# Geometry and Art and Geometry and Time 

## Part 2, Geometry and Time.

So, to begin a study of the ages of time: the "Arian Age" and the ancient geometry of measuring without rulers to make forms that will never change

And the "Piscean Age" and the ancient geometry of measuring without rulers to make forms that will ever change
25. This is the figure of Aion, the Gnostic/Mithraic god of Time. He is coiled seven times by the snake of moving time, coiled seven times for the seven heavenly bodies this side of the changeless stars: for the Moon, the sun and the planets, Mercury, Venus, Mars, Jupiter and Saturn. His body is marked with the Zodiac and he holds the keys to heaven... Keys that are also keys to our prison, here in the world far below the crystalline sphere of changeless stars. He has the face and body of a lion, for he is fierce and eats all things; he is winged for he travels everywhere with infinite speed-the speed of the moments of irresistible time. He is Aion, god of those millenial changes of the crystal of mind, god of the historical procession of archetypal constellations of space that we will now begin to observe.


Aion, the Roman god of time...
30. Ancient geometry proceeded without units of measure and without the arithmetical calculation of measured relationships. Instead, space was regarded as made of units of proportionate, not measured, forms, and the relation of size between any squares and rectangles or any parts of them were found by counting them as so many constituent, equal sized triangles.., what a problem this made for the circle, which could not be converted to constituent triangles, can be easily imagined.


TRIAGULATION PROUES EQUALAREAS OF SQUARES ANO RECTANGLES.


But
THE TRIANGLE CANNOT MEASURE THE CIRCLE.
31. It can be easily imagined also how this problem of the nontriangularization of circles gave a practical push toward the solution of the problem of the integration of square and circle, the practical necessity to find a way to achieve equal perimeters and areas for squares and circles in order to make right building paralleled the psychic need to find a way of reconciling the irreconcileables in the mind in order to build a right life in the spirit.
32. The people of the Arian age found the solution to that problem in this diagram:
a. they took the five fingers of a hand-five points, five equal units of any kind... but the five of the hand was the best, because it integrated man into the cosmos of space, time and geometry...
b. And they constructed the whole cross of four directions of space with five fingers for each direction, north, south, east and west...
c. They found it takes seven fingers to connect the ends, seven fingers for seven days of one phase of the moon. It takes therefore twenty eight to make the whole square of the moon's full cycle; it takes all four sides to complete the square of the month.
d. and the ancients circled the square to get their sign for the sun.. .but the integration, the circle of the sun, the square of the moon and the four directions of earth, the squaring of the circle to achieve equal perimeter-

5 fingers 00000

33. D. and the ancients circled the square to get their sign for the sun.. .but the integration, the circle of the sun, the square of the moon and the four directions of earth, the squaring of the circle to achieve equal perimeter-
33. E. was to build a new square on the diagonal of what is called the square's rectangle. This line which is equal to one fourth of the circumference of the circle thus created a square equal to the NAG
RCLE circle.

How to measure the area of a circle...

34-43. So, the ancients studied the basic geometrical forms with the goal of integrating them into one central formula-a crystal-for structuring space. They developed a vocabulary of forms of those relationships...


44. and a final, total integration of them all, a "crystal" capable of achieving equal divisions of space without measurement in any number of parts 2 to 10 . This vocabulary could analyse and create an equal area of square, triangle and circle, it could show in the endless flux of becoming that is the cosmos, the geometry of permanence and unity that is the source and goal of all things.

The Greek geometric "Vocabulary"

45. And so a temple could be built and

Fig. 202.
that Arian geometry could bring the triangular elevation and square plan into

The geometric "Crystal"
 square, of movement and repose, space and time,

The Dome of the Rock as a geometric crystal of the Arian Age
 crystal of the octagon (a double square).'

The Dome of the Rock as a geometric crystal of the Arian Age


The Dome of the Rock as a geometric crystal of the Arian Age static forever...

51. Three thousand years after the great pyramid, two hundred years after the Dome of the Rock, eight hundred years already into the Piscean age, the mosque at Samarra was built, the emblem, the signature of the geometric form of a new age, the spiral, a new, dynamic form of the reconciliation of irreconcileables.

