## pRIME MOVERS

## Number and the multi-dimensional Circle

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Work in Interdimensional Astrology provokes an interest in dimensions generally and their effect on numbers.
What is a "dimension"?
Esoterically, we tend to think of a dimension not just as a single quantitative measurement but as an experientially (or at least conceptually) real spatial and/or temporal environment which is distinct in quality from others that may coexist with it. Such dimensions, as they refer to human life, appear to exist as increasingly rarefied states of matter and/or spiritual energy. These may interpenetrate each other yet still be unknown to each other, and may only interact where the dense becomes refined and the fine is able to condense its energies sufficiently. These dimensions, as suggested elsewhere, may possibly be described by a "Fractal" astrology, refined to the Dwad and the Superdwad (similar but different in phase to the 12th and 144th harmonics.) Ideally one would go even further into levels of refinement corresponding to the 1728 th and then the 20736 th!... but our data can never be precise enough.

Mathematically, one dimension gives us a line, two dimensions extend this into a plane. three develop a 'solid' form - and these are the dimensions with which we are all familiar, as they shape our everyday existence. What we call 'Time' is generally accepted as our fourth dimension. But in modern mathematics and particle physics, the description of ultra-refined material phenomena demands calculation in four, ten, or even twenty-six dimensions which are then required to compactify into experiential 3-D space.

Setting aside the theoretical mechanisms of such compactification, it seemed worthwhile to follow curiosity into an area that may so far be unexamined by the scientists, as it rests on assumptions that only the astrological mind would fully endorse. These assumptions are
(1) that as most - if not all - phenomena are cyclic, the properties of the circle should engage us more than those of the line, and (2) that the division of a circle into 360 discrete degrees recognises a natural vibrational sensitivity to the first twelve harmonics and their products, except the seventh and eleventh. To increase subdivision of the circle to include the 7th and 11 th would immediately refine it beyond the Dwad, and so leave the dimension of familiar material forms.

The diagrams and tables which follow are the result of expressing all 360 degrees of the Circle in successively higher dimensions by the simple formula $N^{x}$ mod360-ie, the degree-number is raised to the required power (multiplied by itself the required number of times) and multiples of 360 subtracted from the result where necessary. The remainder is the new degree on the circle generated by this process.

For example:
$11^{\circ}$ Aries in the 2nd dimension, hence squared: $11^{2}=121=1^{\circ}$ Leo
$23^{\circ}$ Virgo in the 3rd dimension, hence cubed: $173^{3}=5177717 ; \quad 5177717 \bmod 360=197=17^{\circ}$ Libra
$7^{\circ}$ Taurus in the 5th dimension: $37^{5}=69343957 ; \bmod 360,=37=7^{\circ}$ Taurus!
(Normal Harmonic calculation operates on the same principle, except there the formula is Nx mod 360 - ie the degree-number multiplied by the given harmonic before removing multiples of 360 .)

It is worth mentioning at this point that Degrees/Minutes/Seconds can of course be raised to the same powers... in theory! But in practice you will find that this introduces large margins of error in the resulting degree-positions once you go beyond the second dimension $\left(N^{\circ} n^{\prime} n^{12}\right)$, where the margin of error on 1 second of arc squared is already 10 minutes of arc. So in this study, we are dealing solely with whole degrees, for the reasons given above.

One tantalising coincidence, before we look at the diagrams, is that the whole circle of $360^{\circ}$ raised to the tenth power gives us $3.65615844 \mathrm{E}+25$ in scientific notation, which, divided by $10^{23}$, closely approximates the number of Earth's axial rotations
 multiplied by $10^{24}$ It takes us to the limits of the known universe, therefore so does $10 \mathrm{~km}{ }^{23}$. 10 km is 6.2 miles. Perhaps this measure has some significance?

## The DIAGRAMS

SQUARING THE CIRCLE - by squaring the one-dimensional circle,the line as a closed loop, It becomes geometrically a surface, perhaps a Möbius strip.

