From the desk of Pierre Beaudry

THE LIVING CURVATURE OF THE PARTHENON OF ATHENS AND THE PHEIDIAS CELEBRATION OF THE PRINCIPLE OF CREATIVITY

(An ancient pedagogical experiment.) Part I

by Pierre Beaudry 12/25/2008

> "{In a very early period of the arts in Greece, we meet with a circumstance which shows the advantages derived from consulting with philosophy, if it does not also show the origin and outset of those advantages. The circumstance to which I allude is, that in the period when the sculptors contented themselves with the stationary forms and appearance of figures, in imitation of their predecessors, the Egyptians; at that time they began to submit their works to the judgment of philosophers, one of whom, being called in to survey a statue, which a sculptor, then eminent, was going to expose to public view, remarked that the human figure before him wanted motion, or that expression of intellect and will, from which motion and character must arise; for man had a soul and mind, which put him at the head of the animal creation, and, therefore, without that soul and mind, the form of man was degraded.}" (Benjamin West, *On the Philosophy of Character*, John Galt, *Life, Studies, and Works of Benjamin West*. Part II, p. 124.)

INTRODUCTION: THE PARADOX OF THE PARTHENON OF ATHENS

The curious thing about the Parthenon of Athens is that you have to first start discovering the nature of your own mind in order to understand its construction. That is, you have to look into the future in order to understand the past, you have to start with the whole in order to make sense of the part, which means that you have to understand the universe as a intelligent living whole in order to understand the speck of dust that your last visit there has left on your shoe. That's the process required to understand the Parthenon of Athens. Once you have understood that, the rest is just a matter of grinding the parts and adjusting them to the whole. As Lyn put it in his Windy Hill Dialogue for Saturday Dec. 20, 2008, HYPOTHESIZING THE HIGHER HYPOTHESIS: "The most important thing in all of human knowledge is not what man discovers about the universe, but what we discover about the nature of man, as a power within the universe, a power above what we otherwise treat as the subjects of human intellect." In other words, if you wish to discover anything, you must discover first of all the universal quality of your own mind because it is through your own mind that you can discover anything else. This is the very purpose and intention that was built into the construction of the Parthenon. So, let's see how the mind of man is reflected in that extraordinary construction.

At first glance, the Parthenon of Athens appears to be the greatest monument ever built to celebrate the everlasting tradition of a perennial state of perfection known to mankind. Its construction seems to reflect the perfect state of human government on earth. Indeed, the Parthenon appears to have had every single one of its stones carved in perfect straightness and at perfect right angles and where not a single line seems to be offsetting its perfect symmetry. It was as if a perfect people had carved its principle on a perfect form of Euclidean geometry, using perfect rules, governed by a perfect democratic legislator, guided by perfect Olympian gods, and guaranteeing perfect equality for every human being. In all appearances, the outside features of its Doric construction emphasized such a perfect society by including sculptural decorations, high up on the pediment and on the metopes of the architrave, showing in all manners of war, the superiority of Greek culture by describing battles that the Athenians had fought and won against all of their main enemies during their entire history.

Thus, if such a beautiful monument to reason (Athena being the goddess of Reason and War) was erected to celebrate such human perfection (hypothesizing the higher hypothesis), why is it that immediately after the Parthenon was finished, in 431 BC, the entire Greek society was plunged into the worst crisis of its entire history and its glorious civilization degenerated and collapsed into the tragedy of the Peloponnesian Wars? How could such a perfect society end up in such a disaster? What went wrong? The answer to these questions has lain dormant in the paradox of the Parthenon construction itself for 2,500 years.

However, when closer attention is brought to the construction of the Parthenon, leaving aside the illusions of sense certainty and the pile of garbage that has been written on the subject for the last two millennia, one is able to discover that not a single block of stone in the entire building can be interchanged with another, because no two blocks are alike in the entire building, which means that each block of the Parthenon has only a single place where it can be fitted in the entire design. The truth of the matter is that, architectonically speaking, there does not exist a single straight line or a single right angle in the Parthenon, because every single one of about 70,000 white marble stones pieces reflects the curvature of a living process that was built into it from the beginning.

Figure 1a. Nautilus shell

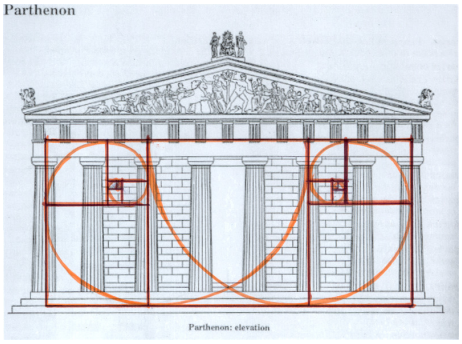


Figure 1b. Spiraling Golden Sections

Paradoxically, the underlying curvature motion of the Nautilus spiral action is the cement that holds together all of the marble blocks of the Parthenon. The simple reason why no two blocks of the Parthenon are interchangeable is because the great architect Iktinos (Parthenon 447-433 BC) and his genial sculptor associate, Pheidias (c. 490-430), built the Parthenon like a growing living being based on the harmonic musical principle of conical spiral action. (1)

Note how right and left spirals of Figure 1.b rotate in opposite directions to determine the intercolumniation of the front elevation. This is the same design that formed each triglyph and each triglyph-metope-triglyph triplet on the external Doric frieze of the entablature. For the same reason that you cannot put a right hand glove on a left hand, the right golden rectangle cannot be mapped on the left side of the Parthenon. Thus, the Parthenon self-reflects, within itself and on itself, like a mirror image as all living processes do, and as all creative self-conscious thinking processes must do, performatively, as well. But, what is the difference between those living processes and the human mind? As Lyn emphasized, the animal is ecologically limited, while man is not. This difference can be found in the axiomatic change that occurs between the Doric order and the Ionic order, between the outside and the inside of the Parthenon construction.

The first aspect of the self-reflexive characteristic of the Parthenon is built into the floor itself. The harmonic ordering of the stylobate floorplan of the Parthenon (Figure

