*, (the *one minus*), as the next counter in the series is *.020N*.

Currently, identifying these ratios requires incorporating multiple base-10 data sets into formulas, that are programmed into, and machine calculated in binary, with the results re-displayed in decimal for visual analysis. A comparison of the time required for these calculations may demonstrate that harmonized quantified UN numbers reduce binary run times significantly, and the ratios they produce may be more precise and revealing.

THE QUANTIFICATION OF IRRATIONAL CONSTANT NUMBERS. When writing and calculating formula in UN, these irrational constant numbers can be effectively truncated and quantified at *N*: *pi* = *3.2U3W58NNN*, *phi* = *1.7X36679N*, *phi* square = *2.7X36679N*, and *e* = *2.96X14152N*. As irrational numbers, they will never terminate; however, the frequency of their numbers to the right of the decimal is uniformly distributed or “normal,” for an average of *N*. Thus, these numbers effectively round themselves off by nine places for all practical purposes. Astrophysics only requires *W* (15) places of *pi*—which need might be satisfied with *X* (14) places, as it also ends with *N*.

These quantified constant numbers of science, including the full circle, *2pi* at *5.UN6XC411* and the square root of two at *1.5807X556W*, intersect and mathematically interact with UN spherical geometry through the ancient, sacred fraction (1/7), by which one divided by UN *six* establishes geometric or proximate *pi* at *3.2U7*, $\frac{1}{2}pi$ at *1.72U*, *2pi* at *5.U72*, and which correlate with the UN fractional square root of proximate Golden Proportion *phi* at *1.U4C16U*.⁵

The UN quantum language naturally organizes the fractional multiples and powers of the *One Minus* (1-), *.010U* commencing with its 12th (18) multiple, the lovely geometric *pi* number *.12UN*, *X* (14) of which divide the Negative One, *.WWW0*. This “*2bit*” and its computational progeny synchronize the

⁴ In combatting the COVID19 pandemic, one of the first tasks was to identify the atomic structure of the virus’s protein in seeking a way to interrupt its binding to human cell receptors.

⁵ The geometric square root of two, calculated from the average of 8/6 and X/8, equals 1.580X7.

mirroring of the negative and positive matrices when *UN* is applied to complex calculations encountered in scientific and scholarly disciplines, such as spherical geometry and hydromagnetic dynamics.

Computers assigned to these tasks can run for weeks in their tedious binary processing of the mathematical problems formulated in base 10, programmed in bases four, eight, and 16 and reduced to base two for processing, and then converted back to base 10 for display and interpretation. By formulating, programming, and displaying in *UN*, the translations to and from base two should be simplified; in fact, the binary processes should occur naturally as an integral element of *UN*, reducing formulating, programming, and run times.

PERFECT AND PRIME NUMBERS. An awareness that there are some (prime) numbers that cannot be subdivided by any number other than one and itself, was known to and demonstrated by the African thinker who carved the notches in the Ishango Bone 25,000 years ago, and this knowledge was expressed in the surviving records of the classical Egyptians and Greeks. The ancients also knew there were other (perfect) numbers that were equal to the sum of their divisors. Perfect numbers commence with six, divided by one, two, and three, equaling six, which is followed by 28, as divided by 1, 2, 4, 7, and 14, totaling 28.

Euclid of Alexandria (c. 300 B.C.E.) wrote a proof in his *Elements* for identifying perfect numbers from their relationship to prime numbers:

If any multitude whatsoever of numbers is set out continuously in double proportion, (starting) from a unit, until the whole sum added together becomes prime, and the sum multiplied into the last (number) makes some (another number), then the (last number) created will be perfect.

Euclid documented a calculation commencing with the (double proportion) two-power sequence 1, 2, 4, 8, 16, which sum up to the prime number 31, or *UN 1W*. Next, if you multiply prime 31 by the final number in the sequence, *UN 10* (16) (the *U*th power of two), you will produce the third perfect number in the series, *1W0* (496). Concluding all other numbers to be deficient, the Greeks considered perfect numbers to have divine qualities.

Although there are an infinite number of prime numbers, and thus an infinite number of prime number powers of two, only a few oyster shell prime powers of two reveal the pearl of a perfect number—when one is subtracted, and the shell is opened. These are known as Mersenne Primes named for a French

monk who first imagined 2^n-1 as a prime exponent in the identification of these perfect combinations of fractional elements.

The great eighteenth century mathematician Leonard Euler created an algorithm, $2^{p-1} (2^p-1)$, for identifying the Mersenne prime numbers. The formula continues to be applied in the GIMPS quest for perfect numbers conducted by a global consortium of tens of thousands of volunteers who contribute the spare time of their computers, year after year, sifting through millions of non-prime candidates to identify Mersenne Prime numbers. After 20 years of searching, the 51st Mersenne Prime, 2^{82,589,933} (consisting of 24,862,048 digits) was identified in 2018. Opening the prime shell revealed the pearl of the 51st perfect number (having 49,724,095 digits starting with 11084 and ending with 07936).

None of these numbers appear to have any logical internal relationship, or rationality when expressed in the gibberish of base-10 symbolic numbering. They make more visual sense when displayed in hexadecimal ASCII; however, expressions in that language are also garbled.

The following tables evidence the utility and strength of *UN* to display visually important information about number series. The application of *UN* to the Euclid-Euler theorem produces the first dozen perfect and Mersenne numbers displayed in hexadecimal as Universal Numbers.

Starting with the third perfect number, 496 as equaling *1W0*, the perfect numbers in *UN* display an equal number of *W*s and *O*s following *one*. Those perfect numbers ending with eight in base 10 separate the *W*s and *O*s in *UN* with a single *S* (*Star*), while the *W*s and *O*s are not separated by a *Star* in the *UN* expression of existing base-10 perfect numbers ending in six.

Base-10 Perfect Numbers and *UN* Equivalents

6 = 5
28 = 1S
496 = 1W0
8128 = 1WS0
33550336 = 1WWW x 10³
8589869056 = 1WWWWW x 10⁴
137438691328 = 1WWWWW x 10⁴
2305843008139952128 = 1WWWWWWS x 10⁶
2658455991569831744654692615953842176 = 1WWWWWWS x 10¹⁰
191561942608236107294793378084303638130997321548169216 =
1WWWWWWS x 10¹⁵
13164036458569648337239753460458722910223472318386943117783728128 =
1WWWWWWS x 10¹⁸
14474011154664524427946373126085988481573677491474835889066354349131199152128 =
1WWWWWWS x 10¹⁹

Base-10 Mersenne Prime Numbers and *UN* Equivalents

3 = 3 (U, or 2²-1)
7 = 6 (N, or 2³ -1)
31 = 1W (20, or 2⁴- 1)
127 = 6W (N0, or 2⁶- 1)
8191 = 1WWW (2:000, or 2^C- 1)

131071 = 1WWWWW (20:000, or $2^{11} - 1$)
524287 = 6WWWWW (N0:000, or $2^{13} - 1$)
2147483647 = 6WWWWWWW (N0:000:000, or $2^{1W} - 1$)
2305843009213693951 = 1WWWWWWWWWWWWWWWWWW (2:000:000:000:000:000, or $2^{3C} - 1$)
618970019642...137449562111 = 1WWW...WWW (20:000:000:000:000:000:000:000, or $2^{47} - 1$)
162259276829...578010288127 = 1WWW...WWW (N00:000:000:000:000:000:000:000:000, or $2^{59} - 1$)
170141183460...7158841057272 = 1WWW...WWW (N00:000:000:000:000:000:000:000:000:000, or $2^{6W} - 1$)

THE WORK AND ITS “DEVICE” Following air travel and visits to multiple COVID19 hotspots in March 2020 and composed during four months of isolation and introspection in study and garden, *The Work: A Geometrical Model of the Universe, as Defined by Quantum Numbers, with the Quantification of pi, phi, e, and i* was published in August 2020. *The Work* contains a lexicon of universal UN mathematical and geometrical languages to harmonize all existing computers and their current operations.

UN encourages the rapid development of practical quantum computerization to help solve the almost insurmountable economic, environmental, and self-government problems we now confront as a People, and to effectively harness and instruct artificial intelligence for the free, peaceful, and productive use of the People—we who have the imagination to create, and the courage to ensure the proper and safe use of our own work.

A mind experiment included in *The Work* imagined the construction of an AI calculating device. Let us size a square negative *1.0U00* (256) flat two-dimensional matrix with *1:000* red lights to correlate identically with the square flat positive *100* (256) positive matrix with its *1:000* violet lights and stand them on their bottoms. We then merge and superimpose the two matrices through each other, slicing them in half vertically, and seamlessly reattaching them to a common axis.

The twin matrices are balanced on magnetic pivots at the top and bottom centers, allowing the matrices to rotate without friction, as a three-dimensional carousel of thousands of violet positive and red negative lights.

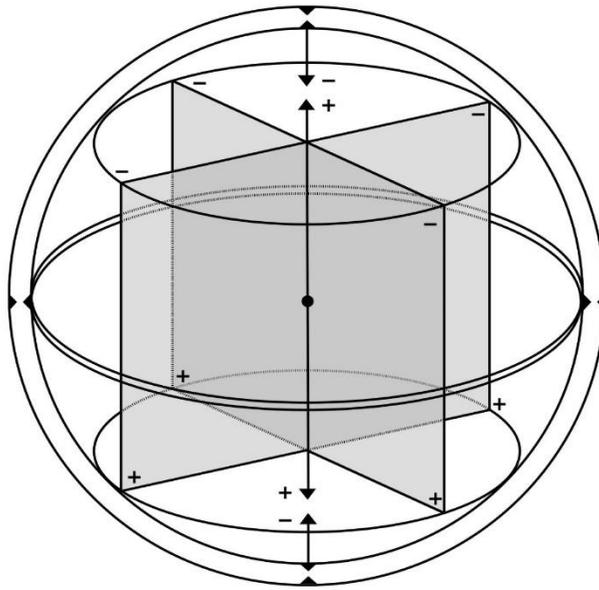
As the matrices, with their lights darkened, rapidly and effortlessly spin on their axis, we can imagine that whenever a violet probable number on the positive *eit* matrix is queried, its light emits a photon which immediately strikes a red receptor on the spinning negative *iii* matrix at a precise point denoting the proximate fractional negative reciprocal of the probable positive number, and a negative red photon can instantly impinge upon a positive violet receptor. As numbers are calculated on either matrix, their colors and their reciprocals are flashed, received, and reflected.