You will remember Aion, god of Time, coiled by the snake seven times for the planets. So too this tower, descendent of the ziggurats... its turns are the turns of heaven, its levels are those of the planets-the Moon, Sun, Mercury, Venus, Mars, Jupiter, Saturn. You wind your way to the top.




So, the geometry of the Piscean Age, the age of the spiral...

56. First, let us review. The rectangle, field of all-space the simultaneous presence of all points.. infinity. It is, within its rectangular parameter, pure potentiality. The Arian age chose rectangles which inflected that potentiality toward stasis, as in the carving on the left. The Piscean age chose especially one rectangle which inflected space toward transcendence, as in the carving on the right. The tool that opened the Arian space was the circled cross, the tool that opens the Piscean rectangle is the diagonal, its reciprocal, and the equiangular---the logarithmic spiral.


$$
\begin{aligned}
& \text { A. DIAGONALS } \\
& \text { B. RECIPROCAL } \\
& \text { DIAGONALS } \\
& \text { C. RECIPROCAL AREA } \\
& \text { D. IS PROPORTIONATE } \\
& \text { TO ORIGINAL }
\end{aligned}
$$ RECTANGLE

57. Now, let us study the diagonal and its reciprocal:

A. In any rectangle, first draw the diagonals.
B. The reciprocal is the line from any corner to the opposite side,
perpendicular to the diagonal.
C. The area of the rectangle determined by the intersection of the reciprocal with the opposite side, is the "reciprocal area" of the rectangle. It is proportionate to the original rectangle, smaller and with long axis turned at right angles to the original rectangle...
D. But it is always similar in shape.


THE
ENERGY
CENTERS

58. The diagonal and its reciprocal establish the fundamental divisions of proportionate space within the rectangle. Its intersections with the lines of division set up by the format establish the "key centers," or energy centers, or attention points, or spatial foci in the rectangle. Some of these centers will make for rest, others for movement; the artist will seek tension and the release of tension in shifting the
The geometry of energy, of the diagonal... attention points toward or away from these spatial foci innate to the rectangle.


The geometry of energy, of the diagonal..
59 A. The diagonal and its reciprocal will divide a continuing series of proportionate areas, ever reducing in size, all proportionate to the original rectangle.
B. The intersection of the diagonal and its reciprocal is the pole, or "eye" of a rectangular spiral, composed of the diagonals of the "remainder spaces" after the reciprocal has been sliced off. The parts of this rectangular spiral are in continual relation to one another on a steadily descending scale: A is to B as B is to C, C to D, etc., down and down, smaller and smaller, forever seeking the infinite dimensionlessness of the point, the pole of the spiral, which they will never reach.

60. In this way we may discover the various intervals of space in any given rectangle which form a whole that is harmonious in all its parts and with the original space itself. But the practice of composition may go beyond this selfevolution and representation of the harmonious possibilities of a given space. Just as the ancient temple builders grounded their proportions on the relationships which they perceived between the circle, square and triangle, so the great geometric artists of the Piscean age strove to relate their study of the geometry of the rectangle to the "crystal" of space, the armature of the universe as they conceived it, a cosmos of dynamic change on the way through apocalypse to God... and for this reason, the Piscean geometric composition is the composition, planned or intuitive, of


Shells, the endless spiral of life...


Shells, the endless spiral of life...

61A. The Fibonacci number series is 1-2-3-5-8-13-21-etc., which is to say one plus two equals three, three plus two equals five, etc. as in the drawing at the top.

61B. To the extent that one builds this ratio into the sides of a rectangle, and uses the diagonal and reciprocal to determine the locations of all divisions within the rectangle, the composition within that rectangle will reflect the order of Becoming as the Great Pyramid reflected the ancients' formula for Being.

Well, the rectangle whose sides are in relation as 1 : square root of 5 is that rectangle. It can be drawn by making a square and by dropping the diagonal from the center of the side of the square. the diagonals and reciprocals will generate a rectangular spiral in accord with the Fibonacci series and with the spiral of growth in nature.


The Tezcher
62. And so, in the years of his apprenticeship and the beginning of his work, Durer began to learn to use these methods of composition in harmony with the spatial crystal of the Piscean Age. For example here, he marked the diagonal, the reciprocal and the

The craft of composition and the structure of meaning... reciprocal area of his rectangle.