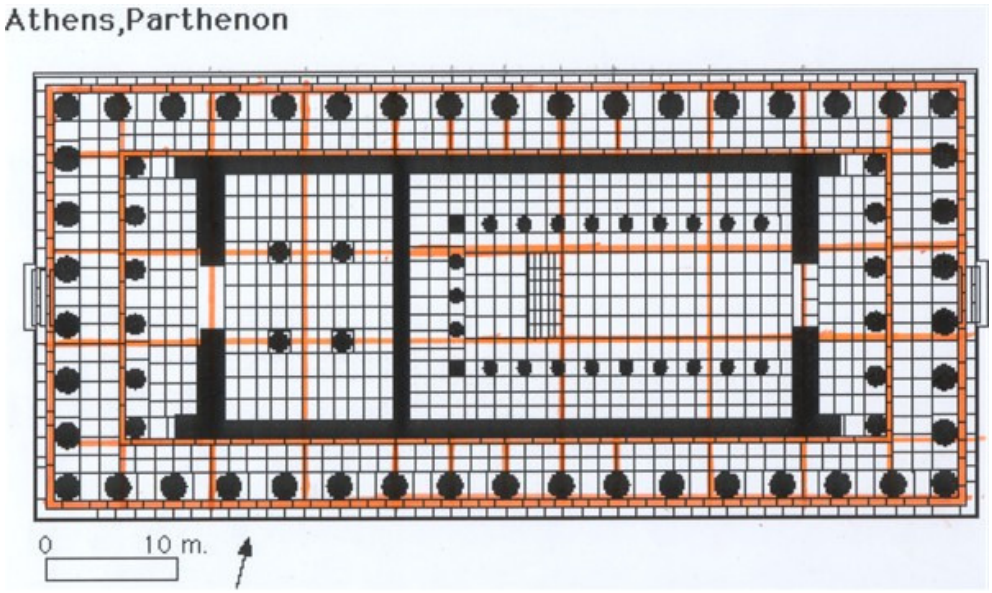
2) is designed like a mirror image of itself, as if there existed an imaginary mirror erected along the central east to west axis line of the temple. Thus, the northern half of the Parthenon is an inversed replica of the southern half, like the left side of the human body is the inversion of its right side. The second self-reflexive characteristic of the floorplan is built like a Fibonacci series jigsaw puzzle in which one has to discover the idea of self-similar spiral growth. This implies that the harmonic ordering of the whole design must be first discovered before fitting any number and size of squares and golden rectangles into a close packed whole. The whole floorplan reflects the overall ratio of 4/9, that is, the double golden rectangle ratio of the width and the length of the stylobate which is 100 feet by 225 feet. These pieces had to be fitted in such a manner that each part reflected, in the small, the intention of the finished building in the large, fitting the microcosm into the universal conception of the macrocosm. However, it was the idea of that completed whole that determined where the part was going to be located. So, how did the worker know where to put the small part if the whole had not yet been built? That is where the design of a universal hypothesis had to be first established as a starting point.

From that vantage point, sitting in the future, we seem to be in a better position to solve that problem, because the Parthenon has already been completed. However, that is a fallacy because the Parthenon as a whole could never be the sum of its parts. This is the reason why the modern engineers who are currently rebuilding the Parthenon have more problems in attempting to solve this puzzle than the original builders had in constructing it in the first place. Why? Did the ancient Greeks have a secret that was lost in the distant fog of time? Yes! But that secret did not work like a mathematical formula or a recipe. The secret process worked as a universal principle and was called “dynamics.”

Note, for example, how the Fibonacci ratio of 8 frontal columns over 5 side columns generates east and west golden rectangles to establish the floor plan. Now, that is merely the mathematical shadow of a principle of growth. It must have been quite a pleasant pedagogical exercise to have a few hundred workers figure out the least action manner in which the close packing of some 870 scrambled floor pieces would have to fit together, each in its proper place, and, at the same time, replicate the process of erecting the front and back elevations of the entire temple. The process of discovery, therefore, worked like the foreward motion of pulling oneself by on one’s own bootstraps.

The challenging axiomatic idea of this ancient pedagogical experiment is to have the front elevation of the Parthenon, as shown in Figure 1.b, reflect the same curvature ordering of hylozoic monism as the one expressed by the shadows of the golden rectangle/square/golden rectangle composition that the floor plan indicated in Figure 2.

North



South

Figure 2. The orange lines (not visible in photocopy reproduction) show how the harmonic divisions of the Parthenon floor plan were all squares and golden rectangles designed with a mixture of smaller squares and golden rectangles. The front has 8 columns and the side has 17 columns.

The harmonic proportionality of such a hylozoic monist design as a whole was intended to reflect the dynamic idea whereby each part of the living universe (universal cosmos) reflected in the small the same intention that bounded the composition of the whole; because, as the nature of the universe shows in its growing process of change, the embryo always contains in its potential the future realization of the completed matured being; which means that causality comes from the whole, not from the part, from the future, not from the past. This also means that the completed being does not come from the embryo, it is the embryo that comes from the completed being. If you understand that fact, then, you should have no difficulty in considering this hylozoic monist self-generating process from the future, as if it were the Greek kernel of Vernadsky's Biosphere. Now, let us see how this can be both seen and heard differently in a conic function.

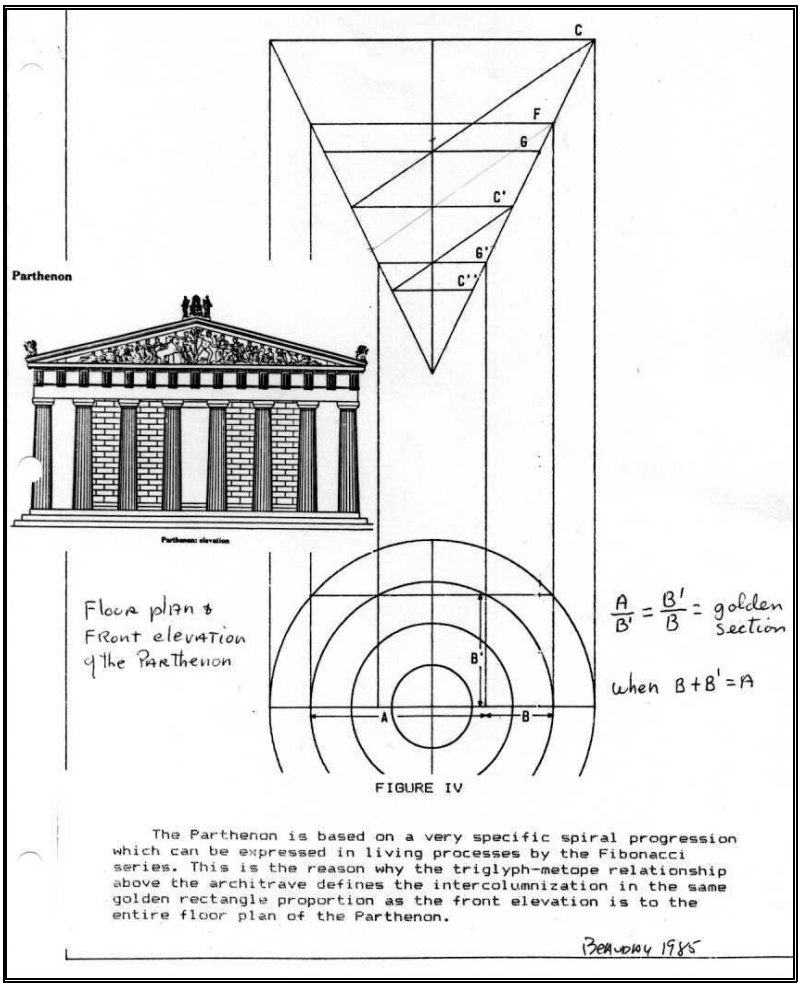


Figure 3. Front elevation and floorplan of the Parthenon projected from conical spiral action.

As shown in Figure 3, the floorplan (seen above within the four concentric circles) of the Parthenon can also be projected from the non-visible manifold of a conical projection. Here, the two domains of architecture and music are mutually connected through a geometric form of logarithmic spiral action. The conical projected golden section in the plane is made to correspond to a complex musical interval relating the keys of G and F within a two-octave span inside of a C-256 regulated conical function. However, there is a non-visible discontinuity here which is only noticeable from hearing.