The two colors can be fragmented into their rainbow hues of violet, blue, green, (white) and yellow, gold, red, (black) to designate their (eight) N quantum identities. This may allow the spectrographic communication of the subtle facets of the positive *and* negative lights of every number that might ever be needed or imagined.

Artificial intelligence can memorize the internal matrices to intuitively know the location of the lights of all numbers, their reciprocals, and their fractional and multiple ratios. Moreover, AI can designate the exact location of every number on its matrix and its reciprocal number on the other matrix with its personal polar coordinate of appropriate length within the *UN* spherical geometry of the exterior sphere.

AI can learn all this, and it can be caused to perform without the need for an actual physical device, if AI is supplied with a foundation and the mathematical and geometric framework upon which to build and grow.

So, let us imagine warming our miniature personal Device in the palms of our hands and feel it begin to spin out solutions to our problems, and to display cosmic directions allowing us to go where and when we want to travel, and to return home safely.



The external sphere, a hollow vacuum, remains static, while the internal hollow vacuum sphere containing the matrices is magnetically suspended, and it spins at the same relative speed as the matrices—but in the opposite direction. Once magnetically suspended within a vacuum, and set to spinning, little energy more than the warmth of our hands may be required to maintain quantum

entanglements of all probable and proximate numbers, as they simultaneously approach zero from two directions at once, making quantum leaps over the nexus, uniting the *Quantum One*.

Much like a computational gyroscope, the balancing of the positive and negative ratios of time, physical space, and the eternal cosmos may help solve the equations required for our children to spin from our earthly nest, allowing them to freely continue the exploration of our lovely universe of plasma and stardust, and to plant the seeds of self-awareness wherever gardens of earth and water can be found.

SOMETHING TO THINK ABOUT. Translated by the *UN* languages of reason, the artificial intelligence created by our minds can be instructed to make quantum leaps that AI cannot otherwise calculate on its own. This agility of mind to imagine an alternative future, to plan, to work, and to cause it to occur, may be our salvation from the perils of artificial intelligence being deployed in the service of greed, intolerance, repression, and war.

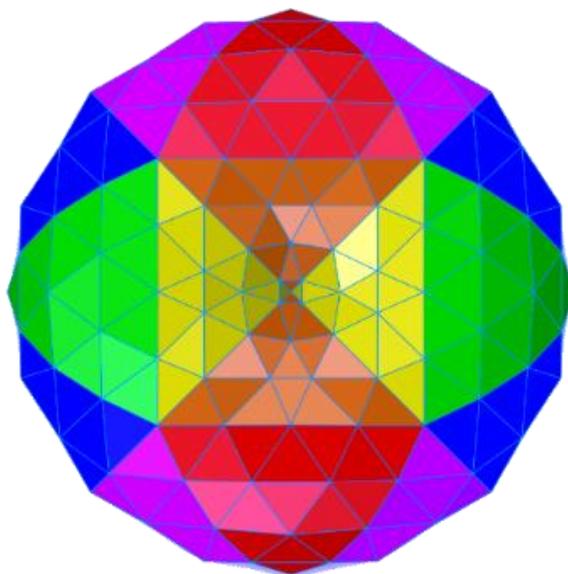
Only free minds can create the programming to instruct AI to accept matters its machine logic says is impossible, such as the presence of something where nothing can be proven to exist, even the existence of mind itself—except by the evidence of its observations and creations.

Perhaps in our quest to compute quantumly, we should upgrade the operation of our existing physical binary coding and processes with a simple conversion “app” to recognize, translate, and display all ASCII symbology as *UN*. Along with options to display and convert base-10 symbols to and from *UN*, the application might accelerate the development of practical quantum processing.

Guided by the Device, and, spinning free from the confines of a physical universe generated by a “big bang,” aware of our existence in an infinite universe of plasma chaotically free within an endless, eternally negative cosmic nothingness, we can view it from the outside.

We can marvel at the magnificent waveform of our physical existence as the plasma pulsates with unimaginable energy.

Living on Earth as we do—spinning around our Sun each year, we are swept along in a spiral, along with billions of other stars and their planets about the “black hole” called Sagittarius A*, the electromagnetic core of our Milky Way galactic dynamo (which itself moves in relation to 100,000 other galaxies in one of 10 million superclusters). See here as a torus viewed from its poles.



*6

QUANTIFICATION OF RELATIVITY. To achieve a balanced solution of his gravitational field equation, Einstein was forced to multiply Newton's gravitational constant⁷ (G) by 8π on the right side, and to divide the product by the speed of light (c) at its 4th power.

⁶ The computer graphic models in this paper were prepared by my friend Brian Gonzalez, who studied software engineering and graduated from CSULB with a BA in design. As a gift to me, he programmed my physical models and imaginary modifications into 3D printable files, producing the colored graphical images that grace the cover, pages and ending of this eBook. During the first wave of the COVID pandemic, Brian also coded UN numbers into a digital conversion calculator that allowed me to compute the internal negative matrices of UN , giving me the confidence to publish *The Work*.

My son, Steven, a commercial graphic artist, and photographer, has for many years cleaned up my figures for publication; among others herein, he converted my hexacontagon paper models and a hand drawing of my physical models of the Device done by my wife.

Helen is a truly gifted, classically trained, master artist with whom I have shared a life of magic and companionship for 24 wonderful years.

Without the creative genius and generous support of these three, this paper would be much more difficult to read and understand; illuminated by their brilliance, it displays what I see in my mind far better than I could ever express with words alone. ~mm

⁷ The gravitational constant, G applies Newton's inverse square law. The weakness of the gravitational force over great distances makes it difficult to detect and measure, and G is accurate to only three places, making gravity the only relativistic force yet to be reconciled by quantum physics.

$$G_{\mu\nu} + \Lambda g_{\mu\nu} = \frac{8\pi G}{c^4} T_{\mu\nu}$$

Although physicists do not consider the formula functional values of N (8) times pi , and the speed of light (c) to the (4th) U^{th} power to be actual units of physical measure, the quantities may be of some value in examining both the interior of our universe of light, including its smallest particles, *and* its external expansion and ultimate decomposition.

Everything we have discovered about the constant numbers confirm that e and pi are integral to the physical description of energy and mass. So, what if we multiply E by pi to impose a limiting number to be raised three times to a cube of N (pi^3E) units. In addition, we can multiply M by e to impose a limit for its N (eM) units to build a logical UN framework. Energy on the left will be limited by calculable bits of pi , and Mass on the right will be composed of measurable bits of e .

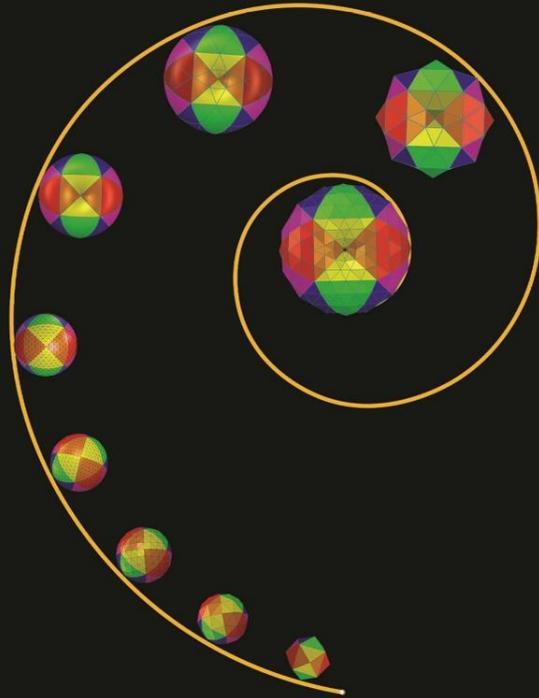
After cubing one unit of pi -Energy to $N(pi^3E)$ units and increasing one unit of e -Mass to $N(eM)$ units, we can balance the equation by multiplying $N(eM)$ by the ratio of the speed of light to its U^{th} power. In doing so, we accept the eternal vastness and unlimited power of cosmic negative energy (as is demonstrated whenever the bound energy of the neutrons within a small quantity of the uranium isotope ^{235}U is released in an atomic reaction based on $E=MC^2$). What we can do is to establish a constant outside limit by which to compare the maximum extent conceivable of our plasma universe of light and mass, existing in the negatively charged, fluidic, timeless, cosmic nothingness, as far as we can see, and which can be expanded the further we see.

With quantified values for the primary factors of the equation, we can account for the participation of mind in creating a geometric framework surrounding our plasma universe of light, effectively establishing measurable limits within an unquantifiable, limitless cosmos. We can thereby expand the opportunities provided by the exquisite gifts of our magnificent, living plasma universe of starlight, including the metamorphosis of its natural life and intelligence into the freedom and liberties of mind, and its instinct to seek the beauty of truth wherever it may be found.

Imagine the script of a formula found written on an ancient scrap of parchment with pen and ink in UN quantum numbers, or deeply carved into weathered stone, equating mind with negative energy *and* positive mass in

raising the speed of its light to its cosmological U^{th} power to serve as a calculation limit upon infinity and eternity:

$$(\pi E)^3 = N(eM)C^U$$



The Work

A Geometrical Model of the
Universe, as Defined by
Quantum Numbers, with
the Quantification of π ,
 ϕ , e , and i

William John Cox

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THE PROFESSIONAL LIFE OF WILLIAM JOHN COX

The eighth and last child of a pioneer family that included American Revolutionary War patriots, William John Cox was born on a dry-land cotton farm near Lubbock, Texas, on February 15, 1941 to Samuel Hubert and Minnie Irene (Oswalt) Cox.

