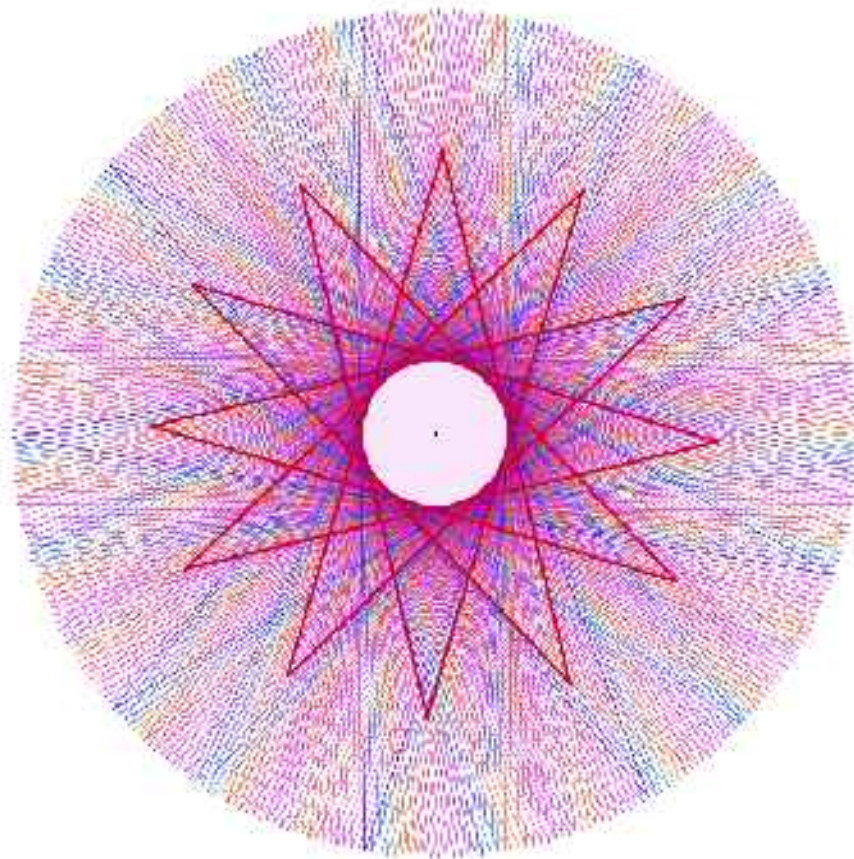


Why 360? – Lenny Silver

1. The picture of the 360

Why are there 360 degrees in a circle? This question has bothered me all my life. The academic historians have their view, but I take this as a mathematical and astrological question.

The question “Why 360?” is not an intellectual question – it is a request for an intuition into the nature of the 360. So it’s reasonable that the answer comes in pictures. This first picture shows a 360-pointed star with a 12-pointed star shining in its center. When I drew this picture, I felt in my heart that this question “Why 360?” at last had an answer.



The 360-pointed star in the picture is made up of 40 9-pointed stars. One of the nine-pointed stars is outlined faintly in blue. That the Twelve sits inside the Nine was revolutionary to me. I’ll say some of what I think it means farther on.

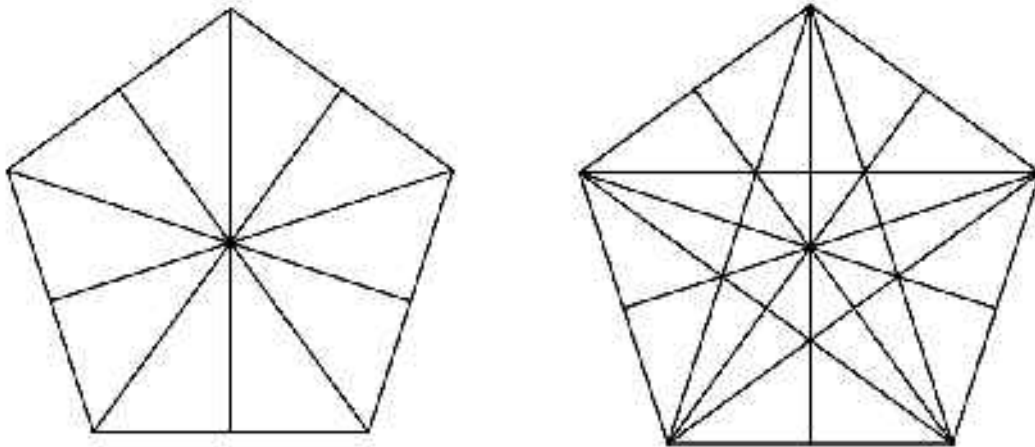
2. Seven beads on a necklace

How many ways can you arrange seven planets in a circle? i.e., how many necklaces can you make out of seven dissimilar beads? Think it through. Put one bead first. There are six choices for the second bead, five choices for the third bead, four choices for the fourth bead, three choices for the fifth bead, two choices for the sixth bead, and only one bead left. This seems to be 720 or $6 * 5 * 4 * 3 * 2$. If we allow that the mirror image of a necklace is the same necklace, then divide by 2. There are 360 necklaces.