This is one of those hearing-sighting paradoxes that the Pythagoreans were studying at the time of Pheidias. Note that when the two spiral actions are the inverse of each other, they cannot be mapped one onto the other, because they are left and right handed. However, when such left and right spirals are projected onto a cone, their pathways must cross each other at some future halfway point. What is that future point? It is the point of causality to which they are naturally attracted, a point of axiomatic discontinuity to which they are invariably led historically into either a breakdown or into a higher manifold. This is the type of axiomatic change that is built-in as a historical

singularity, or a discontinuity, in every growing process of change in the universe as a whole.

Pheidias, as well as the Pythagoreans of his time, understood the reality of such historical crisis periods as being crucial features of a growing living universe. In fact the historical period ending with the construction of the Parthenon was the beginning of the historical period of the Peloponnesian Wars. Such an axiomatic moment of change was also confirmed as the dynamic arithmetic-geometric mean process that Rabelais had later identified as the "fear of fear itself," or the "devil's interval" of the Pythagorean Tetrad in Chapter 36 of his *Book Five*. As Rabelais showed, the Pythagoreans had a perfectly good understanding of the arithmetic-geometric mean as a subjective metaphor for the fear of death. It is not possible to replicate, here, the real conditions of *Panurge's fright*, but we can simulate the experiment by showing how the following heuristic geometrical example succeeds in failing to actually demonstrate the appropriate epistemological dynamics of this matter of mind in the grips of a historical singularity.

Do this little exercise. Look at yourself in the mirror and ask yourself: where is your right hand in that mirror? You will be wrong if you point at the mirror image of your right hand. Why? Because that image is a left hand! Why is the image of your right hand on the left side of your image in the mirror? How did it jump over there? The strangeness of this effect is important to realize because it causes the same kind of *perplexity* as the mirror image of the dual spiral action in a living process. The mirror image of a right spiral is a left spiral, just like the mirror image of your right hand is a left hand.

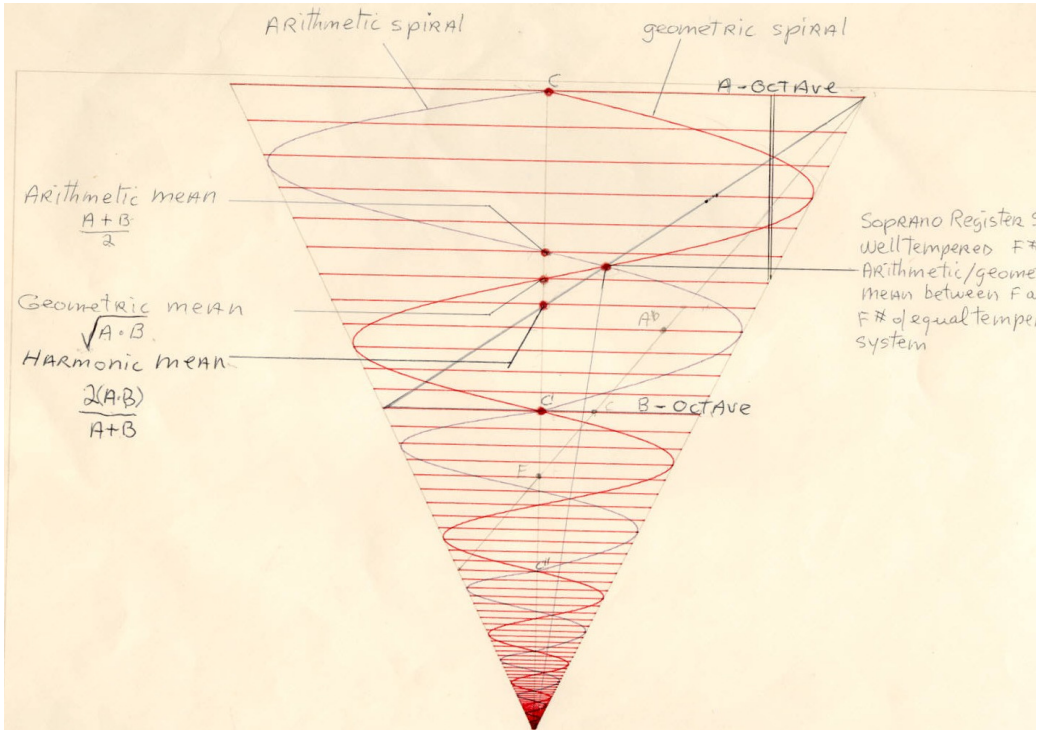


Figure 4. Two arithmetic and geometric spirals rotating in opposite directions intersect at the arithmetic-geometric mean between F and F#.

Now, apply the same principle of chirality when you generate a left and a right spiral action around a cone, say, an arithmetic spiral and a geometric spiral. If you rotate one spiral to the right and the other to the left, the two spirals will intersect half way around the cone in only one place, and where they intersect, the two spiral will express the singularity of the voice register shift, the passing tone of F#! That is meant to represent the passing tone region of the soprano and tenor human voice in changing from the chest register to the head register in Bel Canto. The conical projection of an F and G interval onto a golden section in the plane (Figure 3.) has the same harmonic effect.

1- THE PHEIDIAS AXIOM BUSTING CURVATURE OF THE PARTHENON.

About two hundred years before he was born, the architect Iktinos and the sculptor Pheidias put their heads together and demonstrated the fallacy of Euclid's *parallel axiom* by constructing the Parthenon (449-431 BC) of Athens based on the Pythagorean curvature of Sphaerics. Indeed, the Parthenon is one of the greatest Sphaerics buildings of all times. And, one of the most fascinating aspects of it lies in the fact that the whole construction is based on a floor plan that has a spherical curvature distributing stereographic non-linearity everywhere throughout the building. Here, one of the paradoxes of the Parthenon lies in the fact that everywhere, and in every one of its smallest parts, the temple is actually curved while it appears to be perfectly straight.

The irony is that, today, because the engineering repair crews working on the reconstruction of the dilapidated Parthenon have been educated with the reductionist Euclidean set-square method of digital computers, they find the reconstruction task impossible and they are taking at least twice the amount of time just to repair half of the original work. This is like an ironic backlash of the Euclidean-Newtonian "inverse square law." The reason for this handicap is because modern workers have lost the analog method of grinding all of the joints of every block to fit into the characteristic curvature.

It must have been the greatest joy for the few hundred workers who understood the principle of artistically grinding such a grandiose composition based on the double spiral action chirality of the Nautilus. In the construction of the Parthenon, one can discover that the principle of artistic composition is the mirror image of the universal physical principle of science. In other words, think of the construction of the Parthenon as an actual experiment in constructing a temple based on the idea of extracting transcendental second order intelligible forms from the walls of Plato's Cave.

In point of fact, if the Parthenon were to be understood properly, it would be seen like an epistemological experiment reflecting in all of its components of physical construction the power of creative reason, as personified by Athena. Then, all of the so-called "refinements" of curvature that have been built into it would be understood as very

exciting heuristic infinitesimal devices demonstrating the fallacies of sense certainty as they appear in a Euclidean and Aristotelian fictitious universe.