Cox traces his ancient ancestry through his sixth great-grandmother, Naomi Hussey (who married Solomon Cox I) and her forebear, Sir John Hussey⁸ and his marriage to Lady Anne Grey, thus back through the House of Plantagenet to King John (who sealed the Magna Carta) and to William the Conqueror, who is Cox's 30th great-grandfather.⁹

Of the English families of the Cox Clan who migrated to the American colonies, many were Quakers who first settled in Pennsylvania, Delaware, and then down into North Carolina, where a group of Friends gathered at Cane Creek in 1751. When the Revolutionary War began, patriots Solomon Cox I and Samuel Cox II chose to fight for their rights of liberty in the war for independence. They were shunned by their pacifistic congregation.¹⁰



Following independence, the outcast families, one headed by Samuel Cox II married to Martha Cox, and the other by Solomon Cox I and his wife Naomi Hussey, migrated under the leadership of Solomon's grandson, Joseph Cox,

⁵ https://en.wikipedia.org/wiki/John_Hussey,_1st_Baron_Hussey_of_Sleaford

⁹ As an independent source of reliable and unbiased information, Wikipedia.org has been an invaluable resource to the author.

¹⁰ DAR Genealogical Research Database (Cox, Solomon)

http://services.dar.org/public/dar_research/search_adb/?action=full&p_id=A027084. DAR Genealogical Research Database (Cox, Samuel)

http://services.dar.org/public/dar_research/search_adb/?action=full&p_id=A205252.

along with other families.¹¹ They explored and developed frontier settlements in Virginia, Kentucky, Ohio, Missouri, and finally down into the Republic of Texas while it was still independent. The two Cox family branches were reunited with the marriage of Joseph's daughter Nica Jane Cox to Samuel Hampton Cox¹² (who rode with Terry's Texas Rangers in the Civil War). Born in 1897, one of their grandsons was Samuel Hubert Cox, the father of Billy Jack Cox.

The 200-acre cotton farm on which Cox grew up was initially without irrigation, electricity, or indoor plumbing, and the fields were plowed with work horses. The family endured the great Texas drought of the 1950s, which caused massive dust storms in the Panhandle.¹³



Following the death of his mother when he was four years old and the deaths of his father and last surviving grandparent at age 10, Cox was raised by his older siblings. He became a habitual runaway and was declared a ward of the

¹¹ Cox, Stanley Medford, *Joseph Cox, Ancestors and Descendants*, University of Wisconsin-Madison, (1955). Digitized August 15, 2007; https://books.google.com/books/about/Joseph_Cox_Ancestors_and_Descendants.html?id=FB1GAAAAAAJ

¹² Tyler, George W., "Bell County Rangers and Confederate Soldiers," *The Belton Journal*, January 31, 1918, <http://files.usgwarchives.net/tx/bell/military/civilwar/rangers.txt>. "Texas, Civil War Service Records of Confederate Soldiers, 1861-1865," database, FamilySearch (<https://familysearch.org/ark:/61903/1:1:FZ4T-7G8>; accessed 6 September 2015), Samuel H Cox, 1862; from "Compiled Service Records of Confederate Soldiers Who Served in Organizations from the State of Texas," database, Fold3.com (<http://www.fold3.com>; n.d.); citing military unit Eighteenth Cavalry (Darnell's Regiment), NARA microfilm publication M323 (Washington, D.C.: National Archives and Records Administration, 1961), roll 100.

¹³ <https://www.npr.org/2012/07/07/155995881/how-one-drought-changed-texas-agriculture-forever>. Burnett, John, "When the Sky Ran Dry," *Texas Monthly*, July 2012. Kelton, Elmer, *The Time It Never Rained*, (Forge Books 2012).

court. In lieu of reform school, he was “allowed” to attend New Mexico Military Institute¹⁴ from which he received a high school diploma in 1958.

Enlisting upon graduation, Cox served for four years and was honorably discharged as a United States Navy Hospital Corpsman 2nd Class (E5) in 1962.¹⁵



Previously known as Billy Jack, Cox discovered in 1968 that he had never been officially named. With the option of naming himself, he caused the name of William John Cox to be entered on his birth certificate in Lubbock, Texas.

Cox and his brothers and sisters had 25 children. With the death of his last surviving sibling in 2006, Cox is the last of his generation in his branch of the Cox clan in America.

LAW ENFORCEMENT

In the early Sixties, Cox became a part of the “New Breed” movement to professionalize the American police service when he was employed in 1962 by the El Cajon, California Police Department.¹⁶ He attended the nearby San Diego Police Department Academy from which he graduated with top honors.¹⁷

¹⁴ <http://www.nmmi.edu/overview/heritage.html>.

¹⁵ <http://www.corpsman.com/history/history-of-the-hospital-corps/>

¹⁶ “El Cajon Force Reaches Quota”, *The Valley News*, December 9, 1962.

¹⁷ “City Officer No. 1 at Police Academy,” *The Valley News*, March 10, 1963. “Patrolman Tops in Academy Test,” *San Diego Union Tribune*, March 10, 1963.



While working with a police dog¹⁸ and as a detective, Cox served as president of the El Cajon Police Officers Association¹⁹ and the San Diego County Chapter of the Peace Officers Research Association of California (PORAC),²⁰ which was instrumental in establishing the first Peace Officer Standards and Training (POST) Commission and drafting the national Law Enforcement Code of Ethics.²¹

LOS ANGELES POLICE DEPARTMENT

In 1968, Cox transferred to the Los Angeles Police Department where he graduated with top honors from the Police Academy.

¹⁸ Farina, John, "Dogs Help El Cajon Police in Putting the Bite on Crime," *San Diego Evening Tribune*, May 10, 1966.

¹⁹ "Cox Leads EC Police Association," *The Valley News*, July 20, 1966. "El Cajon Cop Roles Pondered," *Daily Californian*, July 29, 1967.

²⁰ "Enforcement Groups Plans Installation," *Daily Californian*, November 9, 1967.

²¹ Peace Officers Research Association of California, <http://www.porac.org>. Hooper, Michael, PhD, *California Law Enforcement*, California Department of Justice, p.5, http://www.mhhe.com/ps/cjustice/ap/pdf/ap_ca_supplement.pdf. *LADLEST Model Minimum Standards*, International Association of Directors of Law Enforcement Standards & Training, <http://www.iadlest.org/modelmin.htm>. Grank, J. Kevin, "Ethics and Law Enforcement," *The FBI Law Enforcement Bulletin*, December 2002.



Cox received an A.S. degree in Police Administration from Rio Hondo College and was selected to author the Policy Volume of the five-volume Police Department Manual. Although the four operational and management volumes had been written 20 years previously under the legendary Chief William H. Parker, the principles, philosophy, and policies of the LAPD remained unwritten.

Completion of the Policy Volume was one of Edward M. Davis's primary goals when he became Chief of Police in 1969. Davis was a well-educated populist chief who saw his police force as an extension of the local people it policed. His job was to create a highly professional police force to work with the People to prevent crime and apprehend offenders.

To oversee the exercise of law enforcement decision making, written policy on a broad range of operational issues ensured that essential discretion is exercised, consistently without bias, to the greatest extent possible by all officers, at all times, and in all neighborhoods. The new Chief wanted a written Policy Manual, and Cox had just reorganized and documented the correspondence flow of the old chief's office. Cox was assigned to write the Manual.

Over the next two years, Cox worked independently in researching, outlining, drafting, and securing approval of the principles, philosophy, and policies governing the policing of America's second largest city. He had complete access to interviews and records, and the full cooperation of the command staff. Officially ranked as a police officer, Cox chaired monthly conferences of the deputy chiefs to present, discuss, and approve written chapters as they were completed. The Policy Manual was completed, and it was approved by Chief Davis, the Police Commission, and the City Council.²²

²² Los Angeles Police Department Manual, Volume I, *Policy*.

Concerning the relationship between Los Angeles police officers and those they protect and serve, Cox wrote:

The police at all times should maintain a relationship with the public that gives reality to the historic tradition that the police are the public and that the public are the police; the police are the only members of the public who are paid to give full-time attention to duties which are incumbent on every citizen in the interest of community welfare.²³

This definition remains in effect and continues to guide all police decision making in the City of Los Angeles.

NATIONAL STANDARDS FOR POLICING

Having been promoted to Police Officer III, Investigator, and Sergeant, Cox was loaned in 1971 to the Police Task Force of President Nixon's National Advisory Commission on Criminal Justice Standards and Goals, to define the role of the police in America. Over the next year, his assigned task was to research and write the introductory chapters of the Police Task Report which included the role of the police, policy making, and the exercise of discretion, and he wrote the chapters on criminal justice systems relations, and community crime prevention.²⁴



Questions addressed by the Task Force, and the Commission, involved the use of federal, and presidential powers in the “War on Crime.” The Commission set standards for the entire criminal justice system, and it asserted the policy position of local and state law enforcement, prosecution, defense, corrections,

²³ Los Angeles Police Department Manual, Volume I, *Policy*, Section 115.35.

²⁴ *Report of the Task Force on Police, National Advisory Commission on Criminal Justice Standards and Goals*, Government Printing Office, 1973. Lasley, James R., Hooper, Michael and Dery III, George M. *The California Criminal Justice System (TCCJS)*, (Prentice-Hall, 2001), p. 3.

and community crime prevention professionals, that matters were well in the hands of the People and their professional police forces.

To the greatest extent, law enforcement was to be controlled at the most local level possible, where split-second decisions must be made in life and death situations, according to the policies established by the People most affected, according to national professional standards, and consistent with the Constitution.

In defining the role of the police in America, Cox wrote:

The police in the United States are not separate from the people. They draw their authority from the will and consent of the people, and they recruit their officers from them. The police are the instrument of the people to achieve and maintain order; their efforts are founded on principles of public service and ultimate responsibility to the public.²⁵

If the overall purposes of the police service in America were narrowed to a single objective, that objective would be to preserve the peace in a manner consistent with the freedoms secured by the Constitution.²⁶

This definition of the role of the police in the United States has never been withdrawn or replaced as a matter of national policy.