But when we square each zodiacal degree-value In turn, a sequence of fresh degrees is generated which in the '2nd-dimensional' diagram draws a helical progression of larger and larger angles from $1^{\circ}$ Aries to $30^{\circ}$ Gemini and then reverses the same sequence from $1^{\circ}$ Cancer to $30^{\circ}$ Virgo. This repeats again for the second half of the zodiac.

It is therefore ASYMMETRIC, and oscillates about the Cardinal Points. Just 35 of the 360 degrees form the pattern.

## 3-DIMENSIONAL WHOLE WHEEL Repeats every 120 degrees: Single axis of symmetry 0 Aries-Libra



CUBING THE CIRCLE takes the loop into three dimensions and
raising each degree-value to the third power creates an entirely different diagram from the foregoing.

This sequence of generated degrees (76 of the 360) introduces SYMMETRY about one axis, $1^{\circ}$ Aries-Libra. The sequence does not reverse, and repeats three times in the circle from $1^{\circ}$ Fire to $30^{\circ}$ Water. The degrees of the natural pentagram come into strong focus $-30^{\circ}$ PIsces $/ 0^{\circ}$ Aries, $12^{\circ}$ Gemini, $24^{\circ}$ Leo, $6^{\circ}$ Scorpio and $18^{\circ}$ Capricorn.

Upon it can be superimposed the figure of Leonardo's man, his head in two Mars decans, his hands in four Mercury decans (two out- stretched on the Gemini-Capricorn crossbar) and his spread legs
following the flow of the pattern down to feet at junctions of Mercury and Mars. Sun-lines and Moon-lines cross each other on the spine at the major chakras of Gonads, Solar Plexus and Heart, also


IN THE 3RD DIMENSION
The Redeeming Cross above the head, over the Crown.

We have moved into the world of form with the action of Trinity, and are looking upon the idea of Man - united with his Cross.

THE FOURTH DIMENSION reduces the number of degrees to $16-1^{\circ}, 15^{\circ}$ and $24^{\circ}$ of Fire, $10^{\circ}$ of Earth, plus $30^{\circ}$ Pisces and three 'rogue' degrees $-21^{\circ}$ Gemini, and $6^{\circ}$ and $15^{\circ}$ Scorpio, which upset the potential symmetry about the $21^{\circ}$ Gemini-Sagittarius axis.
Like 2-D, this is an oscillating sequence, reversing at $15^{\circ}$ Fixed signs, and repeating four times over the circle. It is a numerical parabola, which you can see clearly in its table, and which mirrors our experience of duration and patterns of change more credibly than a repeated linear sequence. Life rises, peaks, and falls away.


With the FIFTH DIMENSION we are entering mysterious territory; there are no popular concepts of what a fifth dimension may comprise.

It is a most beautiful pattern; five axes of perfect symmetry contain a lacework of interconnections which intersect to form concentric rings of gathered energy. There are seven foci of energy, including the centre and periphery, and six intervals. It is thought-provoking to find a suggestive resemblance to electron shells in a pattern generated by the Creative number 5, and the same number of intervals as there are electrons in the Carbon atom. Carbon is, in our world, the stuff of life. (For more on Carbon, see "The Hidden Splendour", available from the author.)

Once again, the degrees of the natural pentagram are strong, and form the five axes of symmetry.

The pattern for the SIXTH DIMENSION is a curiosity: its sequence is very short, picking out just 12 different degrees which reverse after $15^{\circ}$, with twelve repeats of the oscillation, throwing the cusps and mid-points of each astrological sign into prominence. Four points of the natural pentagram appear - but the fifth, $12^{\circ}$ Gemini, invisibly marks the one axis of symmetry. The shape itself is irregular, until its mirror-image 'shadow' is drawn in, as shown.

