# Was the Great Pyramid Plan Derived From Flatland, or from Sphaerics? 

by Pierre Beaudry

The Great Pyramid: Ancient Egypt<br>Revisited<br>by John Romer<br>New York: Cambridge University Press, 2007<br>Hardcover, 557 pp., \$40.00

This review intends to show how I came to decide not to recommend this book. The advertisement for the publication stated something promising: "The builders of the Pyramid worked from a single construction plan-a plan whose existence has long been doubted by many scholars.... The process of the Great Pyramid's construction was integral to its design."

Anyone who has seriously studied the architecture of the Great Pyramid of Egypt suspects that there must have been some sort of a plan for its construction and will immediately be excited in the prospect of someone having discovered it. So, I rushed to take a peek at Chapters 4 and 5, as author and archaeologist John Romer recommended at the beginning of his book, in order to see what his method and plan were.

Romer admitted, flatly, that his discovery of the Pyramid's original plan was expressed by the idea of doubling of the square, which he located at the end of the ascending corridor of the Great Pyramid. He wrote:
"I'd started my pyramidological perambulations innocently enough, with a ruler, a pair of compasses and a plan, trying to work out how on earth the ancient Egyptians had managed to set a mysterious block of limestone that lies in one of the Great Pyramid's interior corridors exactly at the height at which the area of the base of the pyramid above the block is precisely half of the area of the base of the entire pyramid.... And then, perhaps, once I had solved that strange conundrum, I would discover why these ancient people had set such specific mathematics within the tomb of Pharaoh."

This attracted my curiosity, especially because I was hoping that this question of doubling the square might have led

Romer to the rediscovery of the Egyptian method of Sphaerics, which Lyndon LaRouche has recommended to serious researchers. ${ }^{1}$

The precalculated position of this single block of limestone, located at the end of the Grand Gallery, might be a crucial clue in relationship to the complex geometric center of the Great Pyramid situated at the apex of the Queen's Chamber vault. This led me to think that Romer might have rediscovered the ancient Egyptian-Greek method for solving the famous problem of the doubling of the cube. So, I looked at his construction with doubled interest.

First, and true to the reality of the flat platform located at the 50th layer of the Pyramid, when the monument is viewed from above, Romer was right in identifying that the diagonal of the truncated square base, at that level, represented the side of the ground level base of the entire Pyramid. Thus, he located the ratio of the two square surfaces as being $2 / 1$.

## A Flatland View

Richard Anthony Proctor had already established this, during the 19th Century ${ }^{2}$ However, the problem with Romer's approach, up to this point, was that he did not push the investigation further into the domain of solids. After all, the Great Pyramid is a solid. To my amazement, Romer was looking at the Great Pyramid strictly with the eyes of Flatland!

In reality, the genius that constructed that Pyramid was not merely dealing with the single mean proportionality of the surface domain, but with the double mean proportionality of the higher solid domain.

So, simply from the standpoint of the geometric conception of this great historical monument, Romer was off by a Riemannian degree of magnitude, and had made the fundamental error of omitting the fact that the Egyptians had initiated and educated Greeks like Thales, Pythagoras, Archytas, and Plato in the solid domain of Sphaerics.

Unfortunately, Romer ignored the dif-

ferences of dimensionality among the line, the surface, and the solid. However, I did not consider this to be a sufficient reason not to read his book. Not everyone knows about the existence of epistemological differences between those geometrical domains. So I kept on reading.

Second, Romer made several errors of calculation and judgment in the presentation of the known angular measurements of the Ascending Corridor, which is the most important feature inside of the Great Pyramid. He wrote:
"He [Petrie] also found that the Ascending Corridor rises not at a perfect 30 degrees, which is the required angle of the diagonal of two squares, but at $26^{\circ} 13^{\prime}$ degrees, which, if uncorrected, would give rise to an error of more than 10 per cent. And yet, despite all that, remarkably enough, the huge block of the Great Step still stands upon the Pyramid's upper six square grid within 0.01 percent of mathematical perfection...."