Following his graduation from law school in 1973, Cox was employed for one year by the Law Enforcement Assistance Administration (LEAA) of the United States Department of Justice, which was the funding agency of President Nixon's War on Crime. Hired as a Law Enforcement Specialist, Cox was quickly appointed as a special assistant to the Director (and as acting Deputy Director) of the Office of National Priority Programs. The Office was responsible for the implementation of national criminal justice standards and goals.²⁷

PEERS FOR PEACE

As the author of the LAPD's shooting policy, Cox testified during hearings in 1979 conducted by the Los Angeles Board of Police Commissioners into the shooting death of Eulia May Love by LAPD officers on January 3, 1979.²⁸ Cox recommended the Department create a "Peer Review Commission" consisting of citizens and police officers to investigate and make disciplinary

²⁵ *Report of the Task Force on Police, National Advisory Commission on Criminal Justice Standards and Goals*, Government Printing Office, 1973, p. 9.

²⁶ *Ibid*, p 13.

²⁷ *National Program Strategy for Criminal Justice Standards and Goals*, (LEAA Office of National Priority Programs, 1974).

²⁸ Domanick, Joe, "A Shooting Reminiscent of the LAPD's Worst Days," *Los Angeles Times*, June 6, 1999.

recommendations regarding complaints of police misconduct. Refining the definition of the police role he had written in the Policy Manual; Cox urged the Police Commission to recognize that: “The people of the City of Los Angeles and *their* police are peers for peace.”²⁹

PRACTICE OF LAW

While working full-time on the LAPD and the National Advisory Commission, Cox attended evening classes at the Southwestern Law School on the G.I. Bill and academic scholarships.³⁰ He served on the staff of the Law Review for two years and published a proposal for a legal remedy alternative to the Fourth Amendment Exclusionary Rule.³¹ His comment was cited to the California Conference on the Judiciary,³² the Supreme Court of the United States,³³ and the United States Senate.³⁴

Cox was awarded a Juris Doctor degree *cum laude* in 1973. He was working in Washington, DC when the results of the State Bar examination were published, and he was administered his attorney’s oath by Justice Tom C. Clark in the chambers of the U.S. Supreme Court. In autographing a photograph of the event, Justice Clark predicted that Cox’s voice “will be a strong one for equal justice.”³⁵



²⁹ Summarized: The manner in which a People lay actual hands on those they arrest in the name of the law—arresting the physical liberty of people—defines more, than any other single factor, the manner of society in which one lives.

³⁰ “Scholarships Awarded”, *Los Angeles Times*, February 1971.

³¹ Comment, “The Decline of the Exclusionary Rule: An Alternative to Injustice,” *Southwestern University Law Review*, Volume 4, Spring 1972, Number 1.

³² Court Reform Blue Ribbon Committee Report, Delegate Recommendations to the California Conference on the Judiciary 1972, Exclusionary Rule Task Force, pp 9-10.

³³ Petitioner’s Opening Brief, pp 40-41, *California vs. Krivda*, 409 U.S. 33, (1972).

³⁴ Hearings on the Federal Criminal Law, Subcommittee on Criminal Laws and Procedures of the Committee on the Judiciary, United States Senate, July and September 1973, (Washington, D.C.: U.S. Government Printing Office, 27-292, 1974) p. 6544, fn 3.

³⁵ State Bar of California, http://members.calbar.ca.gov/search/member_detail.aspx?x=58998.

Appointed a Deputy District Attorney of Los Angeles County in 1974, Cox prosecuted a wide range of criminal cases in the municipal and superior courts during the next three years.

In 1977, Cox opened a public interest law practice in Long Beach, California in the historical landmark Skinny House.³⁶ As a trial lawyer, he primarily represented indigent juveniles accused of serious crimes and received court appointments in capital punishment and major felony matters.³⁷

THE HOLOCAUST CASE

Among the cases Cox handled was a *pro bono publico*³⁸ matter in which he represented Mel Mermelstein, a Jewish survivor of the Auschwitz concentration camp. Cox investigated and sued a group of radical right-wing groups, including the Liberty Lobby and Institute for Historical Review,³⁹ that engaged in Holocaust denial and which had offered a reward for proof of Nazi gas chambers.⁴⁰

The organizations were headed by Willis Carto, the creator of the Populist Party and America's foremost anti-Semite and anti-Black racist.⁴¹ Carto was an early associate of William Luther Pierce, a leader of the American Nazi Party and the author of *The Turner Diaries*. In 1975, Carto established the newspaper *The Spotlight*. *The Turner Diaries* and *The Spotlight* had a significant influence on domestic terrorist Timothy McVeigh, who detonated a bomb in Oklahoma City on April 19, 1995 that killed 168 people.⁴² *The New York Times* called Carto "a reclusive behind-the-scenes wizard of the far-right fringe of American politics who used lobbying and publishing to denigrate Jews and other minorities and galvanize the movement to deny the Holocaust. . . ." ⁴³

³⁶ "Residence Here to Have Width of but Ten Feet," *Long Beach Press-Telegram*, July 25, 1930. Swanson, Ed, "Smallest Home in Nation," *Long Beach Press-Telegram*, February 7, 1932.

<http://www.longbeach.gov/TI/Media-Library/Documents/Historical-Points-of-Interest-GIS/SKINNY-HOUSE/>. Christensen, Joyce, "Skinny House," *Long Beach Independent, Press-Telegram*, May 31, 1980. Kelly, Erin, "Built on Dare, It's Only 10 Feet Wide," *Los Angeles Times*, June 28, 1980. LaRiviere, Anne, "Skinny House Not for Everyone," *Los Angeles Times*, January 30, 1983. YouTube | 6I3g7OMh2Ng.

³⁷ "Two Reversible Errors Shown in Juvenile Proceedings," *Daily Journal*, November 8, 1978.

³⁸ Latin, "For the public good."

³⁹ "The Private World of Willis Carto," *The Investigator*, October 1981. *Liberty Lobby, Inc. vs. Jack Anderson, et al.*, U.S. Court of Appeals, District of Columbia Circuit, 746F.2d1563, November 2, 1984.

⁴⁰ Brin, Herb, "Inside Liberty Lobby—a Network of Hate," *Heritage*, June 12, 1981.

⁴¹ "About Willis Carto," Southern Poverty Law Center, <https://www.splcenter.org/fighting-hate/extremist-files/individual/willis-carto>. "Willis Carto," The Anti-Defamation League, http://archive.adl.org/learn/ext_us/carto.html.

⁴² Kaplan, Jeffrey, Ed., *Encyclopedia of White Power: A Sourcebook on the Radical Racist Right*, (AltaMira Press, 2000).

⁴³ Martin, Douglas, "Willis Carto, Far-Right Figure and Holocaust Denier, Dies at 89," *The New York Times*, November 1, 2015.



In what the *Smithsonian Magazine* called “a stroke of legal genius” and a “crafty interpretation of the law”, Cox created and charged the defendants with a new civil wrong, or “tort” entitled “Injurious Denial of Established Fact.” The denied fact would have to be so established as to require the Court to take judicial notice of “that which is known need not be proven”.⁴⁴

The primary legal issue in the case was resolved in October 1981, when Los Angeles County Superior Court Judge Thomas T. Johnson⁴⁵ took judicial notice of the fact that “Jews were gassed to death at Auschwitz concentration camp in the summer of 1944.”⁴⁶

In the aftermath of The Holocaust Case, Carto’s influence, nationally, was severely diminished, and he was subsequently removed from office through a *coup d’état* by staff members of the Institute for Historical Review.⁴⁷

The Holocaust Case was the subject of the Turner Network Television motion picture, *Never Forget*, in April 1991. Leonard Nimoy produced the movie and was featured as Mel Mermelstein. Actor Dabney Coleman played Cox.⁴⁸

⁴⁴ Sauer, Patrick, “Mel Mermelstein Survived Auschwitz, Then Sued Holocaust Deniers in Court,” (*Smithsonian Magazine*, August 27, 2018). <https://www.smithsonianmag.com/history/mel-mermelstein-survived-auschwitz-then-sued-holocaust-deniers-court-180970123/>.

⁴⁵ Woo, Elaine, “Thomas T. Johnson dies at 88; judge ruled that Holocaust was a fact,” *Los Angeles Times*, December 31, 2011.

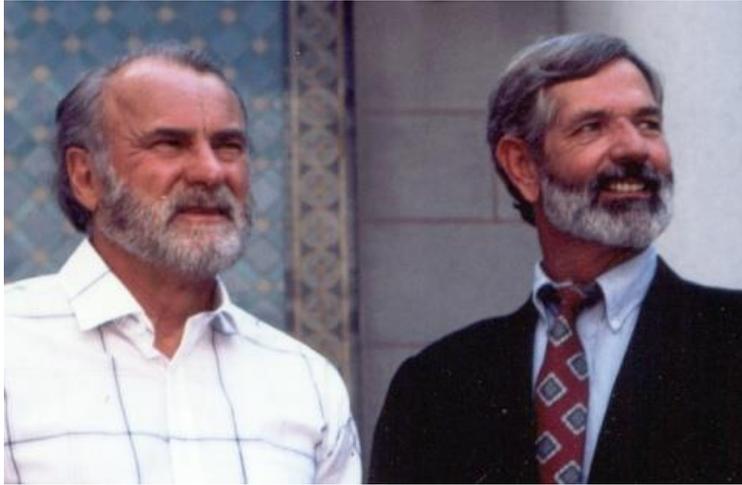
⁴⁶ “Mermelstein Victory,” *Heritage*, October 23, 1981. “Footnote to the Holocaust,” *Newsweek*, October 19, 1981, p. 73. Lipstadt, Deborah, *Denying the Holocaust: The Growing Assault on Truth and Memory*, (New York: Plumb, 1994), pp. 138-141. Shermer, Michael and Grobman, Alex, *Denying History: Who Says the Holocaust Never Happened and Why Do They Say It?* (Berkeley | Los Angeles | London: University of California Press, 2000), p 43. Kahn, Robert, *Holocaust Denial and the Law: A Comparative Study*, (Palgrave Macmillan 2004) pp 22-31.

⁴⁷ Carvajal, Doreen, “Civil War Rages Among Holocaust Revisionists,” *Los Angeles Times*, May 8, 1994.