There are 360 ways to arrange 7 planets in a circle.

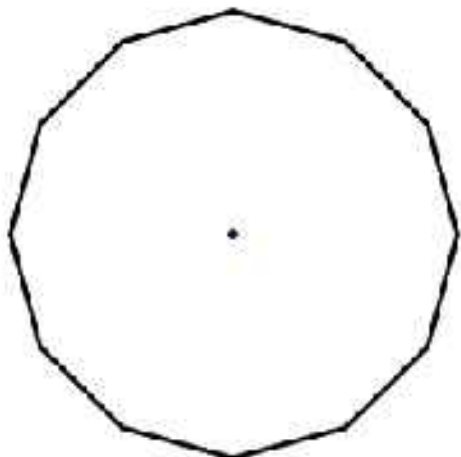
3. Thirty triangles on a pentagon

On a pentagon, draw lines from each corner to the midpoint of the opposite side, then add in the 5-pointed star, count the number of triangles – there are 30. If you do this to each pentagon on a dodecahedron you get 360 triangles.

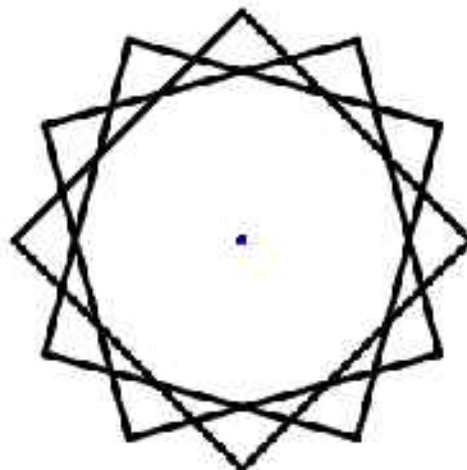


4. The Twelve

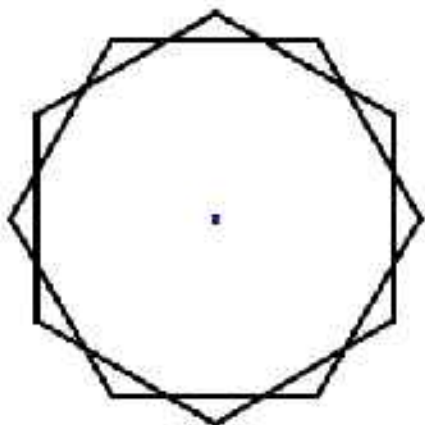
Before I could think about the 360, I had to think about the Twelve. Here are the components of the twelve-pointed star, from the inside out:



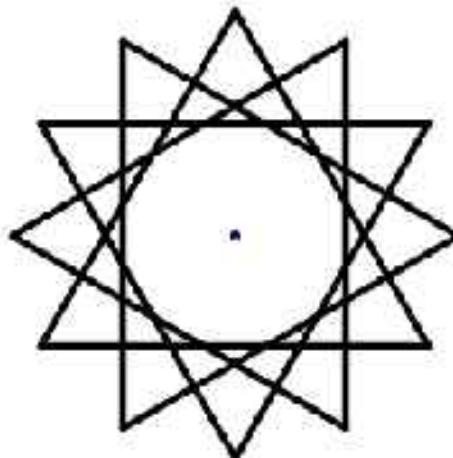
The Dodecagon



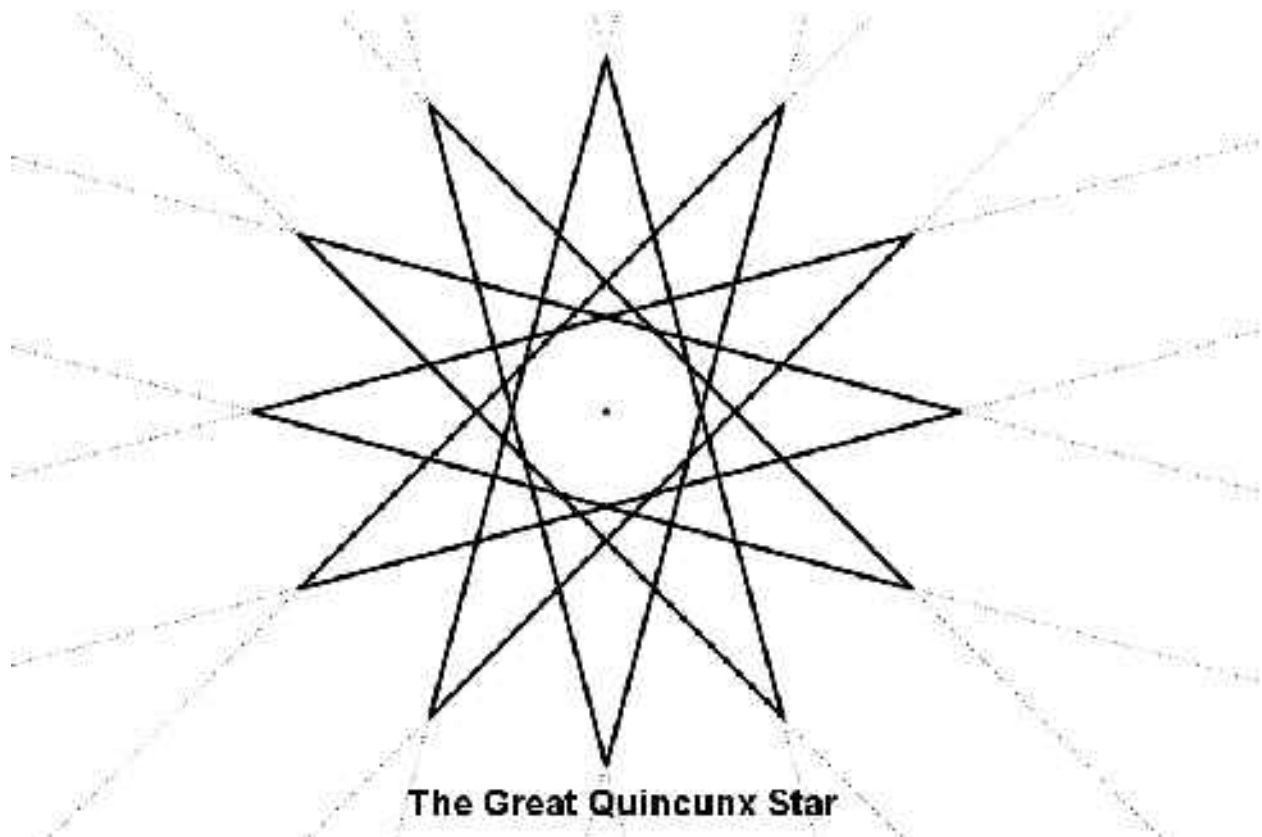
The Star of Three Squares



The Star of Two Hexagons



The Star of Four Triangles



The foundation of the astrological aspects can be read from this sequence. A thought takes shape in the individual mind, grows to maturity, then begins to decay and look back upon itself. The dodecagon shows the initial appearance of the thought, before it has any definite form. In the two hexagons the thought takes one form after another. In the three squares the different forms of the thought struggle with each other. In the four triangles the thought acquires its final form(s). In the quincunx the thought has passed its final form(s) and begun to decay and look back upon itself.

Another way to express this is to watch a thought gradually acquire a definite embodiment. In the semi-sextile the thought, though capable of embodiment, is not yet embodied. One might quip: "always the bridesmaid, never the bride", or "all dressed up and nowhere to go." In the sextile the thought has successive bodies, each giving way to the next – a kind of serial monogamy.

In the square the several bodies of the thought fight for supremacy, like saplings fighting for sunlight. In the trine some of its bodies have survived and grown to maturity.

In the quincunx maturity has passed. Thoughts are no longer accepted to be what they seem. The decay of the thought gradually reveals glimpses of its essence – like an emeritus professor teaching an elementary course – but reveals it imperfectly. It is as though a ball falling towards the ground had to fall halfway first, then halfway again, and then again – its landing continually postponed.

Accepting something like this description brings me to this statement: **the Twelve represents the process by which the individual mind creates the intelligible object.**

5. Factoring 360

There are two important ways to factor the number 360. The first, from the necklace of planets, is $360 = 3 * 4 * 5 * 6$. The second is $360 = 2^3 * 3^2 * 5$, or $360 = 8 * 9 * 5$.