## 6-DIMENSIONAL WHOLE WHEEL

Reverses after every 15 degrees:
Repeats every 30 degrees: Symmetry about 12 degrees Gemini/Sagittarius


## 5-DIMENSIONAL WHOLE WHEEL

5 axes of symmetry about $0,72,144,216,288$ degrees All chords are $\mathrm{n}(30)+1$ degree (aspect + 1 degree orb)


7-DIMENSIONAL WHOLE WHEEL
Symmetry about 0 Aries-Libra: 360 degree sequence


THE SEVENTH DIMENSION is amazing... a seventh heaven? Like the third, it forms about the single axis of $0^{\circ}$ Aries-Libra and contains similar patterns. but it is a far more complex and delicate tracery, taking the full $360^{\circ}$ circle to complete. Like the fifth, it is beautiful; but its patterns remind one of neural networks. Perhaps it has some relation to the angelic kingdom, or to Man in his spiritual state.

In the EIGHTH DIMENSION 'rogue' degrees from $6^{\circ}$ and $15^{\circ}$ Scorpio again bring asymmetry into an otherwise balanced pattern pivoted about $21^{\circ} \mathrm{Gemini}$ Sagittarius, comprising the actual sequence of 16 Fire and Earth degrees plus its 'shadow' - as we found with the Sixth. The pattern repeats four times in the circle with reverses after each $45^{\circ}$

## THE NINTH DIMENSION reminds

 us of the idea of Nine as a number of perfection: this displays another most lovely five-fold pattern, again focussed on the natural pentagram. It is essentially a radiant star, suggestive of no organic form except the flower in its perfection, and shines three times from the circle.
## A TENTH DIMENSION re-

 introduces a contrasting and definite asymmetry in a 24-degree sequence that repeats after each $90^{\circ}$ and reverses after each $45^{\circ}$ The structure is based on the grand trines of $1^{\circ}, 16^{\circ}$ and $24^{\circ}$ of Fire, $10^{\circ}$ and $19^{\circ}$ of Earth, and $4^{\circ}$ of Air, but it is upset by $8^{\circ}$ Aries, $21^{\circ}$ Gemini, $6^{\circ}$ and $15^{\circ}$ of Scorpio. Like all the other Base-2 dimensions, it is a pattern of oscillation.11-DIMENSONAL WHOLE WHEEL Symmetry about 0 Aries-Libra: 360 degree sequence
 circle, and reverses every $15^{\circ}$, a simple sequence with a shadow. It combines the properties of symmetry and oscillation.

It would be tempting to end the sequence at that point - but the apparent requirement of twenty-six dimensions for satisfactory structures in particle physics suggests that we should go further. I have not attempted all the powers between twelve and twenty-six, but offer the 26th itself, and the 13 th.

Comparison with the ELEVENTH DIMENSION could not be more dramatic; its delicate networks are very similar to those of the Seventh, but not identical. Like Three enduring symbols, clothing them

- like the stars - in recognisable forms.


## In the TWELFTH DIMENSION we have a

 return to utter simplicity, eight key degrees that lay the ground-plan for the beautiful traceries we saw in Three, Seven and Eleven. It repeats twelve times around the shadow. It combines the


10-DIMENSIONAL WHOLE WHEEL Asymmetric. Reverses at 45 degrees Repeats every 90 degrees
 and Seven, it produces symmetry about the $0^{\circ}$ Aries-Libra axis and the idea of life-form - and to me it is reminiscent of the bird ( often a Dove ) as symbol of the animating and inspiring spirit, particularly when reversed to emphasise a 'descending' form. It may be from these primal geometries that the collective unconscious draws its -


# 13-DIMENSIONAL WHOLE WHEEL 5 axes of symmetry about $0,72,144,216,288$ degrees 



## The SEQUENCE TABLES

A table-by-table analysis is needless, as the phenomena they produce can be summarised quite briefly.

As one would expect, raising any multiple of $30^{\circ}+1$ to any power, mod360, gives a multiple of $30^{\circ}+1-\mathrm{ie} 1^{\circ}$ of a Sign - as its answer; and any multiple of $30^{\circ}$ to any power mod 360 results in 0 .
Immediately, by doing maths on our circle, the fiducial 0 ( $0^{\circ}$ Aries) and the pulse of $1^{\circ}$ of a 'Sign' every $30^{\circ}$ are naturally emphasised.