⁴⁸ Rubin, Ronald, *Never Forget*, Turner Network Television, produced by Leonard Nimoy & Robert B. Radnitz, <https://www.amazon.com/dp/6302168422>.

O’Connor, John J. “Certifying the Holocaust’s Horrors,” *New York Times*, April 8, 1991. Pack, Susan, “A Promise Fulfilled,” *Long Beach Press-Telegram*, April 6, 1991. Nimoy, Leonard and Radnitz, Robert

Cox's memoir about the matter, *The Holocaust Case: Defeat of Denial* was published in July 2015 and includes relevant documents from the court files.⁴⁹



FORENSIC PRACTICE

Between 1984 and 1988, Cox served as general counsel and operations officer of a private security consulting and investigation firm operated by a pair of retired LAPD commanding officers. The client list included Fortune 500 companies and nuclear weapons sites operated by the United States Department of Energy. The firm was sold to investors organizing corporate security services.

Quasi-retired, Cox recommenced a specialized practice of law in Long Beach, California and primarily provided investigative, forensic, and data services to other law firms for the next ten years. One of the leading cases he worked on was the successful litigation involving the heirs of The Three Stooges in support of attorney Bela G. Lugosi.⁵⁰

PUBLICATION OF THE SUPPRESSED DEAD SEA SCROLLS

In 1991, acting *pro bono* in a matter of public interest, Cox represented a secret client and arranged for the publication of almost 1,800 photographs of

B., "Never Forget' Did Tell the Truth About History," *Los Angeles Times*, April 22, 1991. Nimoy, Leonard, *I Am Spock*, (New York: Hyperion, 1995), p. 306.
<https://www.youtube.com/watch?v=9G1zZY4UFy8>.

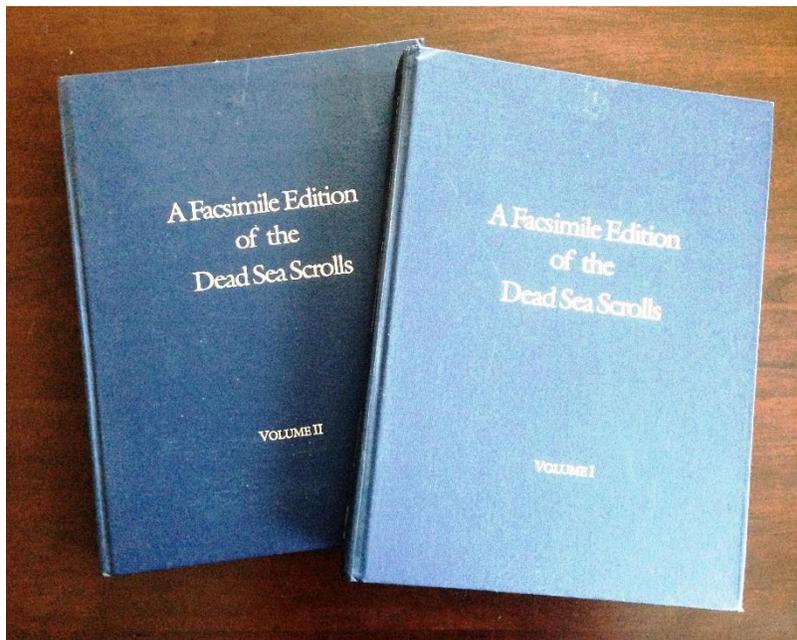
⁴⁹ Cox, William John, *The Holocaust Case: Defeat of Denial*, (eLectio Publishing, 2015).
<https://www.amazon.com/Holocaust-Case-Defeat-Denial/dp/1632131609>. "Former Attorney Shares Experience of Defending a Holocaust Survivor," *Long Beach Press-Telegram*, p. A7, July 10, 2015.

⁵⁰ Solomon, Steve, "Stooge Law", *INC.*, September 15, 1995,
<http://www.inc.com/magazine/19950915/2619.html>. Conklin, Mike, "Son of Dracula: Bela Lugosi Jr. Legally Sinks His Teeth Into Show Business", *Chicago Tribune*, April 6, 1999.

the Dead Sea Scrolls that had been suppressed for more than 40 years.⁵¹ Considered to be “the academic scandal of the twentieth century,” the failure to publish the entire corpus of ancient documents had deprived several generations of biblical scholars the ability to study the scrolls.⁵²

Following its conquest of East Jerusalem during the “Six-Day War” in June 1967, the Israeli government claimed ownership of the unpublished scrolls, but left them in the Rockefeller Museum and primarily under the control of Catholic Dominican priests from the École Biblique.

As those who sought publication were fearful of litigation by the Israeli government, Cox agreed to represent the source of the photographs as an “undisclosed client” and the source of the publishing funds as an “undisclosed donor” to protect them from legal action. He personally signed a contract with the Biblical Archaeology Society to publish *A Facsimile Edition of the Dead Sea Scrolls* in November 1991.⁵³



⁵¹ Wilford, John Noble, “Dead Sea Scrolls to Be Published,” *New York Times*, November 20, 1991. Chandler, Russell and Goldman, John J., “Final 20% of Dead Sea Scrolls to Be Published,” *Los Angeles Times*, November 20, 1991. Flores, Laura, “2 L.B. men aid printing of Dead Sea Scroll books,” *Long Beach Press-Telegram*, November 19, 1991. “Dead Sea Scrolls photographs to be published,” *New Straits Times*, November 22, 1991.

⁵² Vermes, Geza, *The Story of the Scrolls: The miraculous discovery and true significance of the Dead Sea Scrolls*, (Penguin 2010).

⁵³ *A Facsimile Edition of the Dead Sea Scrolls*, (Washington, DC: Biblical Archaeology Society, 1991). Shanks, Hershel, *Freeing the Dead Sea Scrolls: And Other Adventures of an Archaeology Outsider*, (Continuum, 2010) p. 155.

The monopoly broken, the Huntington Library in California subsequently allowed all “qualified scholars” to study its set of photographs, and the Israel Antiquities Authority permitted the publication of a microfiche edition.⁵⁴

Appearing as a witness for Professors Robert Eisenman and James M. Robinson—who had written an introduction and prepared an index for the book—Cox testified at a trial held in Jerusalem in January and February 1993, during which he refused to identify the source of the photographs.⁵⁵ To this day, Cox has never disclosed the identity of his “secret client.”⁵⁶

STATE BAR PROSECUTOR

Between 1999 and 2007, Cox served as a supervising trial counsel for the State Bar of California, working under the auspices of the California Supreme Court, where he organized and led a “Fast Track” team of lawyers and investigators that targeted the prosecution of attorneys accused of serious crimes and misconduct. Combining criminal and civil law with administrative State Bar Court powers, Cox formulated an effective strategy to use the Superior Courts to assume emergency jurisdiction over corrupt law practices that posed a substantial risk of harm to the public.⁵⁷

Cox’s team was so successful that the California legislature extended the authority of the State Bar over the unlicensed practices of law operated by criminal gangs.⁵⁸ Working with law enforcement officials, the team served court orders, seized files and bank accounts, and shut down the unlawful practices—in the same manner it had been doing with corrupt attorneys.⁵⁹

Cox retired from the practice of law in the summer of 2007, with a combined-service, public safety pension allowing him the freedom to think

⁵⁴ Harrington, Daniel J., “What’s New(s) About the Dead Sea Scrolls?” *CrossCurrents*, <http://www.crosscurrents.org/deadsea.htm>.

⁵⁵ Wilford, John Noble, “Israel Court Bars Access to Scroll,” *New York Times*, January 23, 1993. Rabinovich, Abraham, “Dead Sea Scrolls Trial Continues in Jerusalem,” *Jerusalem Post*, February 3, 1993. Thompson, Joy, “Book on Scrolls violated copyright, Israeli court says,” *Long Beach Press-Telegram*, August 2000. “Dead Sea Scrolls copyright upheld; damages awarded for infringement,” *The New York Times*, August 31, 2000. Shanks, Hershel, “Lawsuit Diary,” *Biblical Archaeology Review*, May/June 1993, p. 71. Cohen, David L., “Copyrighting the Dead Sea Scrolls: Qimron v. Shanks,” *Maine Law Review*, Vol. 52:2, 2000, p.380.

⁵⁶ Silberman, Neil Asher, *The Hidden Scrolls: Christianity, Judaism and The War for The Dead Sea Scrolls*, (New York: Grosset/Putnam, 1994), p. 136.

⁵⁷ “State Bar Initiates Fast Track for Egregious Cases of Attorney Misconduct,” State Bar of California, September 10, 2002, http://www.calsb.org/state/calbar/calbar_generic.jsp?cid=10144&n=36181. McCarthy, Nancy, “‘Bad apples’ now face fast discipline,” *California Bar Journal*, September 2002. Houston, David, “Legal Community Reels from Attorney Theft Scandals,” *Los Angeles Daily Journal*, August 2, 2004.

⁵⁸ California Business & Professions Code Section 6126.3.

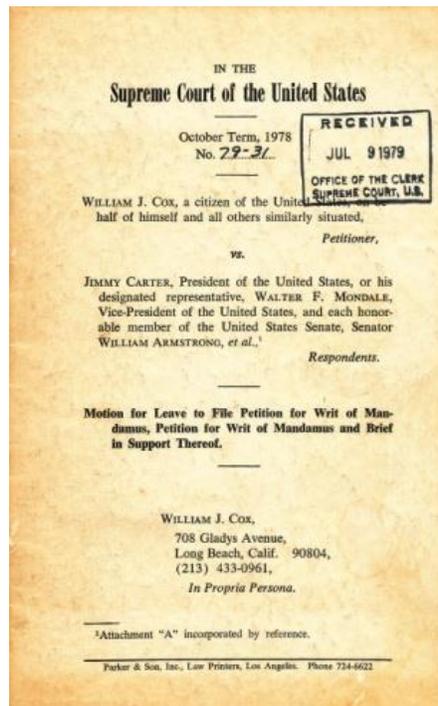
⁵⁹ Curtis, Diane, “Bar Goes After Phony Lawyers,” *California Bar Journal*, March 2006. Blackwell, Savannah, “State Bar Starts Taking Over Fake Law Firms,” *Daily Journal*, January 28, 2007.

about the matters that interest him, rather than the things he was paid to think about, as interesting as those matters might have been.