## Where the Monkey Sleeps

Now, this sort of statement shows you how to discover where the monkey sleeps. Romer gets blinded by the mathematical perfection of the Pyramid while he, himself, makes the error of stating that the diagonal of two squares is 30 degrees. Obviously, he should have verified that measurement before he wrote that chapter and he would have discovered that this was not the case.
That, however, can be easily corrected. But Romer also attributed to the Egyptians "an error of more than 10 percent" in determining the angular measurement of the Ascending Corridor, which is at precisely $26^{\circ} 17^{\prime}$ degrees, as opposed to 30 degrees.

This is a more serious error on the part
of Romer, because it comes from the underlying wrong assumption that the corridor angle should correspond to the latitude of Giza, which is 30 degrees.

Here, Romer implicitly blames the Egyptian builder for not having chosen today's standard of Polaris and, instead, for having chosen the angle corresponding to the North Star, Alpha Draconis, which was a bright star that appeared at less than 4 degrees south of the North Pole at midnight, in the approximate period of 3400 B.C., as was calculated by Proctor.

This is what explains the angular determination of the descending and ascending corridors at $26^{\circ} 13^{\prime}$ degrees. Thus, for Romer to admit this error would mean revising the British oligarchy's calendar, for which he established the date of construction of the Pyramid at about 2478 B.C. This "error of 10 per cent" would therefore represent a miscalculation of 922 years! Such an error might set all of the British establishment clocks into uncontrollable gyrations.

Romer preferred to blur the whole thing by blaming that inconsistency on the Egyptian builders. That is not very honest.

## Pragmatism

The most serious error, however, is Romer's reductionist approach to the Pyramid from the vantage point of British pragmatism and utilitarianism. Romer ignores the power of ideas and rejects entirely the complex function of the Pyramid as a great astrophysical observatory, as well as a pedagogical experiment in the simultaneity of eternity.

Romer reduces the Pyramid, as most British authors do, to a burial monument, and in doing so, he reinforces the Freemasonic Cult of the Dead. Even though no dead Pharaoh was ever found in any of the Egyptian pyramids, Romer persists in perpetuating the spirit of the tomb and the myth of the dead.

As a result of his not understanding the Sphaerics function of the Great Pyramid, Romer used the North Star alignment merely for the positioning of the horizontal surface of casing stones, and neglected to explain the North Star alignment for the vertically descending and ascending corridors, which call for the presence of a North Star at an elevation of $26^{\circ} 13^{\prime}$ degrees. That North Star would come a long way in explaining Romer's error of 10 percent.

As a result of flattening everything and of ignoring the significance of the vertical dimensionality, Romer, therefore, adjusted the casing alignment to conveniently fit the date he wished to establish for the construction of the Pyramid-that is, 2478 B.C.

If you cannot move the casing blocks, then, you must move the stars around, and that is precisely what Romer did. Romer flattened everything to fit his methodology, and in the same manner, excluded from his study of the Pyramid the power to elevate the human mind to the required level of a discovery of universal physical principle.

For instance, in his section on "Stars," Romer wrote:
"As we have already noticed, however ... the odd cubit fraction produced by the six-partite division of 440 cubits suggests that rather than employing abstract mathematics and measuring out its product on the ground, the dimension of the six-square grid was set with builder's tools working pragmatically at 1 to 1 , directly on the pyramid's fine stone pavement.
"At this same time, our modern plan informs us ... a number of basic decisions must have already been taken about the architecture of this pyramid. First was, the basic geometrical design of the Pyramid's interior, set from two crossed lines set on the diagonals of four grid squares, would be represented in the hard stone of the Pyramid at the level of its floors, so as to allow that elegant design to remain intact and so permit, it would transpire, the master builders the freedom to construct an interior architecture over and around this basic framework as circumstance required."

The fact that Romer would have found a tracing mark in the masonry next to the Pyramid that would serve as a guide to the workman, is an interesting find, but to elevate this guiding practicality to the level of the plan of the Pyramid is a reductionist fantasy. The discovery of the carpenter's square does not tell anything about the idea and the design of the Renaissance dresser that it was used for.

