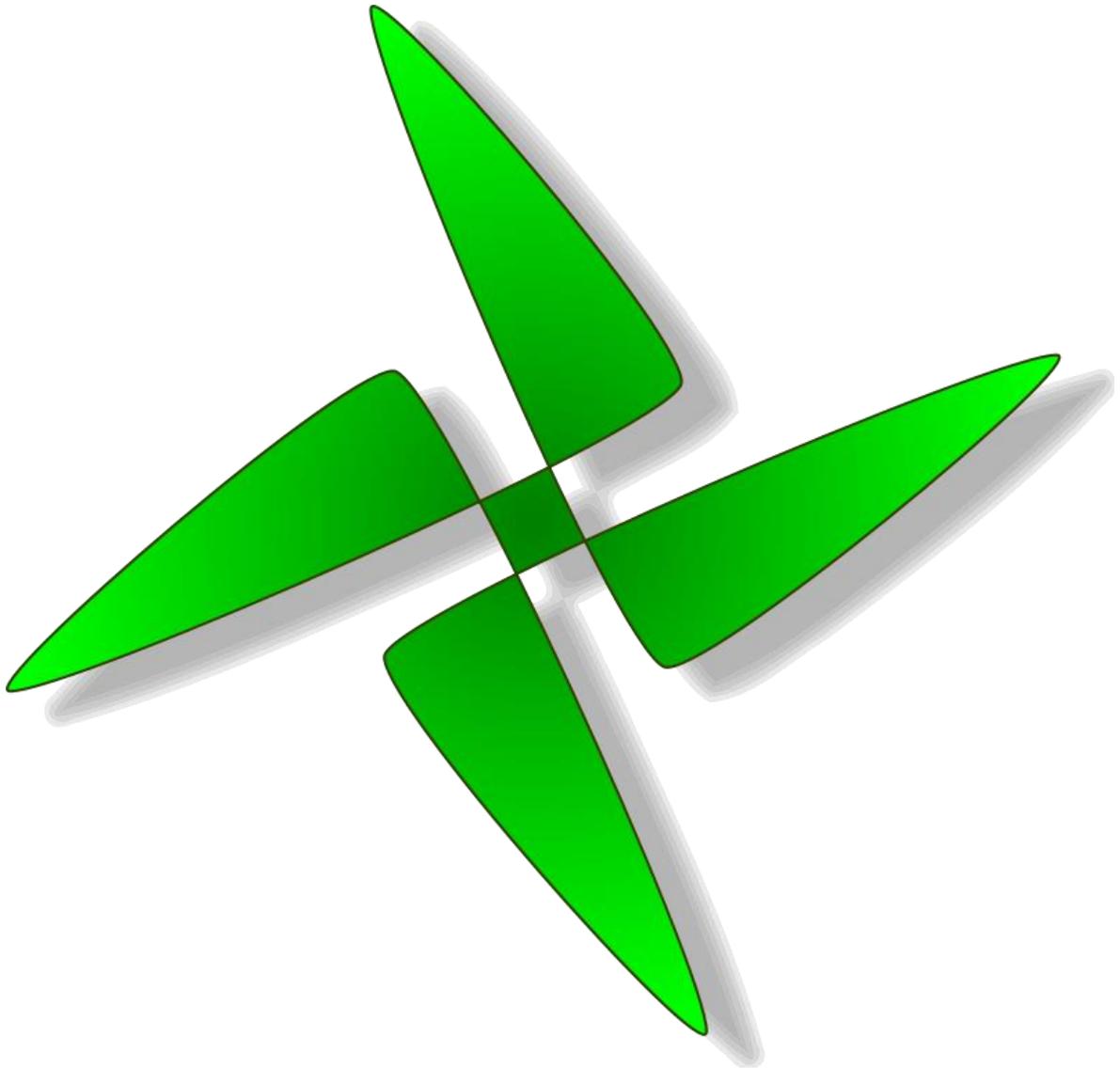


Thomas Taylor

*On the Eleven Faces of
the Pythagorean Tetractys*



From Thomas Taylor. (tr. & Annot.). *Iamblichus' Life of Pythagoras*, etc. London: J.M. Watkins, 1818; Annotation on Pythagoras' Tetractys, pp. 235-39.