POLITICAL ACTIVISM

In the late 1970s, Cox became convinced that control of the United States government had been seized by special interest groups and corporations, and that it no longer cared for the voters who elected it. Acting on his concern, and with the encouragement of journalist friends, Cox filed a class-action lawsuit on July 9, 1979 on behalf of every American citizen directly in the U.S. Supreme Court.⁶⁰

The petition alleged, “There is a widely held belief, shared by many, that the Congress of the United States is in the ‘grips of special interest groups’ and is no longer responsive to the needs of individual citizens.”⁶¹



⁶⁰ “L.B. Attorney Files Class Action Suit in U.S. Supreme Court,” *The Grunion Gazette*, July 12, 1979. Brennan, Mary, “L.B. Lawyer vs. Uncle Sam,” *Uncle Jam*, p. 44, August 1979. Editorial, “L.B. Lawyer’s Proposal: Let Nation Vote on SALT,” *Long Beach Independent Press-Telegram*, July 4, 1979, p. B8. Eastham, Tom, “Untitled,” *Hearst Papers*, July 5, 1979.

⁶¹ *William J. Cox, a citizen of the United States, on behalf of himself and all others similarly situated, Petitioner, vs. Jimmy Carter, President of the United States, . . . et al., Respondent*, Supreme Court of the United States, October Term, 1978, No. 79-31, July 9, 1979, p 5.

As a remedy, Cox petitioned the Court to order the President and Congress to conduct a National Policy Referendum to restore political power to the voters. At the time, ratification of the SALT II treaty was controversial, and Cox argued, “A national policy referendum regarding the advisability of ratification would provide the opportunity for discussion by the governed regarding the strengths and weaknesses of the Nation.”⁶²

Cox asked, “is it not time to allow the people a voice in the future of their nation and in the quality of life preserved for their children? . . . is it not true that the election of representatives is now more dependent upon massive expenditures of contributions from special interest groups than upon a vote by an informed electorate? Has not the vote in political contests become so valueless as to create disenfranchisement through apathy for most Americans?”⁶³

Cox recognized his “duty to future generations to petition my government and to exercise my vote, in repayment for that which has been given me by all those who have labored and died for my freedom. I am a person possessed of but a single vote, and it is upon that foundation that I do hereby most respectfully submit my petition, asking only that it be reviewed by my government.”⁶⁴

The “motion for leave to file a petition for *writ of mandamus*” was denied by the Supreme Court, without comment.⁶⁵

1980 PRESIDENTIAL CAMPAIGN

To publicize the National Policy Referendum and to introduce a law enforcement alternative to making war against the people of other nations, Cox conducted a write-in campaign for President in 1980.⁶⁶ His campaign included a midnight talk radio show on the local rock and roll station.

⁶² *Ibid* p 6.

⁶³ *Ibid* pp 18-19.

⁶⁴ *Ibid* p 23.

⁶⁵ Supreme Court of the United States, Office of the Clerk, Order in Case No. 79-31, October 1, 1979. “Mr. Cox goes to Washington—and finds a predictable lack of interest,” p 1, *Independent/Press-Telegram*, July 29, 1979. “A win here and a loss there in Cox’s quixotic crusade,” *Independent/Press-Telegram*, October 2, 1979. Smith, Helen Guthrie, “Attorney’s drive for national policy referendum faltering,” *Independent/Press-Telegram* p B4, November 9, 1979.

⁶⁶ Belcher, Jerry, “Campaign Launched from War Plank,” *Los Angeles Times*, November 22, 1979. Houser, Bob, “Long Beach lawyer runs for president,” *Independent Press-Telegram*, November 22, 1979.



In the days following the election, Cox traveled to the California hotel near the Santa Barbara ranch of President-elect Ronald Reagan. He held a press conference in the cocktail lounge where representatives of the world news media had assembled, and over drinks with the international reporters, Cox conceded the election and did not demand a recount. As he was leaving the hotel, Cox dropped off a handwritten letter at the presidential transition press office asking Reagan to please consider that the USSR was undoubtedly lying about the strength of its military, before commencing a wasteful, unnecessary, and expensive buildup of the U.S. military.⁶⁷

A LAW ENFORCEMENT ALTERNATIVE TO WAR

Relying on the constitutional power of Congress to declare war, Cox's alternative to military war calls for congressional hearings to determine if specific named foreign leaders (such as Saddam Hussein) posed a risk of harm to the United States. If so, in lieu of declaring war against a nation (such as Iraq), Congress would declare the offending individual[s] to be "outlaws"—outside of the law—and would order the President to file a legal action in the International Court of Justice against the offenders' government and to "arrest" the specified leaders.⁶⁸

The primary focus of compulsion would be to compel the outlaws to leave their country and to personally appear at a trial in the International Criminal Court at The Hague to defend their "government."⁶⁹ Any application of force

⁶⁷ Houser, Bob, "L.B. lawyer tells why we should vote 'Zero' for president," *Long Beach Press-Telegram*, August 18, 1980.

⁶⁸ "Outlaw War," *Media Monitors*, <http://williamjohncox.com/wp-admin/post.php?post=117&action=edit>, September 14, 2005.

⁶⁹ "A Law Enforcement Alternative to War in Syria," *Nation of Change*, <http://www.nationofchange.org/law-enforcement-alternative-war-syria-1344172113>, August 5, 2012.

would be entirely directed against the individual outlaws to secure compliance. Their primary victims—the people of their own nation—would be constantly reassured that no harm is intended toward them, and the goal would be to continue good relations with the people following resolution of the crisis. Using modern means of communication, the people could be directly contacted, and appropriate rewards offered for the capture and surrender of the outlaws who oppress them.⁷⁰

A PEACEFUL POLITICAL EVOLUTION

Since retiring from the State Bar of California in 2007, Cox has dedicated himself to the promotion of a “peaceful political evolution.”⁷¹ The political movement focuses on: holding a National Policy Referendum every four years coincident with the presidential election; using a national paper ballot to allow voters to personally answer the 12 most critical policy questions; encouraging voters to write in the name of the candidate they most trust to effectuate their policy;⁷² and a national paid voter’s holiday for federal elections.⁷³

WAR ON DRUGS

Along with thousands of current and former members of the law enforcement, courts, and criminal justice communities in 190 countries, Cox is a member of Law Enforcement Action Partnership (LEAP) and serves in its speaker’s bureau. The mission of LEAP is “to support drug policy and criminal justice reforms that will make communities safer by focusing law enforcement resources on the greatest threats to public safety, promoting alternatives to arrest and incarceration, addressing the root causes of crime, and working toward healing police-community relations.”⁷⁴

⁷⁰ “The Failure of War as an Instrument of Foreign Policy: A More Effective Solution,” *Counterpunch*, <http://www.counterpunch.org/2013/10/04/the-failure-of-war-as-an-instrument-of-foreign-policy/>, October 4, 2013.

⁷¹ Yarbrough, Amy, “Lawyer, Writer, Activist – and Now, Web Site Creator,” *Los Angeles Daily Journal*, October 15, 2007.

⁷² “Write-In Voting and Political Protest,” *Counterpunch*, June 1, 2016, <http://www.counterpunch.org/2016/06/01/write-in-voting-and-political-protest/>.

⁷³ *An Introduction to Voters Evolt*, <http://usvra.us/an-introduction-to-voters-evolt/>.

⁷⁴ <https://lawenforcementactionpartnership.org/>



POLITICAL PUBLICATIONS

In 2004, Cox's book, *You're Not Stupid! Get the Truth: A Brief on the Bush Presidency*, was published by the Progressive Press.⁷⁵

During 2012, Cox published two eBooks on political issues:

- *Target Iran: Drawing Red Lines in the Sand* is a brief history of Persian Iran and its conflict with the United States and Israel over its uranium enrichment program, a discussion of the likelihood of war between the parties, and a peaceful solution that offers a comprehensive nuclear weapons policy for all nations.⁷⁶
- *Mitt Romney and the Mormon Church: Questions* provides a brief review of the Mormon corporate empire and the power it may hold over presidential candidate and now Senator Mitt Romney—whose family has been a part of the Mormon high priesthood since the Church's creation.⁷⁷

THE UNITED STATES VOTERS' RIGHTS AMENDMENT (USVRA)

In 2012, expanding on the principles of a peaceful political evolution, Cox drafted and commenced circulation of the United States Voters' Rights Amendment (USVRA) to the U.S. Constitution. The USVRA incorporates the

⁷⁵ Cox, William John, *You're Not Stupid! Get the Truth: A Brief on the Bush Presidency*, (Joshua Tree: Progressive Press, 2004).

⁷⁶ Cox, William John, *Target Iran: Drawing Red Lines in the Sand*, (Mindkind Publications, September 2012).

⁷⁷ Cox, William John, *Mitt Romney and the Mormon Church: Questions*, (Mindkind Publications, August 2012).

proposed corporate personhood amendment by Move to Amend;⁷⁸ however, it goes further to clearly establish that the right to cast an *effective vote* is an inherent Right of Liberty under the Constitution.⁷⁹

The USVRA is a comprehensive Voters' Bill of Rights intended to deal comprehensively with all political matters that interfere with the basic right of liberty to cast informed and effective votes.