As the Platonic Cave experiment shows, reason in opposition to mere opinion and sense certainty, must make the correction of our naturally lying sense perception. It must show how we fail as well as how we succeed. This means that, here, in the Parthenon, asymmetrical disproportion has been deliberately created in order to restitute to the mind's eye of the observer-participant the living proportionality that our eyes would otherwise perceive as distorted and untrue. The amount that has been epistemologically corrected by your mind actually corresponds to the degree to which our sensory instruments have failed in reading the shadowy presence of the fundamental principle of Hylozoic Monism in the domain of Sphaerics. A close study of the treatment of how the idea of the golden section curvature fitting motion was applied to the grinding of stones, for example, is a case in point.

Again, this is but a shadow, but it is worth repeating that the architectonic golden section was accounted for like a living nautilus accounts for the development of its golden section shell in which the smallest part is not only a replica of the whole curvature, but the actual intention of the entire future curvature of the completed being. The spiraling grinding method of Sphaerics functioned the same way.

Figure 5. The ancient method of grinding columns with sand and a grinding plate can be precise up to one twentieth of a millimeter. (Secrets of the Parthenon homepage/ NOVA homepage.)

Similarly, think of the grinding action of every column drum as an expression of such a figure eight motion, as it is reflected in the two spirals of the front elevation and the entire floorplan of the Parthenon (Figure 1b.). Furthermore, the Greeks understood that a continuous left and right spiral motion in the plane, as in Figure 1b. was similar to the pathway that the sun follows during the solar year. In other words, the grinding

method of the Parthenon reflected the universal grinding of time along the apparent pathway of a lemniscate. This grinding method alone demonstrates that the universe of Euclid, based on straight-line measurements, is a complete fraud. And, this is the reason why the series of asymmetric disproportions that Iktinos and Pheidias had incorporated into their great work must be looked at as the best scientific argument against Euclid's fraudulent "*parallel axiom*." Let us look at this more closely and note some of the most devastating non-linear implications.

Figure 6. The Parthenon curvature along the northern steps.

There are three types of anomalistic curvatures built into the Parthenon, and all three represent different degrees of epistemological difficulty in mastering the universal principle of its composition. In this report, I will emphasize mostly the third such difficulty, in section five of this report. The first and most easily recognizable curvature is the bellowing curved floor plan on all four sides of the Parthenon's stylobate platform which is not perceptible when viewed frontally; the second is the conical entasis curvature and inward inclination of all of the columns; the third, and most fascinating, is the Pheidias stereographic anomaly of projection in certain scenes in the frieze of the Parthenon's cella, as if to indicate certain non-visible adjustments to be made on the wall of Plato's Cave.

The first two anomalies are made visible in Figure 6. These singularities have been noticed and commented upon for centuries and have been examined ever since their original construction of the Parthenon started in 447 BC. However, the point that is rarely, if ever, made about these non-linear features is that they were not constructed for

empirical or aesthetical reasons, as most commentators have suggested throughout history. They were built for the specific epistemological purpose of developing the power of the human mind.

For example, take the case of the Greek commentator, Heliodoros of Larisa, who wrote, during the first century AD, a complete fallacy of composition which consisted in considering such curvatures as introduced merely for the purpose of making empirical visual adjustments: "The aim of the architect," he wrote, "is to give his work a semblance of being well-proportioned and to devise means of protection against optical illusions so far as possible, with the objective, not of factual, but of apparent equality of measurements and proportion." (2) This evaluation is a complete fallacy based on sense perception. Why would any one need to be "protected against optical illusions?" Are they dangerous? Do they bite? Is there a danger of tripping over them and breaking a leg? Should we buy an insurance policy against them?

Lens makers may have the purpose of helping people correct visual defects, but Greek architects and sculptors were not in the business of adjusting their buildings to practical necessities or to protect themselves and their buildings against accident-prone people. Their concerns were atoned to universal physical principles of gravitation, proportion, and truthfulness about the universe as a whole, and the mental defects that people may express with respect to them. The artists of the Parthenon were interested in the creative mental processes rather than defects attributed to the illusions of sense certainty.

1- THE PRINCIPLE OF INSIGHT.

Lyn has many times addressed the issue of creative insight as the crucial form of discovering what past individuals have realized, have partly realized, or may even have realized with an evil intent in their works. Here is how Lyn described the essential of the *principle of insight*.

> "By *insight*, we must intend to mean, that we have grasped the universal implication expressed by the way we are thinking about either the real universe, or which an opponent has adopted as one which he might maliciously intend that mankind should not be permitted to know. Indeed, the recognition of this quality of *insightful intention* is the underlying principle of all discovery of what may be presumed to be knowledge of any universal principle, either good, or evil. In present-day society, as known in history so far, only a small minority of persons have been, or are efficiently aware of this specific role of what were fairly described, for emphasis, as *strategic insight*." (3)

This is the way we must look at the case of Lawrence Alma Tameda and his *Pheidias Showing the Frieze of the Parthenon to his Friends.* This is the best example of a malicious insight in the sense that Lyn identified. There are two reasons why I have chosen Tameda as an explicit enemy target. The first reason is that every "British" tainted history book on the subject of the frieze of the Parthenon cites this painting of Tameda as if he were an artistic authority in the matter, without identifying that the very intention of the Tameda painting was to explicitly bowdlerize the purpose of Pheidias and to justify Lord Elgin's stealing of the Parthenon marbles from Athens, in the name of British fair play, in 1816. Secondly, Tameda was one of the leading nineteenth century British pre-Raphaelite artist who actively campaigned against the classical school of Benjamin West and against the American Hudson River School. But, aside from the malicious nature of Tameda's political activities, it is important to investigate what is conceptually and epistemologically wrong with this painting.