I swear by him who the tetractys found,
Whence all our wisdom springs, and which contains
Perennial Nature's fountain, cause, and root.
— IAMBlichus¹

Tetractys 1

The tetrad was called by the Pythagoreans every number, because it comprehends in itself all the numbers as far as to the decad, and the decad itself; for the sum of 1, 2, 3, and 4, is 10. Hence both the decad and the tetrad were said by them to be every number; the decad indeed in energy, but the tetrad in capacity. The sum likewise of these four numbers was said by them to constitute the tetractys, in which all harmonic ratios are included. For 4 to 1, which is a quadruple ratio, forms the symphony bisdiapason; the ratio of 3 to 2, which is sesquialter, forms the symphony diapente; 4 to 3, which is sesquialterian, the symphony diatessaron; and 2 to 1, which is a duple ratio, forms the diapason.

In consequence, however, of the great veneration paid to the tetractys by the Pythagoreans, it will be proper to give it a more ample discussion, and for this purpose to show from Theo of Smyrna,² how many tetractys there are. Says he:

The tetractys was not only principally honoured by the Pythagoreans, because all symphonies are found to exist within it, but also because it appears to contain the nature of all things.

Hence the following was their oath:

Not by him who delivered to our sod the tetractys, which contains the fountain and root of everlasting nature.

But by him who delivered the tetractys they mean Pythagoras; for the doctrine concerning it appears to have been his invention. The above-mentioned tetractys, therefore, is seen in the composition of the first numbers 1. 2. 3. 4.

¹ [On the Pythagoreans' Oath, pp. 80, 87]

² In *Mathematics useful for the understanding of Plato*, p. 147

Tetractys 2

But the second tetractys arises from the increase by multiplication of even and odd numbers beginning from the monad.

Of these, the monad is assumed as the first, because, as we have before observed, it is the principle of all even, odd, and evenly-odd numbers, and the nature of it is simple. But the three successive numbers receive their composition according to the even and the odd; because every number is not alone even, nor alone odd. Hence the even and the odd receive two tetractys, according to multiplication; the even indeed, in a duple ration; for 2 is the first of even numbers, and increases from the monad by duplication. But the odd number is increased in a triple ration; for 3 is the first of odd numbers, and is itself increased from the monad by triplication. Hence the monad is common to both these; being itself even and odd. The second number, however, in even and double numbers is 2: but in odd and triple numbers 3. The third among even numbers is 4; but among odd numbers is 9. And the fourth among even numbers is 8; but among odd numbers is 27.

{ 1. 2. 4. 8. }
{ 1. 3. 9. 27. }

In these numbers the more perfect rations of symphonies are found; and in these also a tone is comprehended. The monad, however, contains the productive principle of a point. But the second numbers 2 and 3 contain the principle of a side, since they are incomposite, and first, are measured by the monad, and naturally measure a right line. The third terms are 4 and 9, which are in power a square superficies, since they are equally equal. And the fourth terms 8 and 27 being equally equal, are in power a cube. Hence from these numbers, and this tetractys, the increase takes place from a point to a solid. For a side follows after a point, a superficies after a side, and a solid after a superficies. In these numbers also, Plato in the *Timaeus* constitutes the soul. But the last of these seven numbers, *i.e.*, 27, is equal to all the numbers that precede it; for $1+2+3+4+8+9=27$. There are, therefore, two tetractys of numbers, one of which subsists by addition, but the other by multiplication, and they comprehend musical, geometrical, and arithmetical ratios, from which also the harmony of the universe consists.

