

Inheritance in the Great Pyramid, written in 1880 and reissued in 1978 as *The Great Pyramid: Its Secrets Revealed*.¹

Smyth uncovered many remarkable facts about the Great Pyramid that caught the interest of the nineteenth century public. These have been re-discovered in recent years, as people rebel against the cold materialism of conventional science and seek other pathways to truth about the universe.²

Perhaps Smyth's most remarkable observation was that the base length of the pyramid is precisely $\pi/2$ times its height. Using a unit of measurement called the pyramid yard (1 py = 64 cm), which he confirms as the sacred unit of length by relating it to the cubit of the Bible (and contrasting it to the "profane" cubit of pre-Biblical history), Smyth shows that the Great Pyramid reflects the dimensions of the solar system.

Smyth found that the base length of the Great Pyramid is 365.25 py, the exact number of days in a year. Further, expressing the sum of the two diagonals of the base in pyramid inches (one py is 25 pyramid inches, which is close to a British inch), Smyth obtained the number 25,826, which equals the period of the precession of the equinoxes in years!

An earlier researcher, William Petrie, had found that the height of the pyramid, measured in British inches and multiplied by 10^9 , gave 91,840,000. This turned out to be closer to the modern measure of distance of the earth to the sun, 93 million miles, than the value that astronomers held at that time, about 95 million miles. This led Smyth to assert: "Modern Astronomers are involuntarily proving that Man, unaided by supernatural Divine Power, could not possibly have measured the Sun-distance accurately in the Age of the Great Pyramid; and yet it is recorded there with exceeding accuracy!"¹

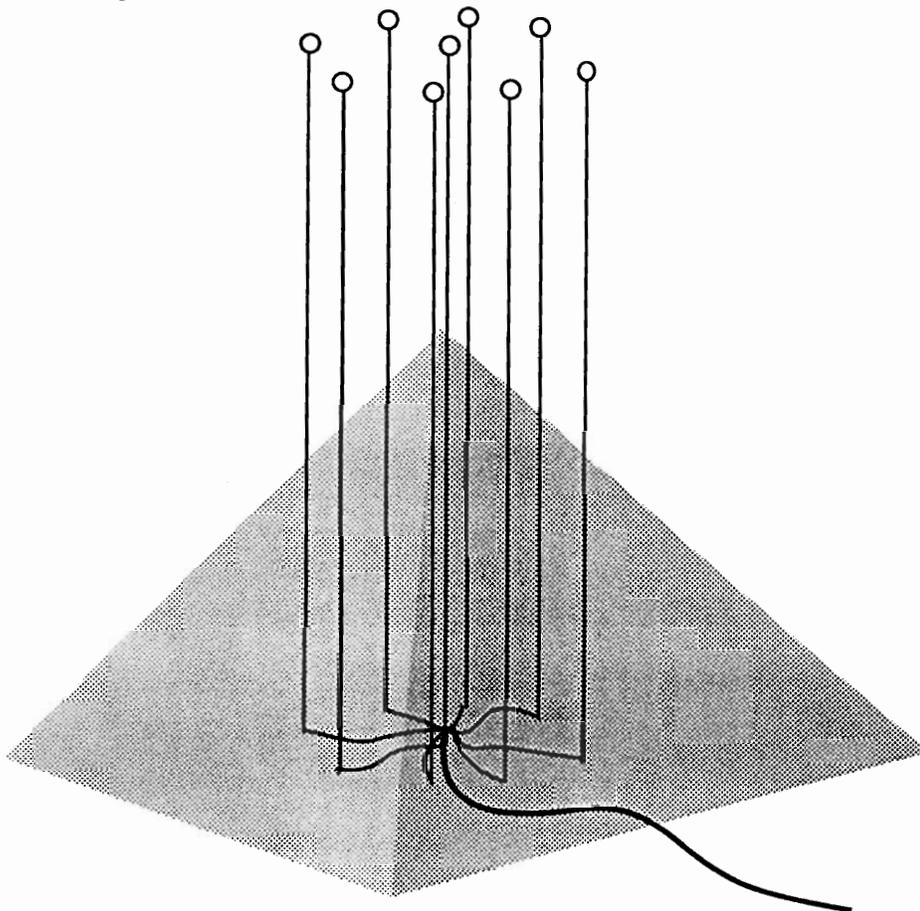
Let me list some of the other remarkable facts about the geometry of the Great Pyramid:

- ☉ The square root of ten times the height of the North or South walls divided by the height of the niche in the Queen's chamber equals π .
- ☉ The height of the niche multiplied by 10π equals the height of the pyramid.
- ☉ The central axis of the niche is removed from the central vertical line in the east wall by a distance exactly equal to

the sacred Hebrew or Israelite cubit length.¹

2.0 The Great Octagon

Like the Great Pyramid, DUMAND will be one of the wonders of the world. Deployed at a depth of 4,750 meters in the ocean off the Island of Hawaii, it will be composed of nine vertical strings arranged in an octagon of side 40 meters, along with a central string. Each string contains 24 optical modules spaced 10 meters apart. **The height of the active volume of the Great Octagon exactly equals the base length of the Great Pyramid of Khufu!**