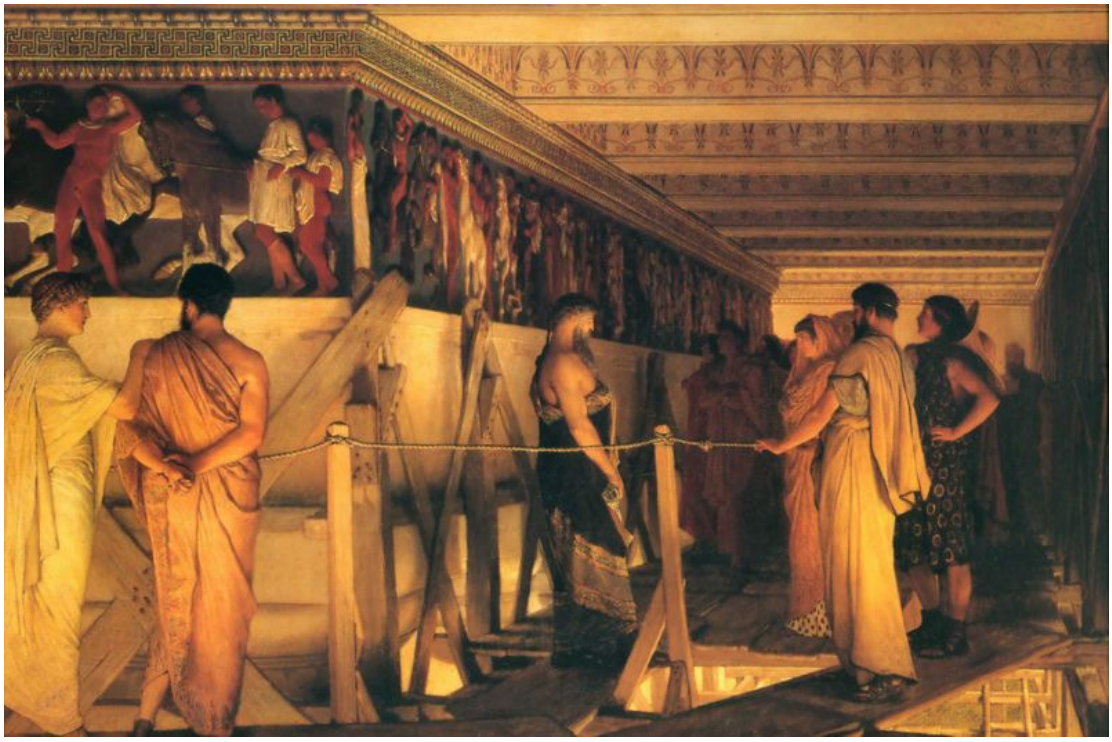


Figure 7. Lawrence Alma Tameda, *Pheidias Showing the Frieze of the Parthenon to his Friends*, 1868.

First of all, in order to have an insight into a picture, one must always investigate the state of mind that is reflected in the painting. Always look at a painting as a state of mind, and nothing else. The subject of the painting of an apple is not the apple, but the state of mind of the painter that is reflected into that apple. Ask yourself: What is the intention of the artist? What is his purpose? What is he trying to do to the spectator? Educate him? Entertain him? Steer him in one direction or another? Prevent him from

discovering something? Secondly, what does that painting represent from the standpoint of classical artistic composition?

This painting of Tameda is a piece of fakery! Why? Because it is a calculated fallacy of composition reflecting entirely the opposite of what Pheidias intended to accomplish with his frieze. Tameda has obfuscated completely the pedagogical purpose of the frieze and has entirely expurgated the work of Pheidias from the crucial experiment of observing the frieze from the ground level. Contrary to that intention, Tameda's malicious insight was to show that it was so difficult to see the frieze of the Parthenon from below, that Pheidias needed to bring his friends up on a scaffold in order to show them the details of the frieze up close, in order to get a truer appraisal. In doing that, Tameda has left out the real subject matter of the frieze, i.e. the self-reflective process of creativity, and he has replaced it with pure lying sophistry, reflecting, instead, the typical British oligarchical pragmatism and cynicism that the pre-Raphaelite movement represented in England during the nineteenth century.

As a result, the ridicule of the Tameda painting is that the scenes of this western frieze are so flat that, even from where we stand on his makeshift scaffolding, we cannot even recognize any of the subjects, not even from a few feet away. Note that the people in the background, for instance, cannot see a thing two feet in front of them because the platform they stand on is entirely blocking the source of light. Brilliant isn'it? Tameda has blocked the source of light projecting into Plato's Cave. Take the platform away and you can see the shadows on the frieze!

This painting was meant to express British humor in suggesting that Tameda had found an Aristotelian solution to the awkwardness of the position of the frieze by putting them up to a "proper" eyesight level, as in the British Museum, where they are still on display today. This was not the way that Pheidias intended to have his viewer participate physically and mentally into one of the most important discoveries of principle of ancient times. For Pheidias, the viewer had to be a participant, not a cynical outside commentator. This is what Tameda and the British tainted history books did not want you to know about the frieze. Tameda obviously missed the whole irony of the subject matter of the frieze and he deserves nothing but the ridicule that he brought upon himself.

3. THE FUTURE ORIENTED GREAT PANATHENAIA

Thou still unravished bride of quietness,
Thou foster-child of silence and slow time,
Sylvan historian, who canst thus express
A flowery tale more sweetly than our rhyme:
What leaf-fringed legend haunts about thy shape
Of deities or mortals, or of both,
In the Tempe or the dales of Arcady?
What men or gods are these?

What mad pursuit? What struggle to escape?
What pipes and timbrels? What wild ecstasy?

Heard melodies are sweet, but those unheard
Are sweeter; therefore, ye soft pipes, play on;
Not to the sensual ear, but more endeared,
Pipe to the spirit ditties of no tone:"

(John Keats, *Ode on a Grecian Urn*.)

Now that we have seen how the British enemy of mankind has attempted maliciously to prevent you from discovering the truth of the Pheidias frieze, let us look into the composition of the frieze itself. The Pheidias frieze of the Parthenon, along with the *Iliad* of Homer, are the first great works of art in ancient history that can be considered as models for setting the standard for all future classical artistic compositions, for the simple reason that they were the bearers of ironies that broke with the tradition of the Olympian gods and, as such, reflected the principle of creativity. As confirmed by John Keats in his *Ode on a Grecian Urn,* this "Attic shape" celebrates the creative process of youth, the presence in the procession of the Great Panathenaia of mostly young and dynamic people, none of whom is wearing a suit of armor or carrying a weapon, and all of whom are turned toward the future. Obviously, what is being included as excluded from the frieze speaks volume.

For the first time, and on a scale never seen before, a Greek temple is no longer centered on the pantheon of the Olympian gods who capriciously steer human history into fabricated conflicts, but it is rather focused on the celebration of ordinary citizens who have dedicated their future to improve civilization. In that sense, this great composition built by a few hundred artists and highly skilled workers can be considered as an axiomatic turning point in the history of mankind, as the first great Greek narrative work of art that is sublime as opposed to tragic. It is not tragic because, as the Promethean gesture in defying Zeus, the Pheidias frieze had definitely broken with the hideous tradition of the Olympian gods.

Examine closely what Pheidias represented on the two Parthenon friezes and you will understand how the drama of ancient Greek society unfolded. What is most striking about the outside and inside friezes of Athens's Parthenon is that they reflect the two paradoxical sides of Greek history, the two completely different and contradictory ideas of war and creativity. Thus, the Parthenon represents an architectural drama, a pedagogical memorial to the tragic fate of Greek culture. The intention Pheidias had in designing the Parthenon was to characterize the process of the tragedy of man being bestialized by war on the outside frieze, and the creative process of how to solve that tragic fate on the inside frieze: the two friezes, therefore, represent both the crisis of Greek culture and its solution. There is an axiomatic break between the two.