Tetractys 3

But the third tetractys is that which according to the same analogy or proportion comprehends the nature of all magnitude. For what the monad was in the former tetractys, that a point is in this. What the numbers 2 and 3, which are in power a side, were in the former tetractys, that the extended species of a line, the circular and the right, are in this; the right line indeed subsisting in conformity to the even number, since it is terminated¹ by two points; but the circular in conformity to the odd number, because it is comprehended by one line which has no end. But what in the former tetractys the square numbers 4 and 9 were, that the two-fold species of planes, the rectilinear and the circular, are in this. And what the cube numbers 8 and 27 were in the former, the one being an even, but the other an odd number, that the two

¹ Instead of *περιπλοσαι*, it is necessary to read *περαιουται*; the necessity of which emendation, I wonder the learned Bullialdus did not observe.

solids, one of which has a hollow superficies, as the sphere and the cylinder, but the other a plane superficies, as the cube and pyramid, are in this tetractys. Hence, this is the third tetractys, which gives completion to every magnitude, from a point, a line, a superficies, and a solid.

Tetractys 4

The fourth tetractys is of the simple bodies fire, air, water, and earth, which have an analogy according to numbers. For what the monad was in the first tetractys, that fire is in this. But the duad is air, the triad is water, and the tetrad is earth. For such is the nature of the elements according to tenuity and density of parts. Hence fire has to air the ratio of 1 to 2; but to water, the ratio of 1 to 3; and to earth, the ratio of 1 to 4. In other respects they are analogous to each other.

Tetractys 5

The fifth tetractys is of the figures of the simple bodies. For the pyramid, indeed, is the figure of fire; the octahedron, of air; the icosahedron, of water; and the cube, of earth.

Tetractys 6

The sixth tetractys is of things rising into existence through the vegetative life. And the seed, indeed, is analogous to the monad and a point. But if it increases in length it is analogous to the duad and a line; if in breadth, to the triad and a superficies; but if in thickness, to the tetrad and a solid.

Tetractys 7

The seventh tetractys is of communities; of which the principle indeed, and as it were monad, is man; the duad is a house; the triad a street; and the tetrad a city. For a nation consists of these. And these indeed are the material and sensible tetractys.

Tetractys 8

The eighth tetractys consists of the powers which form a judgment of things material and sensible, and which are of a certain intelligible nature. And these are, intellect, science, opinion, and sense. And intellect, indeed, corresponds in its essence to the monad; but science to the duad; for science is the science of a certain thing. Opinion subsists between science and ignorance; but sense is as the tetrad. For the touch which is common to all the senses being fourfold, all the senses energize according to contact.

Tetractys 9

The ninth tetractys is that from which the animal is composed, the soul and the body. For the parts of the soul, indeed, are the rational, the irascible, and the epithymetic, or that which desires external good; and the fourth is the body in which the soul subsists.

Tetractys 10

The tenth tetractys is of the seasons of the year, through which all things rise into existence, *viz.* the spring, the summer, the autumn, and the winter.

Tetractys 11

And the eleventh is of the ages of man, *viz.* of the infant, the lad, the man, and the old man.

Hence they are eleven tetractydes

The first is that which subsists according to the composition of numbers.

The second, according to the multiplication of numbers.

The third subsists according to magnitude.

The fourth is of the simple bodies.

The fifth is of figures.

The sixth is of things rising into existence through the vegetative life.

The seventh is of communities.

The eighth is the judicial power.

The ninth is of the parts of the animal.

The tenth is of the seasons of the year.

The eleventh is of the ages of man.

All of them however are proportional to each other. For what the monad is in the first and second tetractys, that a point is in the third; fire in the fourth; a pyramid in the fifth; seed in the sixth; man in the seventh; intellect in the eighth; and so of the rest. Thus, for instance,

The first tetractys is 1. 2. 3. 4.

The second is the monad, a side, a square, and a cube.

The third is a point, line, a superficies, and a solid.

The fourth is fire, air, water, earth.

The fifth the pyramid, the octahedron, the icosahedron, and the cube.

The sixth, seed, length, breadth and depth.