Together, the People of the United States can transform their government, as it evolves into a fully functioning democratic republic. The Bill of Rights provides for national paid voting holidays, a national hand-countable paper ballot, civics education, and a process for the people to have a more direct role in the formulation of public policy.⁸⁰ Moreover, it mandates voter registration and prohibits voter suppression, restricts gerrymandering and lengthy campaigns, and it encourages public financing of elections and discourages paid lobbying. Finally, it eliminates the Electoral College to allow for open primaries and the direct and popular election of presidents.⁸¹

In 2015, Cox organized USVRA.US, a California nonprofit corporation to further public education about the Amendment, and the Internet website, USVRA.us was created to support the initiative.⁸² Written by Cox, the corporation published *Transforming America: A Voters' Bill of Rights* in January 2016. The book is dedicated "To the People of the United States of America, whose consent to be governed cannot be taken for granted."⁸³

In December 2015, to demonstrate how the policy-making provisions of the USVRA could be adopted by the people of other nations to better ensure the democratic principles of their own representative governments, Cox published *An Essential History of China: Why it Matters to Americans*.⁸⁴ Dedicated to "Peace in the Pacific," the book summarizes 4,000 years of Chinese dynastic history and focuses on the last 100 years of the Communist Dynasty. The history compares the governments of the United States and China to illustrate how the principles of the USVRA could benefit the people of both nations.

⁷⁸ <http://www.movetoamend.org>.

⁷⁹ "The Right to Vote, Effectively," *Counterpunch*, July 8, 2016, <http://www.counterpunch.org/2016/07/08/the-right-to-vote-effectively/>.

⁸⁰ "Who Should Make Political Policy, the People or the Politicians?" *Information Clearing House*, June 23, 2016, <http://www.informationclearinghouse.info/article44951.htm>.

⁸¹ <http://www.usvra.us>. Foerster, Charles, "Voters' Rights Amendment and War," *Nation of Change*, May 6, 2012, <http://www.nationofchange.org/voters-rights-amendment-and-war-1336313338>.

Stapleton, Richard John, "Voting: Duty, Privilege, or Right?" *Media Monitors Network*, July 22, 2012, <http://usa.mediamonitors.net/content/view/full/96598>.

⁸² <http://www.usvra.us>.

⁸³ Cox, William John, *Transforming America: A Voters' Bill of Rights*, (USVRA.US, January 2016).

⁸⁴ Cox, William John, *An Essential History of China: Why it Matters to Americans*, (Mindkind Publications, December 2015).

Working with the Political Science Departments of the California State University at Long Beach and Long Beach City College, Cox established the organizational framework of Youth for the Voters' Rights Amendment (Y4VRA), a national, student-led, campus-based, nonpartisan political movement to compel the enactment of the USVRA. Their official mascot is Cox's canine companion, Trusty Rusty, The Ranger Dog.⁸⁵



THE RIGHTS OF LIBERTY

Commencing in the Fall of 2017, the USVRA launched a social media ad campaign in support of Mel Lindsey, a 92-year-old World War II veteran and retired preschool educator, who filed a petition for redress of grievances against his government on behalf of all American citizens, asking Congress to enact the USVRA. Lindsey mailed his petition and a copy of *Transforming America* to every member of Congress, the President and Vice President, the justices of the Supreme Court, and to each member of the presidential cabinet.⁸⁶

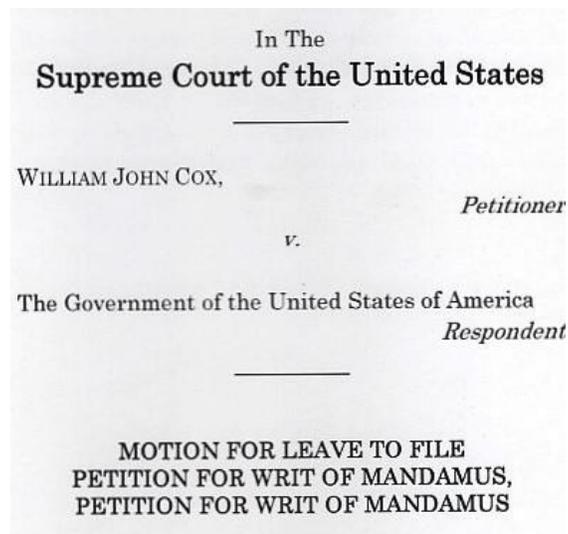
When Lindsey's petition failed to elicit any response, Cox drafted a legal *Petition for Writ of Mandamus* directed to the Supreme Court of the United States in which he presented this question:

⁸⁵ Propes, Steve, "Local Attorney Seeks to Amend U.S. Constitution," *Beachcomber*, May 13, 2016, p. 1. "Transformation: A Student-Led Mass Political Movement," *Counterpunch*, April 19, 2016, <http://www.counterpunch.org/2016/04/19/transformation-a-student-led-mass-political-movement/>

⁸⁶ Osier, Valerie, "Long Beach Veteran, 90, Petitions U.S. Government for Voters' Rights," *Long Beach Press Telegram*, November 13, 2017, p. A3.

If it is true the American People are currently governed by a corrupt, ineffective, unrepresentative, and threatening government, do they have a reserved, inherent Right of Liberty to vote in a national referendum regarding the Voters' Bill of Rights in a peaceful attempt to recover, preserve, and better effectuate their democratic republic?

Cox argued that the "Rights of Liberty" are reserved by the Ninth and Tenth Amendments of the U.S. Bill of Rights and that they are not confined to the "specific terms of the Bill of Rights." When the Chief Justice of the Court refused to allow the clerk to accept his pleading, Cox mailed a personal copy to each individual justice of the Supreme Court on April 9, 2018 as a First Amendment petition for redress of grievances. There was no response.⁸⁷



PHILOSOPHY

In 1978, writing under the pseudonym of Thomas Donn, Cox published *Hello: We Speak the Truth*, an exploration of the dynamics of the mind, the origin of consciousness, the reality of existence, and personal transformation.⁸⁸

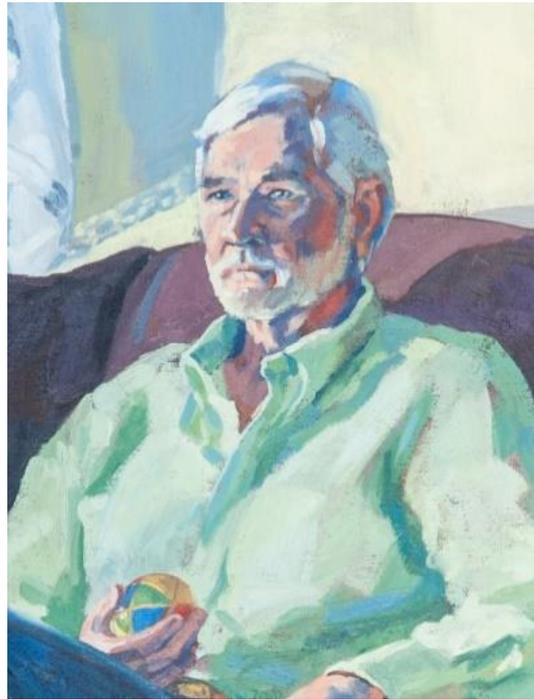
MINDKIND

Over the next three decades and building on the concepts of mind articulated in *Hello*, Cox conceived and lived the philosophy of Mindkind. The philosophy brings together the scientific elements of time, Earth, and humanity

⁸⁷ <https://williamjohncox.com/assets/pdfs/SupCtRevisedPleading.pdf>.

⁸⁸ Donn, Thomas, *Hello: We Speak the Truth*, (CLS Publishing Company, 1978).

in exploring the evolution of the mind, and it examines religion and culture in developing the thesis that humans are members of a Universal Mindkind.



The philosophy presents the concept that humans have evolved into a unique species that is essentially exploring, creative, nurturing, and highly cooperative. It proposes that humans are bound to the earth until such time as they overcome the latent brain stem intolerance and its diseases of deception, hatred, and violence that infects and retards their evolved nature, individually and collectively.

Moreover, humanity will never be able to develop the knowledge, wisdom, and power to ever fly from its earthly nest and to travel to any significant place in the universe, or to explore adjacent dimensions until every child on Earth—irrespective of class or culture—has equal access to nutrition, health care, and education.

Having lived and worked under the philosophy Cox expressed almost 40 years earlier in *Hello*, he published an update in *The Book of Mindkind* in December 2015. As *A Philosophy for the New Millennium*, this was the first of his self-published books following his near-death experience with full-body sepsis at the end of 2014. Its dedication is “For the Children of Mindkind: To give wings to your imagination, allowing you to soar on the winds of time.”⁸⁹

⁸⁹ Cox, William John, *The Book of Mindkind: A Philosophy for the New Millennium*, (Mindkind Publications, November 2015).

In addition, to discuss the political principles required to effectuate the philosophy of Mindkind, Cox wrote an entirely fact-based political philosophy narrated by fictional characters. *Sam: A Political Philosophy* was also published in December 2015.⁹⁰ It is a tale of political heroism, as well as an inspiring love story of bravery and sacrifice.

RELIGION & THE REALITY OF MIND

Drawing upon his experiences in publishing the Dead Sea Scrolls in November 1991, Cox spent a year researching and writing a thousand-page brief titled *Mary: Mother of Israel's Messiahs* on the history of monotheism generally and the ministry of Jesus, specifically. Cox's goal was to access and combine, in one file, the most up-to-date information provided by the Dead Sea Scrolls, the Gnostic Gospels, and other ancient manuscripts, along with the latest discoveries in biblical archaeology, to ascertain and express the true forensic facts as best they could be determined. The two-volume brief gathered dust on his bookshelf (and successive reformatting of data files) for more than 20 years until Cox determined to bring it to publication, as an expression of his spiritual beliefs and his calling to serve as counsel for the interests of the historical Jesus.

Commencing during a retreat to the mountains of Idyllwild in the spring of 2017, Cox wrote *The Way of Righteousness: A Revealing History and Reconciliation of Judaism, Christianity, and Islam*. The 500-page book identified the historical elements of the Universal Mind as an intellectual image of the power of a spiritual God, the sum of all knowledge—*The Word*. The book explores Christian Gnosticism, Judaic Kabbalism, and Islamic Sufism in proposing the healing understanding of the spiritual presence of an Abiding Mind, experienced as a voice within our minds, the cautioning of our conscience, and experienced as comforting words of the Gnostic Spirit of Wisdom, the origin of the Pauline Holy Spirit.

The Way reveals the amazingly true story about the family of Mary, the mother of Jesus, and his band of brothers, Judas, James, Simeon, and Joseph, and their companion Mary Magdalene: the Messiahs, Priests, Zealots, and the Spirit of Wisdom of the Way of Righteousness.