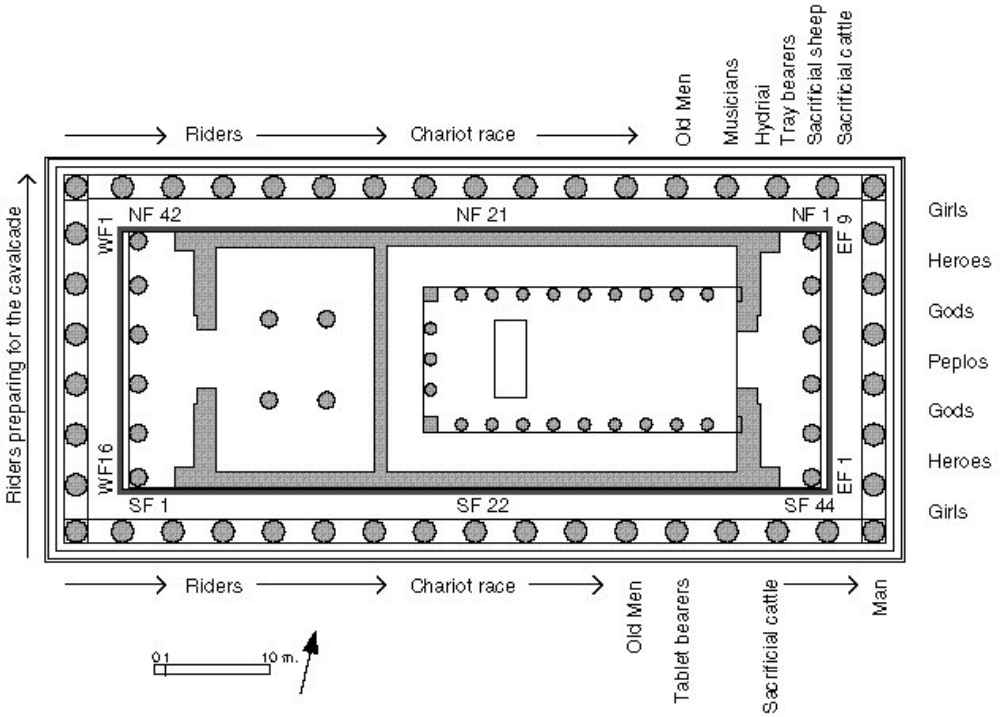


Figure 8. Floorplan of the Parthenon and the identification of the internal frieze of the Great Panathenaia. The procession around the Parthenon starts on the South West corner marked WF16 and ends at the *Peplos* ceremony on the East facade.

On the outside frieze of the Parthenon, Pheidias depicted a series of battle scenes in the Doric metopes as a way of demonstrating that, throughout its history, Greek society had been constantly manipulated by the gods of Olympus into going to war. The 92 metopes of the four sides of the outer frieze of the building showed: 1) the west facade as the Amazonomachy, the battle of the Greeks and the Amazons; 2) the east facade showing the Gigantomachy, the battle between the Gods and the Giants; 3) the south facade depicting the mythical Centauromachy warfare, the battle between the Greeks and Centaurs; and 4) the north facade showing the historical battle between the Greeks and the Trojans. All four wars led to the victory of Greece but also to its tragic downfall. It would be impossible to show all of these illustrations in this report. However, if the reader wishes to see them, I suggest [http://www.willamette.edu/cla/wviews/parthenon/images.htm]

On the inside of the Parthenon, however, Pheidias displayed the Ionian frieze of the Cella as the pedagogical solution to the Greek tragedy of senseless battles and warfare. This frieze, which we are now investigating, takes the form of a celebration known as the Great Panathenaia. This great contribution to mankind reveals the importance for a nation's citizens to regularly return to the principles that founded its Capital city, Athens, in order to keep alive the wisdom of its founding fathers, and carry its civilization further into the future. This is what Pheidias was celebrating in the most

creative fashion with the Great Panathenaia. His objective was to restore to all of the Greek people, not just the Athenians, the principle of wisdom that Athena represented as the solution to the tragedy of Greek culture as a whole.

This intention was further manifested by the fact that Pheidias always represented Athena, as the only one of the Olympian gods who loved human beings, while the other gods generally hated creativity and mankind. For example, Zeus and Apollo thrived systematically on capriciousness, broken oaths, and carried on ceaseless punishments against mankind. As Pheidias showed in earlier sculptures of the frieze of the temple of Zeus in Olympia (450 BC), Athena was the only goddess helping Hercules in his Labors. Athena also helped Ulysses get back to Ithaca. One example of conflicting relations between Athena and the other Olympian gods was the contest she held with Poseidon over the sovereign territory of Attica, which is the subject represented on the west pediment of the Parthenon.

The legend has it that in order to prove his superiority over Athena, the only gift that Poseidon could give the Greek people in order to show his love for them was to strike a trident blow on the Acropolis and create a salt lake. On the other hand, Athena created the olive tree and made it grow on the Acropolis, thus inventing the olive oil industry as an economic benefit for her people. As a result, the legend says that since the ten other gods realized that the olive industry was more beneficial to man than a salt lake, they gave Athena the patronage of the city.

However, as Lyn has many times demonstrated, the point to be stressed about tragedy is that it is not the result of personal failure of some individual leader, hero, or god, but the outcome of a whole culture's refusal to change its axioms. The tragedy of Greece invariably came from listening to the voices of the gods, listening to the priests of Apollo at the Oracle of Delphi saying: "Do this! Don't do that." Socrates had warned the people of Athens against the evil tradition of the gods of Olympus, but the result was that the population of the city preferred to kill him rather than go against public opinion in fear of the gods.

First of all, note the chirality of the double motion of the procession of the frieze as a whole (See Figure 9). That is the road map for discovering the creative process. This great Ionic frieze depicts the opposite of what was displayed on the external Doric frieze. There is a definite discontinuity between the outside and the inside friezes, between the Doric and the Ionic. In fact, the internal frieze is the actual counterpart and solution to the outside one. The subject matter is that of a procession of the whole citizenry of the city of Athens, and later the entire Greek people, united in celebrating the birthday of Athena. And, the emphasis was put on the people rather than on Athena.

According to the official version of the Greek Ministry of Culture, the celebration, called the Great Panathenaia, was the most important celebration of all of Greece, held every four years, in Athens during three centuries, from the 6th to the 4th century BC. The Greek Ministry further states that the founder of Athens, Erichthonios, was the initiator of that ceremonial tradition that he called Athenaia, and which Theseus also continued to

celebrate until the end of the Mycenaean period. Established during prehistoric times, therefore, the celebration was repeatedly held during the entirety of Athenian history and was later expanded to encompass the whole of Greek history: thus, the name of Great Panathenaia. The official Greek Ministry of Culture explained it as follows:

> "The Great Panathenaia included numerous ceremonies and sacrifices, of which the most striking was the Hekatomb (sacrifice of 100 bulls). Of great importance too were the riding, athletic and music contests. The ceremonies and games, which lasted from 4 to 12 days, reached their peak on the 28th of Hekatombaion, the day held to be Athena's birthday. On this day the people of Athens gave their goddess a **peplos** woven with thread-of-gold by the Arrephoroi and the **Ergastinai**, maidens from prominent families in the service of the goddess." (4)

First of all, let us have a look at the frieze as a whole. On the one hand, the procession started at the South West corner of the Parthenon and proceeded west, then along the northern side to the east facade. This first direction reflected a counterclockwise motion in which the procession of the frieze is moving from right to left. This flow of the procession included a greater number of the people, including bareback horse riders, chariot riders, ordinary citizens, musicians, wine and food bearers, and cattle growers.