63. Then, when he drew the teacher and the students, the students flower out and up from the lower reciporcal along the diagonal to the teacher in the upper reciprocal area.

The craft of composition and the structure of meaning...

66. Or, if it were the question of resurrection and salvation, he knew how the reciprocals of the rectangle may separate into the world below and the world above and man's difficult place in between-curiously, the heart is at the center, as if to say it is the guide on the upward journey.

The craft of composition and the structure of meaning...


The craft of composition and the structure of meaning...

68. to come down from the Angel who tells, to the Angel who binds the dragon for a thousand years "when he will be let out for a little time"-_Durer's own time, and ours when he is let out more and more,

The craft of composition and the structure of meaning...


The craft of composition and the structure of meaning...


The craft of composition and the structure of meaning...
Poussin and The Funeral of Phocion
69. In the funeral of Phocion, Poussin plays the geometry of the rectangle as the key of death and resurrection: the Piscean dream of transcendence.

70. He opens the rectangle by rabatment, and places Phocion's magnificent tomb-which he has been

The craft of composition and the structure of meaning... Poussin and The Funeral of Phocion denied by the calumny of his political enemies-at the center.

71. Poussin places Phocion himself,

The craft of composition and the structure of meaning...
Poussin and The Funeral of Phocion carried outside the walls of the city, directly below the tomb.

72. For the sign, the journey of transcendence, Poussin sends God's light down from the upper left, streaming down the spiral, striking the body of Phocion and then spinning up, around and into the tree.


The craft of composition and the structure of meaning... Poussin and The Funeral of Phocion
73. whose stump is dead but which is springing anew into golden life in the very eye of the spiral. It is the sign for Phocion's redemption/rebirth, as the new age of Aquarius will come from the death of the Piscean age, a time whose tomb is magnificent but whose spirit, so widely reviled and calumniated in out of time, must be buried outside the walls if the new age is to begin.

74. For us here on earth, love is the emblem of and also the act of resurrection. With that thought I once studied the geometry of Watteau's "Embarcation,"
The craft of composition and the structure of meaning-Watteau and The Embarkation for the Isle of Cythera to discover the geometry of love. This is the geometry of his spiral of life.


The craft of composition and the structure of meaning-Watteau and The Embarkation for the Isle of Cythera
74. For us here on earth, love is the emblem of and also the act of resurrection. With that thought I once studied the geometry of Watteau's "Embarcation," to discover the geometry of love. This is the geometry of his spiral of life.


The craft of composition and the structure of meaning-Watteau and The Embarkation for the Isle of Cythera
75. It begins on the right where the man entreats the woman to undertake with him the journey of love. They are seated by a statue of Venus with a herm in the trees behind. The spiral spins around the journey, closing into the boat, and then radiates along the diagonal into the shining sky beyond.


I said that I would seek to show how the spatial armature is also the signature of the age and the crystal of the mind and the form by which the history of the spirit is revealed.., and I showed this gnostic stature of Aion, the God of time, lord of the ages. I related the crystal of the Arian age to the squaring of the circle and the search for the permanence of Being; I related the crystal of the Piscean age to the spiral and the search for the endless self-transcendence that is Becoming. We are in the ending of the Piscean age; what might be the geometric armature of the age to come?


I said that the stasis of the pyramids is the signature of the Arian age, the golden time so long ago.


And I said that the spiral, as in this by Albrecht Altdorfer, a flaming sky on the way to the sun, the spiral is the signature of the Piscean age that is ending.


For the signature of the future age... how great it is to live in a time when the foundations of the future are being laid, how great it is to be a worker on the great city to come... for the signature of the future, that which lies in the womb of time yet unknown... for the armature of the future, crystallizing so far off in the infinite myriad of all points of all space... for the future, the crystal of mind will be what we discover at last when infinity is now.

"In the artistic chaos of these last years, when the absolute liberation of the individual instinct has brought it to the point of frenzy, an attempt to identify the harmonic disciplines that have secretly, in every period, served as foundations for painting may well seem folly. But this folly is in fact wisdom. It is the way to a kind of
knowledge essential for whoever wants to paint...
--Jacques Villon, in Charles Bouleau: The Painter's Secret Geometry

## The End

References Follow


These were some of the references used in this essay.