Every sixth dimension - 1st, 7th, 13th, 19th - actually emphasises the beginning of each Sign, as the power of 1 is 1 , the power of 31 is 31 , that of 61 is 61 , and so on (all modulo 360 .)

Every fourth dimension - 1st, 5th, 9th, 13th, 17 th - the natural sequence progresses by multiples of $30+1$, drawing in the circle those relationships that we call Aspects; each plus an orb of $1^{\circ}$, the margin within which we know planetary and angular directions to be active. These are the dimensions with 5 -fold symmetry, the creative Star.

Every fourth dimension from the third - 3rd, 7th, 11 th, 15th, 19th - the single axis of symmetry emerges from an unaesthetic linear sequence, which however still gathers its numbers into astrologically recognisable groupings across the page. One finds lines of Fire, Earth, Air and Water grand trines, Cardinal, Fixed and Mutable Grand Crosses, perfect semi-sextile or inconjunct sequences, and repeated natural pentagram degrees.

The 9th dimension elegantly combines its aspect sequence with cross-page lines of Qualities and Elements - the latter in their correct order. Even the four columns of computation yield respectively a Fire, Earth, Air and Water emphasis, converted back to the language of astrology. Nine Is quite perfect!

And the final oddity is that any multiple of $30,+6$, raised to any power greater than 2 , mod 360 , always results in 216 astrologically $6^{\circ}$ Scorpio. In other words, the first multiplication giving this persistent degree is $\mathbf{6} \mathbf{x} \mathbf{6} \mathbf{x} 6$. ! Does this corner of the natural pentagram have a darker significance than even its Scorpio qualities imply?

Tantalisingly, when the human form is spread on the natural pentagram - so closely approximated by Leonardo's figure $-6^{\circ}$ Scorpio becomes the place of the left foot, and invokes another package of symbolism: the idea of Left as symbol of Wrong in its opposition to Right, the idea of mankind possessing an "Achilles Heel" which is a fatal flaw, and the image out of Genesis of humanity crushing the Serpent under his heel.

This accumulated imagery is so powerful that it is worth looking more closely at the other four points of the Creative Star.

The right foot, then, would be set at $24^{\circ}$ Leo - in the sign of the Sun... or the Son.. .archetype of the spiritual light that balances and challenges Scorpionic darkness. Both feet stand in decans of Mars; but the right is placed in Leo's Aries decan, referring back to the source degree of $0^{\circ}$ Aries that crowns the head and symbolises the Father of whom Leo is the Son. When the pentagram is drawn, the first line is the chord of $144^{\circ}$ from Aries to Leo. The left foot is in the Scorpio decan of Scorpio, relating to no other point on the star, only to itself.

Carrying these ideas further, we find that on the right hand is $12^{\circ}$ Gemini, the sign most closely linked to Breath and the Word, and positive like Aries and Leo. On the left hand is Capricorn $18^{\circ}$ - a Sign like Scorpio popularly associated with images of evil or misfortune. We project our own wrongs onto the Scapegoat, sheep are to be separated from the goats, and the devil himself, Satan/Saturn, appears horned and goat-hoofed in folk imagery. The left foot is linked to the left hand, being in the Capricorn Dwad; both right hand and right foot are in Venus Dwads, Libra and Taurus respectively, embracing justice and kindness. There is one link between Left and Right - the left hand in Capricorn's Leo Dwad suggesting that as in the book of Job, the Tempter may be constrained to do the work of God!.. working through the negative and earthy to bring out a buried light.

This can be read another way, too. The story of Genesis is told by drawing the pentagram on the zodiac circle. In this, the line Aries-Leo shows God the Father creating Adam, the first Man, from the clay of the Taurus dwad. Leo to Capricorn's Leo dwad takes the 'rib' of Adam the Man to form the Woman from the Taurus decan and lead humanity 'into temptation' through ambition and sensuality. The Capricorn-Gemini line begets the brothers Cain and Abel, and Cain, moving next between Gemini and Scorpio, experiences mankind's first jealousy and hatred and commits the first murder. But there is a last line to be drawn, from Scorpio to Aries, promising the hope of return to the Father by the path of suffering and redemption. The whole drama of Darkness and Light is contained in the natural pentagram, which must not be inverted, for then the Father is displaced, giving ascendancy to Adam and the Tempter, and the left-hand path is presented as if it were the right; Scorpio $6^{\circ}$, $6 \times 6 \times 6$ in the Third Dimension, usurps the place of Gemini $12^{\circ}$, the Beast standing in the place of the Holy Spirit. This is what happens when we stand true values on their head.