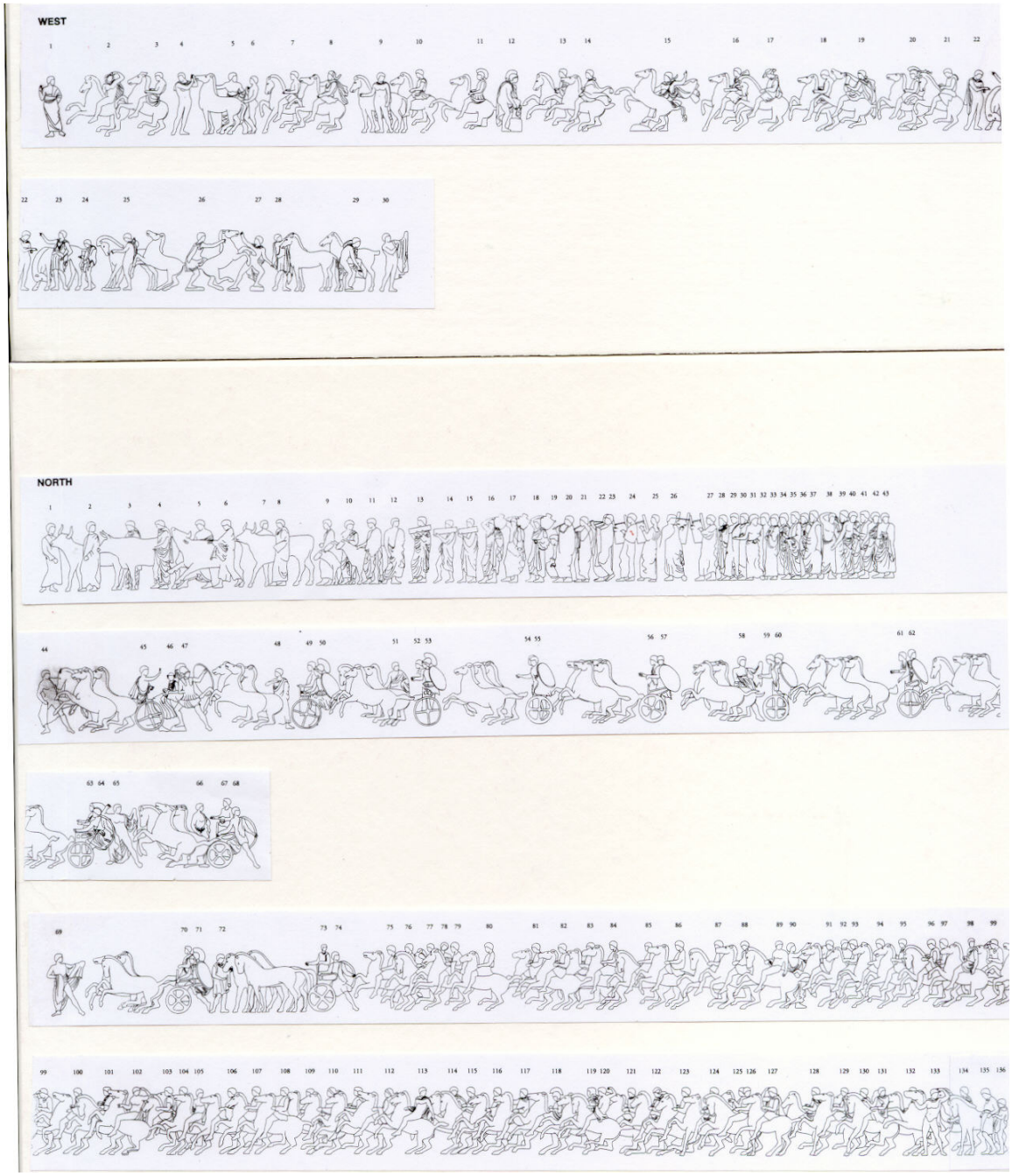


Figure 9. The left procession flow of the Great Panathenaia. The West side is numbered 1 to 30, but the procession actually starts at 30 and goes back to 1. The same inversion applies in both the North and the South sides.

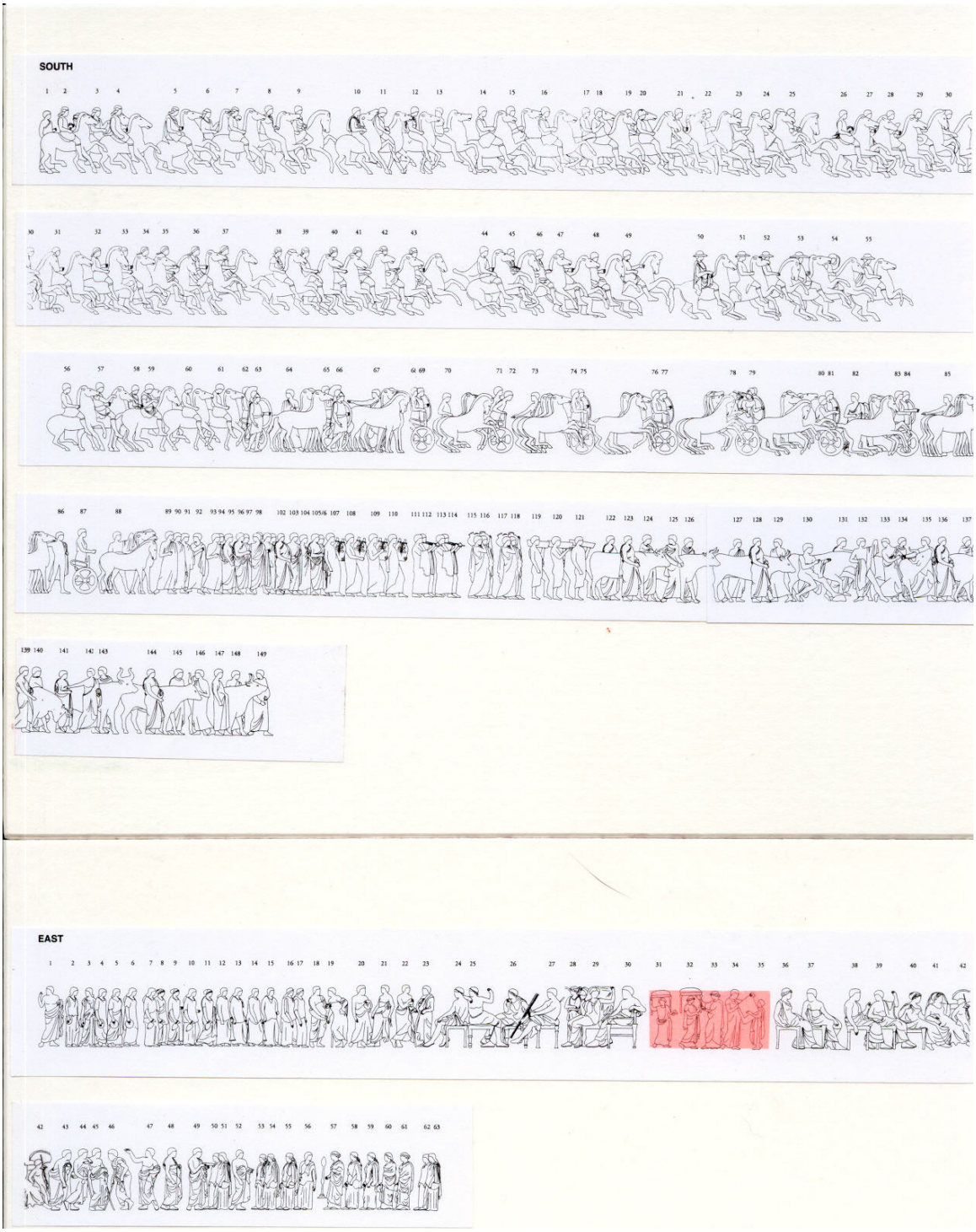


Figure 10. The right procession flow of the Great Panathenaia. The direction from the south frieze to the east reflects a clockwise motion in which the procession is moving from left to right. The procession involves a smaller group of persons including similar horse riders, chariots, ordinary citizens, musicians, wine and food bearers, and cattle growers. The east frieze joins together the two procession flows. It includes two