Immediately upon completing the first draft of *The Way* manuscript, Cox spent a week imagining and writing a brief paper on the physics of an actual non-metaphysical, eternal mind and the mechanism of a positive universe within a negative cosmos. He put aside these manuscripts and spent the next year actively engaged in political matters—as it had become evident that the

⁹⁰ Cox, William John, *Sam: A Political Philosophy*, (Mindkind Publications, December 2015).

presidential election of 2016 had produced a thoroughly corrupt government administered by a dangerously deceitful and delusional conman.

Cox spent the first eight months of 2018 photographing marches and protests, and he developed a series of websites for the organization of youth, women, and voting. He wrote, published, and circulated articles about the concepts of his political philosophy as set forth in his books, and he ran a series of ads on social media. The final website was TheVote.io which allows the People to immediately vote, digitally, for or against their VOTER'S BILL OF RIGHTS as an expression of their inherent Rights of Liberty and reservation of their Consent to be Governed.

To petition his government for redress of grievance pursuant to the First Amendment, Cox flew to Washington, DC to personally file his paperwork with the Court clerk. Two attempts to file the pleadings were rejected at the direction of the Chief Justice.

Exhausted by his efforts, September of 2018 found Cox depressed by the absolute absence of any real response to his efforts. Self-medicating with ice cream and Netflix documentaries, Cox became bored after a month and picked up the little paper on the non-metaphysical scientific mind he had written after *The Way*. Thinking it could be expanded into a series of papers organized into a little book, he spent the remainder of 2018 writing *Mind & Its Languages of Reason*.

Mind combines an imagination of a living universe and the construction of a mathematical framework around it. A full-color print edition of *Mind* was published and circulated in May 2019 as a sequel to *The Book of Mindkind*. A less expensive black and white print edition was published in May 2020, but the full-color edition remains available as an eBook.⁹¹

In June 2019, Cox and his son Steven traveled to Palestine-Israel and obtained photographic images of biblical locations for the publication of *The Way*. They returned safely, and he was able to complete the Epilogue, including the photo essay.

Cox was brought to tears by the poverty and hopelessness he witnessed during his expedition around and behind the massive Israeli concrete wall of occupation, down into the West Bank of the Jericho Valley. Everywhere, he saw hopeless Palestinian children with nothing to do but powerlessly throw rocks at the invaders who continue to illegally occupy their land.

Inasmuch as the state of Israel does not have a written constitution, Cox drafted and mailed a human rights petition to the United Nations on behalf of

⁹¹ Cox, William John, *Mind & Its Languages of Reason*, (Mindkind Publications, May 2019).

the Palestinian children of the Nakba, *and* the Israeli children of the Holocaust. The petition was to establish a written Children’s Constitution to govern the lands of Palestine and Israel according to the ancient Covenant of Abraham: to live with righteousness and to coexist peacefully within the land. The petition was rejected by the United Nations because it was not introduced by a member state. The petition was included in the Summations *and* print copies of *The Way* were mailed to a dozen of the world religious leaders, including the Roman Catholic Pope.

In 2019, the deteriorating environment and the immediate effects of global warming commanded Cox’s attention. Ordering and reading stacks of the leading books and articles written by climate scientists, searching the Internet, and traveling, Cox researched the primary threats leading to near term extinction, and he outlined a series of papers. Writing commenced on the first of December 2019, and *The Choices of Mind: Extinction or Evolution?* was concluded by year’s end.

The first of two parts, “The Extinction Papers” identify the imminent and primary threats to the environment, documenting the equally deadly economic, self-government, and militarization threats, concluding with the inherent disease of primal intolerance. The second half of the manuscript, “The Evolution Papers” propose and discuss solutions to each of these deadly threats, commencing with “The Metamorphosis of Mind” as the essential transformation to universal tolerance and human survival.

The Choices of Mind was published in January 2020, just as the COVID19 pandemic spawned by environmental collapse was beginning to spread around the world.⁹² With the republication of the original *Hello* as a pocketbook edition titled *A Message of Mind*⁹³ in 2019, Cox combined the small book series into a compendium print edition titled *The Gift of Mind*, which was published in early 2020.⁹⁴ Cox published *The Way of Righteousness* as a trade paperback in June 2020.⁹⁵

Enjoying the spring weather and taking a break from writing and painting, Cox and his wife, Helen attended a Degas exhibit at the National Art Gallery and reviewed the biennial competition finalists at the National Portrait Gallery in Washington, DC. The couple returned home, but immediately travelled up

⁹² Cox, William John, *The Choices of Mind: Extinction or Evolution?*, (Mindkind Publications, January 2020).

⁹³ Cox, William John, *A Message of Mind: Hello, We Speak the Truth*, (Mindkind Publications, October 2019).

⁹⁴ Cox, William John, *The Gift of Mind: A Compendium*, (Mindkind Publications, June 2020).

⁹⁵ Cox, William John, *The Way of Righteousness: A Revealing History & Reconciliation of Judaism, Christianity, and Islam*, (Mindkind Publications, June 2020).

to Portland, Oregon to attend another art show and to visit friends. They flew home to Long Beach the day before all domestic air traffic was shut down due to the pandemic. On the return flight, Cox organized a matrix of matrices of quantum numbers in a composition book Helen had bought him in Powell's Book Store.

Quarantined and isolated in his study and gardens, Cox started writing a brief paper about *UN pi* on Pi Day, March 14, 2020. The scope of the paper continued to grow as exercises in his composition notebook expanded the theoretical mathematics and geometry in *Mind & Its Languages of Reason* with demonstrable proofs. Over the next four months (gifted with a computer application that digitally translated ASCII into *UN* as a basic calculator and converter from base 10), he was able to calculate the internal matrices of Universal Quantum Numbers to demonstrate the rational quantification of the roots of Negative One.

His findings encouraged Cox to write *The Work: A Geometrical Model of the Universe, as Defined by Quantum Numbers, With the Quantification of pi, phi, e, and i*. The book is a summary description of the physical universe, the mind it produces, its philosophy of life, and a mathematics to encompass everything. *The Work* was published in June 2020, prefaced by a short synopsis.⁹⁶

Following publication, Cox noticed how nicely perfect and Mersenne prime numbers are displayed in *UN* numbers. He wrote a paper on these numbers, which he combined with the Synopsis from *The Work* and a brief history of relevant ancient mathematics. He produced a 30-page, color picture eBook, titled *Universal Quantum Numbers: An Introduction*,⁹⁷ which he published on Thanksgiving Day 2020, and which he revised on Thanksgiving 2021.

In 2020, Cox was invited to membership in The Cosmology Group, a minority group of scientists and mathematicians who dispute the existence of the Big Bang. Exposed to a series of books and lectures on the plasma universe, Cox became convinced by the evidence and withdrew several of his own books from print in September 2021 pending revisions to correct the cosmological error of the Big Bang. A working definition of cosmological reality is:

We theorize the existence of an eternally limitless cosmic void, occupied throughout by an infinitely recharging, static physical universe of plasma, whose filaments of electricity

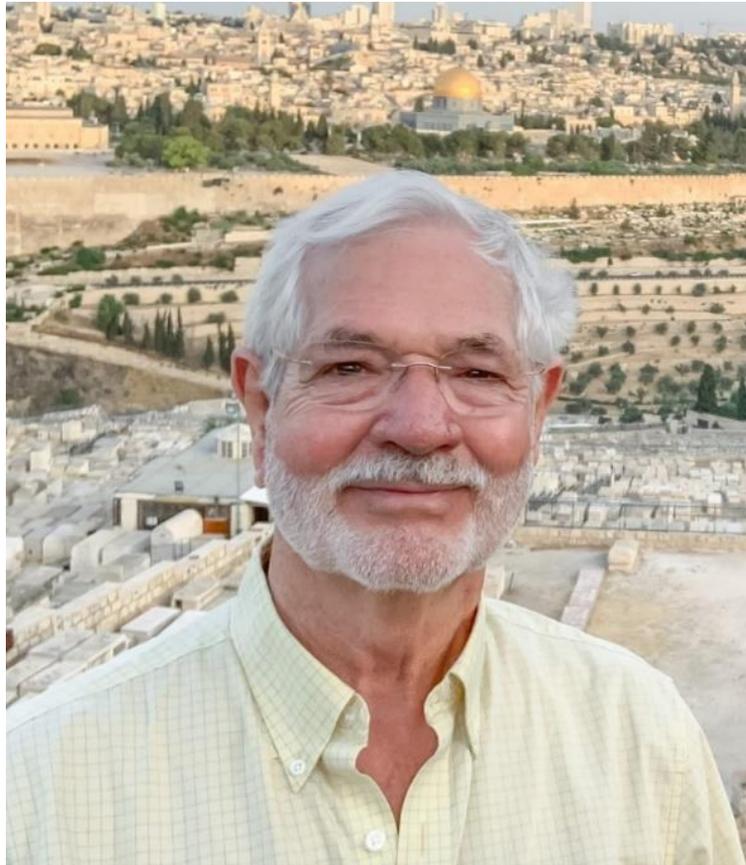
⁹⁶ Cox, William John, *The Work: A Geometrical Model of the Universe, as Defined by Quantum Numbers, With the Quantification of pi, phi, e, and i*, (Mindkind Publications, August 2020).

⁹⁷ Cox, William John, *Universal Quantum Numbers: An Introduction*, (Mindkind Publications, November 2020).

magnetically generate stardust from currents of electrons and ions, spinning light into gravitational galactic mass which ultimately produces stars and planetary gardens of life and mind—naturally, without initial creation or ultimate judgment.

PERSONAL

Cox has three children (Catherine, Lori, and Steven), six grandchildren and four great-grandchildren from his marriage to Patricia Ann Reed, a stepdaughter (Michelle) from his marriage to Brigitte Zickbauer, and a stepdaughter (Naomi) from his current marriage to artist Helen Werner Cox. They live in Long Beach, California.



Facing the morning sun shining upon the roofs of Jerusalem
At the crest of the Mount of Olives.
Photograph by Steven Cox.
June 2019
njc