This is the imagery and the message of St.John's Revelation.
It is notable that the degrees of the natural pentagram raised to any power, will only generate themselves or each other; and that the fourth dimension is ruled by Scorpio $6^{\circ}$, the only point on the star to manifest apart from the first degree of Aries. If the fourth dimension is that of Time, then it is existence in Time that gives such power to the dark forces, against which we
men and women are pitted during incarnation after incarnation to temper and purge and prove ourselves before our return to the Father. Time is the dimension of the "Fall".

Aries $1^{\circ}$ is pitted only 8 times against 12 of Scorpio $6^{\circ}$. Our hell is here.

## Number and the Creation

In the beginning... there is just the circle of vibration. The First Dimension, the Source of All. The Second Dimension winds the numbers into a helix, and something is created out of "nothing". In the Third Dimension, space is created and within it eternal symmetries, the primal forms and ideas; a star is born! But with the Fourth the innocence of eternal life is cast into the agonies of Time, symmetry spoiled, the fire of the spirit in the Fire Grand Trines embattled by the forces of darkness from Scorpio. But rising Into Five we enter a realm of utter harmony and beauty, a taste of heaven. Dimension Six is an enigma-in form a spread pentagon, focussing only 12 of the 360 degrees, drawn asymmetrically, yet symmetrical when its 'shadow' is drawn in; repeating every $30^{\circ}$; and emphasising not Scorpio $6^{\circ}$ but Aries $1^{\circ}$. Here, then, the idea of the Father, the Source,the Alpha/ Omega point, is dominant. The axis of symmetry of this imperfect pentagram is the unmarked, 'invisible', $12^{\circ}$ Gemini point of the Word or Breath. My feeling is that this may be the dimension of judgment where the soul becomes aware of its incompleteness and must account to its Maker... before rising again to the Seventh Heaven with its delicate and beautiful vibrations, its sense of holiness of being.

Beyond this plane comes another level fraught with disharmony in Eight, a domain of darkness, which leads to the utter perfection of ascended spirit in the Ninth Dimension, where Man achieves Mastery and the Christ-light shines forth as a dynamic creative force. A further hurdle to the spirit is presented in Ten; then the Eleventh Dimension fills with the choirs of angels before the throne of the Twelfth. Here, power belongs to the Father; every one of the significant Primes $1,7,11,13,17$, 19, 23, 29 - raised to the 12 th power resolves to 1 . There is no pentagram here, only the First and Last Great Ideas of the Source (Aries 0/1), Mind and Matter (Gemini $21^{\circ}$ - Aquarius dwad - and Capricorn $10^{\circ}$ - Taurus dwad), the forces of Light In Leo $16^{\circ}$ and $24^{\circ}$, and those of Darkness in Scorpio $15^{\circ}$ and $6^{\circ}$.

If there is truth in these conjectures, then Twelve is the power, the dimension, of the Creator of the knowable universe, and hence a holy number. All the argument for the preservation of duodecimal measures amid the influx of decimals is entirely justified. Retaining a 12 -base symbolises an adherence to the Created Order, while the spread of base-10 is symptomatic of its violation and the dethroning of the sacred by the secular.

It is in the powers of the 'significant primes' listed above that the patterns of form and harmony are principally displayed, hence the title of this piece, "Prime Movers". The study began as a hunt for the pattern of prime numbers which has become a most popular sport amongst number-crunchers of all nations. That hunt is still on, and is best left to the well-equipped; but it has led us on a most interesting and thought-provoking journey from which we may have more to learn.

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