groups of girls with ceremonial plates, two groups of founding fathers of Athens, two groups of Olympian gods and the mystery of the *peplos* (highlighted) in the center. Drawings from Jenifer Neils, *The Parthenon Frieze*, Cambridge University Press, 2001. [For a viewing of the entire remains of the original frieze, see: **The Parthenon Frieze**: **South Frieze**, **East Frieze**, **North Frieze**, **West Frieze**] http://www.ekt.gr/parthenonfrieze/introduction/history.jsp?lang=en)

The first question that comes to the spectator's mind, after having gone through the whole procession, is what does the Great Panathenaia truly represent? Is the official version of the Greek Ministry of Culture complete, or are all of these scenes also representing something else that remains to be discovered on the dimly lit wall of Plato's Cave? For example, were the bulls and sheep meant for a sacrifice or were they representing the prizewinners of the Greek food industry, just as the musicians represented the best artists and the hydria-bearers represented the best wine makers, and so forth? What does the mystery of the *peplos* represent? What is the state of mind of this entire frieze?

The Greek Ministry further stated that by the time of the fifth century B.C., the celebration had become the most brilliant ceremony involving the whole of Greece. What the official Greek Ministry did not say, however, was that the reproduction of the event had encapsulated different times and it had not identified the chirality of the two flows merging into a single process. What do these different times and flows represented together on the frieze of the Parthenon? Moreover, what is the significance of the self-reflexive procession? Why create a ceremonial procession every four years in which all of the people of Athens and other Greek cities repeat the same march around the Parthenon only to discover that the same scenes are represented on the frieze of the temple? In other words, why was Pheidias holding a mirror for all of the Greeks to reflect themselves into? What is it that is actually being reflected by this process?

My hypothesis is that Pheidias was, in reality, conducting a pedagogical experiment for the viewer-participant to discover a universal physical principle; that is to say, the principle of creativity of classical artistic composition, and that the Great Panathenaia procession was merely the means of casting the shadow of that discovery which could not be made explicitly visible on the frieze, but could only be suggested as a discovery that occurred in the viewer-participant's mind. So, the hint to discovering the significance of this whole process, lies in precisely the fact that the entire procession culminated in the offering of a gift to Athena, the so-called *peplos* that official Greek historians and archeologists have identified as a ceremonial dress for the patron goddess. But, was that really the purpose of this whole process? (5) What does the gift of a dress have to do with the creative process? What remains to be explained is how this gift of the *peplos* reflected the principle of creativity.

Lastly, recall the little chirality experiment that you did in the mirror a little while back and remember how the two well-tempered spirals of G and of F around the cone had to intersect half way around at F#. Now, think of the two flows of the Great Panathenaia procession around the Cella, one moving clockwise and the other moving

counterclockwise, both of which end up meeting on the east side of the Parthenon at the scene of the mystery of the *peplos,* as if they had reached a crisis point of discontinuity that intersected at F#! What is the epistemological significance of that axiomatic moment? Part II of this report will attempt to answer all of these questions.

NOTES:

(1) For a more detailed discussion on the method of construction by conical spiral action and the golden section, see Pierre Beaudry, *The Acropolis of Athens, The Classical Idea of Beauty*, American Almanac, The New Federalist, June 24, 1988. Pheidias was Pericles' chief architect, master sculptor, and overseer of public works for the entire project of the Acropolis. He became famous throughout Greece for the creation of the giant ivory and gold sculptures of Zeus and Athena, but his greatest work of artistic composition was the internal frieze of the Parthenon, which represented the work of many artists under his guidance.

(2) Quoted by A. W. Lawrence, *Greek Architecture*, Yale University Press, New Haven, 1996, p. 126.

(3) Lyndon H. LaRouche Jr., *H. G. Wells' 'MEIN KAMPF' Sir Cedric Cesspool's Empire*, EIR, May 9, 2008.

(4) National Documentation Centre - Ministry of Culture. According to the Greek Ministry of Culture: "The frieze of the Parthenon forms a continuous band with scenes in relief that encircles the upper part of the **cella**, the main part of the temple, within the outer colonnade. The theme represented was the procession toward the Acropolis that took place during the Great Panathenaia, the festival in honor of the goddess Athena. The frieze had a total length of 160 m. and was 1.02 m. high. Shown in the procession are some 360 human figures and deities and at least 250 animals, chiefly horses. Groups of horses and chariots occupy most of the space on the frieze. The sacrificial procession is next, with animals and groups of men and women bringing ceremonial vessels and offerings. In the middle of the east end, above the entrance to the temple, is depicted the high point of the Panathenaia, this festival of many days duration. The procession ends with the giving of the **peplos**, the gift of the Athenian people to the cult statue of the goddess, a xoanon (ancient wooden statue) called **"diipetes"** because it was thought to have been sent down from heaven. Left and right of the peplos scene sit the twelve gods of Olympus.}" http://www.ekt.gr/parthenonfrieze/introduction/history.jsp?lang=en)

(5) The poetical use of double meaning is always present in Greek poetry, philosophy, and artistic composition. American archeologist, John Magruder Mansfield made that point quite explicitly by recovering the "second" meaning of the term *peplos* in his doctoral thesis on the subject:

"By a special usage among the Athenians, *peplos* means the sail of the Panathenaic Ship, which the Athenians fit out for the Goddess, every four years, and which they also escort in the procession from the *kerameikos* as far as the *Eleusinion*. They call the sail a *peplos* because it is made of wool."

"The scholiast implies the opposite of what this note is cited by modern scholars to prove: the author does not say that the robe (*peplos*) of the statue of Athena was displayed in the procession of the Great Panathenaia as the sail of the Panathenaic Ship, but that in Attic, the term *peplos*, generally "woolen cloth", refers to specifically to the (designated) sail of the Panathenaic Ship – not that the peplos ("robe") was displayed as a sail, but that *peplos* ("tapestry") was the proper term for the "sail" of the ship." (John Magruder Mansfield, *The Robe of Athena and the Panathenaic "Peplos"*, University of California, Berkeley, PHD Thesis, 1985. p. 16.)

FIN Part I