Since this remarkable fact can hardly be a coincidence, I have probed further to see if the geometry of DUMAND, like that of the Great Pyramid, contains hidden knowledge not consciously inserted into the Monte Carlo program I used to optimize the parameters of the Octagon

array.³

In seeking out the knowledge that may lie buried in the parameters of the DUMAND array by virtue of the holistic connections between all things, I followed a procedure suggested by Cornelis de Jager, who found similar remarkable properties concealed in the dimensions of his bicycle.⁴

Using a specially-written Monte Python program, I searched for connections of the form:

$$a^\alpha b^\beta c^\kappa d^\mu = U$$

where a, b, c, d are dimensionless parameters describing the DUMAND array and U is some dimensionless universal number.

In this study, I took

- a = 9, the number of strings in the Octagon array;
- b = 216, the total number of optical modules in the array;
- c = 5.75, the ratio of the height to the horizontal string spacing;
- d = 20.65, the ratio of the depth of the ocean at the DUMAND site to the height of the array.

The first test I tried was to see if the fine structure constant, $\alpha = e^2/\hbar c = 1/137$, was deeply embedded in the DUMAND geometry. Sure enough it was, by the simple relation

$$(a/c)^{1/2} (d/b)^2 = 1/137$$

Next I tested for the ubiquitous π and found,

$$(a c)^{1/3} b^{1/4} d^{-1/2} = \pi$$

To see if knowledge of electroweak unification was implanted by cosmic consciousness in the Octagon array, I looked for a connection with the Weinberg angle, and discovered

$$a^{-1/2} b^{-2} c^{-1} d^4 = \sin^2\theta_W = 0.2259$$

Surely this result, accurate to four significant figures, should make the

most ardent skeptic take pause.

Further, the ratio of the masses of proton and electron can be found in the relation:

$$a^{-1/2} b^{-1/4} c^{1/2} d^3 = 1836$$

And, last but not least,

$$a^{-1/2} b^{-1/4} c^3 d^{-1/3} = 6.022$$

which we recognize as Avogadro's number divided by 10^{23} .

If one looks at the above relations, one sees other further correlations that are difficult to attribute to pure accident. Note how often the square root of the number of strings appears. Similarly, check how the fourth root of the number of optical modules seems to have universal significance. Further, notice the close correspondence between the last two examples. Does this suggest a deep connection between Avogadro's number and the ratio of the masses of proton and electron?

3.0 Conclusion

The height of the active volume of the DUMAND Octagon array will exactly equal the base length of the Great Pyramid of Khufu. The Monte Carlo program used to determine the height (for DUMAND, not the Great Pyramid) did not use any of the parameters of the pyramid as input, yet the result of 230 meters nevertheless came magically out of the analysis.

Piazzzi Smyth and others have shown that the geometry of the Great Pyramid contains information that the builders should not have known according to conventional historical wisdom. Discovering the remarkable connection between the Great Pyramid and DUMAND, I have sought other evidence that its geometry may contain hidden knowledge. Aided by a sophisticated Monte Python program, I have shown that π , $e^2/\hbar c$, $\sin^2\Theta_W$, m_p/m_e , and N_A are all contained within the geometry of the Great Octagon.

Studies are now underway to discover what hidden prophecies may exist buried in the design of DUMAND, placed there by some yet unknown holistic force that forms simultaneous connections between

everything in the universe. (Such a force has been suggested by physicist Fritjov Capra in his books *The Tao of Physics* , *The Turning Point*, and the recent film, *Mindwalk*.⁵⁾

When currently unknown physical quantities such as the masses of the neutrinos, top quark, and Higgs particles are finally measured, they will be tested to see if their values already existed prior to their direct measurement within the dimensions and parameters of the Great Octagon.

4.0 References

1. Piazzzi Smyth, 1978. *The Great Pyramid: Its Secrets and Mysteries Revealed*. Bell Publishing Company, New York.
2. Victor J. Stenger. 1990. *Physics and Psychics: The Search for a World Beyond the Senses*. Buffalo, NY: Prometheus Books.
3. V. J. Stenger. 1988. "The DUMAND Octagon Array." Hawaii DUMAND Center report HDC-1-88.
4. Cornelis de Jager. 1992. "Adventures in Science and Cyclosophy." *Skeptical Inquirer* Vol. 16, No. 2, Winter 1992, p. 167.
5. Fritjov Capra. 1975. *The Tao of Physics*. Berkeley Calif.: Shambhala.
---. 1982. *The Turning Point*. New York: Simon and Schuster.