The seventh, man, a house, a street, a city.

The eighth, intellect, science, opinion, sense.

The ninth, the rational, the irascible, the epithymetic parts, and the body.

The tenth, the spring, summer, autumn, winter.

The eleventh, the infant, the lad, the man, and the old man.

The world also, which is composed from these tetractys, is perfect, being elegantly arranged in geometrical, harmonical, and arithmetical proportion; comprehending every power, all the nature of number, every magnitude, and every simple and composite body. But it is perfect, because all things are the parts of it, but it is not itself the part of any thing. Hence, the Pythagoreans are said to have first used the before-mentioned oath, and also the assertion that

ALL THINGS ARE ASSIMILATED TO NUMBER.



Postscript

Saturn is the dianoetic tetractys

But why does Plato now call Saturn *διανοια* the dianoetic part of the soul? May we not say, that it is because he looks to the multitude of intellectual conceptions in him, the orders of intelligibles, and the evolution of forms which he contains; since also in the *Timæus*, he represents the demiurgic intellect as reasoning, and making the world, dianoetically energizing: and this in consequence of looking to his partible and divided intellections, according to which he fabricates not only wholes but parts.

When Saturn, however, is called intellect, Jupiter has the order of the dianoetic part: and when again, Saturn is called the dianoetic part, we must say that he is so called according to analogy with reference to a certain other intellect of a higher order. Whether therefore you are willing to speak

- 1 Of intelligible and occult intellect [*νοητος νους*, Phanes] or,
- 2 Of that which unfolds into light (*εκφαντορικος νους*), [Heaven] or,
- 3 Of that which connectedly contains (*συνεκτικος νους*), [Earth] or,
- 4 Of that which imparts perfection, (*τελειουργος νους*),¹ [Subcelestial Arch].

— Saturn will be as the dianoetic part to all these. For he produces united intellection into multitude, and fills himself wholly with excited intelligibles. Whence also, he is said to be the leader of the Titanic race, and the source of all-various separation and diversifying power. And perhaps Plato here primarily delivers twofold interpretations of the name of the Titans, which Iamblichus and Amelius afterwards adopted. For the one interprets this name from the Titans extending their powers to all things; but the other from *something insectile* (*παρα το τι ατομου*), because the division and separation of wholes into parts receives its beginning from the Titans. Socrates therefore now indicates both these interpretations, by asserting of the king of the Titans that he is a *certain great dianoetic power*. For the term *great* is a symbol of power pervading to all things; but the term *a certain*, of power proceeding to the most partial natures.²



“The Holy Four of Pythagoras is First Logos in its latent state,” in the same series.

¹ Of these intellects the first is Phanes, the second Heaven, the third Earth, and the fourth the Subcelestial Arch which is celebrated in the *Phædrus*, viz. *νους νοητος ο Φανης, εκφαντορικος νους ο Ουρανος, συνεκτικος νους η γη, τελειουργος δε νους η υπ' ουρανιος αρις*.

² *The Mystical Hymns of Orpheus (or Initiations) being Invocations used in the Eleusinian Mysteries*, Additional Notes by Thomas Taylor.

Quick overview of the eleven faces

The first exists according to the composition of numbers.	1	2	3	4
The second, according to the multiplication of numbers.	Monad	Side	Square	Cube
The third, according to magnitude.	Point	Line	Superficies	Solid
The fourth is of the simple bodies.	Fire	Air	Water	Earth
The fifth is of figures.	Pyramid	Octahedron	Icosahedron	Cube
The sixth is of things rising into existence through the vegetative life.	Seed	Length	Breadth	Depth
The seventh is of communities.	Man	House	Street	City
The eighth is discriminative power.	Intellect	Science	Opinion	Sense
The ninth is of the parts of the animal.	Rational	irascible	Epithymetic	Body
The tenth is of the seasons of the year.	Spring	Summer	Autumn	Winter
The eleventh is of the ages of man.	Infant	Lad	Man	Old man