## The Shadow Reckoning Method

However, Romer might have a better chance to reach out to the true idea of a universal physical principle hidden in the discovery of that design, if he inquired about the shadow reckoning


Interior of the Grand Gallery (about one quarter of its length), showing how it could have been used to observe the stars circling in the souther sky. The illustration shows the southern section of the meridian.

Source: From an illustration by Richard Anthony Proctor in Peter Tompkins, Secrets of the Great Pyramid (New York: Harper Colophon Books, 1971)
method of angular measurement that the Egyptians used in their astronomy as well as in their architecture.

But, the reductionist approach to practicality in the building of such a masterpiece as the Great Pyramid is a deadly blow to the creative process of anyone who is seeking the truth about the whole matter. The plan of the Great Pyramid is a powerful idea reflecting a universal principle, not simply a practical grid required by the circumstance in the building process.

This problem of pragmatism is reflected directly in Romer's reduction of the Pyramid plan to a surveying six-squared grid that the ancient Egyptians have used in lining up their brick laying. And that became the "single construction plan" that was publicized for selling the book.
Such a grid was surely used to keep the blocks lined up, but that does not qualify the instrument as a single construction plan. Furthermore, Romer had to admit that he was not so sure about that grid either, and that "the designers of King Khufu's Pyramid did not employ this six-squared grid consistently.... [O]nly selected parts of the pyramid's interior are fixed upon it, other elements of its plan having no immediate connection with it."
Well, I guess that, after all, everybody is entitled to change plans and possibly several grid-plans were used.

Regardless of this deadly British pragmatism, I still kept on reading patiently and, as I came back to Chapter 5, Romer stated:
"Yet it was not mere capriciousness that fixed the positions of those other elements of this design, but the consistent use of what might be called the Great Pyramid's double helix. For the Pyramid's architecture is governed not by a single grid of squares but by two staggered grids of equal size set on the same vertical planes, the upper being the one described above, the lower being set some 15 feet ( 4.6 m ) beneath it at the level of the Pyramid's baselines."
At this point, I had had enough. Here, it became clear to me that Romer has no real understanding of the physical geometry problem that he was wrestling with. He was blindly poking at different parts without seeing the entire elephant. Romer may have produced excellent results as an archaeologist, I have no
doubt, but from the standpoint of geometry, he simply did not know what he was talking about.

As I was about to close the book, I discovered that Romer admitted his shortcoming. He wrote:
"My diagrams of the Pyramid's plan, for instance, are set upon a modern type of drawing, specifically a cross-section, which was only named as such two centuries ago. So, whilst these modern tools provide us with a useful window through which to view the ancient Pyramid's design we must always bear in mind that its ancient builders worked without such plans, just as they also worked without the surveying equipment that enabled such drawings, along with their accompanying specifications, to be realized as they are today. The discovery of this ancient pattern in our modern plans, therefore, is but a shadow of a lost reality."

Here, I could not agree with Romer more. This, at least, was an honest statement, but then why write a book to say that all you were doing was chasing the "shadow of a lost reality"? And why did the news release of Romer's book claim that he had discovered the "single construction plan" of the Great Pyramid? This was a completely false representation.

Finally, it turns out that Romer was not attempting to discover the plan for the construction of the Great Pyramid at all. He was merely attempting to find a practical alignment mechanism for brick laying and make the Great Pyramid fit onto it. He had caught the Newtonian disease of making the universe fit his mathematics: pragmatism.

This is how I discovered that I had been reading a book pertaining to the domain of British Flatland, the horrifying consequences of which can be found in Edwin A. Abbott, Flatland, A Romance of Many Dimensions (New York: Dover Thrift Edition, 1992). After discovering so many errors of calculation and judgment, it became clear that John Romer had not written a serious book, and that I could not recommend it.

## Notes

1. For example, see Lyndon H. LaRouche, Jr., "Man \& the Skies Above," EIR, June 1, 2007.
2. For more on Richard Anthony Proctor, and a review of Pyramid geometry, see my article "Pythagorean Spherics: The Missing Link Between Egypt and Greece" in 21st Century, Summer 2004.


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