These factorizations help me to ask this question:

In a zodiacal sign of 30 degrees, are there 5 groups of 6 degrees, or 6 groups of 5?

I don't want to say what this means, nor do I want to say what I think is the answer. I want to draw a picture of the question.

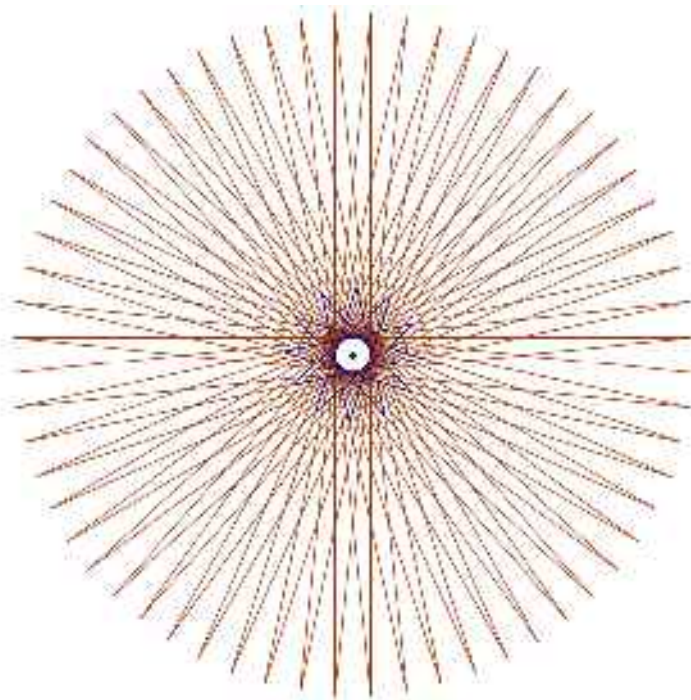
If there are 5 groups of 6 degrees, I have a point on the circle every 6 degrees, so I want to look at a 60-pointed star; if there are 6 groups of 5, I have a point on the circle every 5 degrees, so I want to look at a 72-pointed star.

If you can, convince yourself of this.

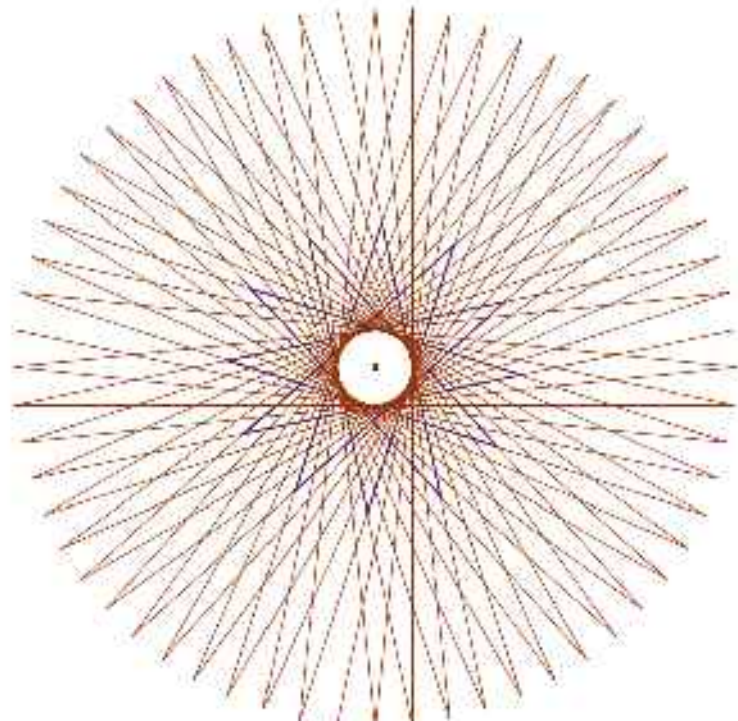
6. Sixty-Pointed Stars

These are some very complicated star-pictures. If you're unfamiliar with these stars, you'll probably find the accompanying text very confusing. In the Appendix there are some simpler pictures that might help. But unless you draw these stars yourself, this confusion will remain. As Euclid told the Greek King, there is no Royal Road to Geometry. The intuitions are available only if you draw the pictures yourself and experience them as the answer to your own confusion. The beauty is available anyhow and I hope you will enjoy it.

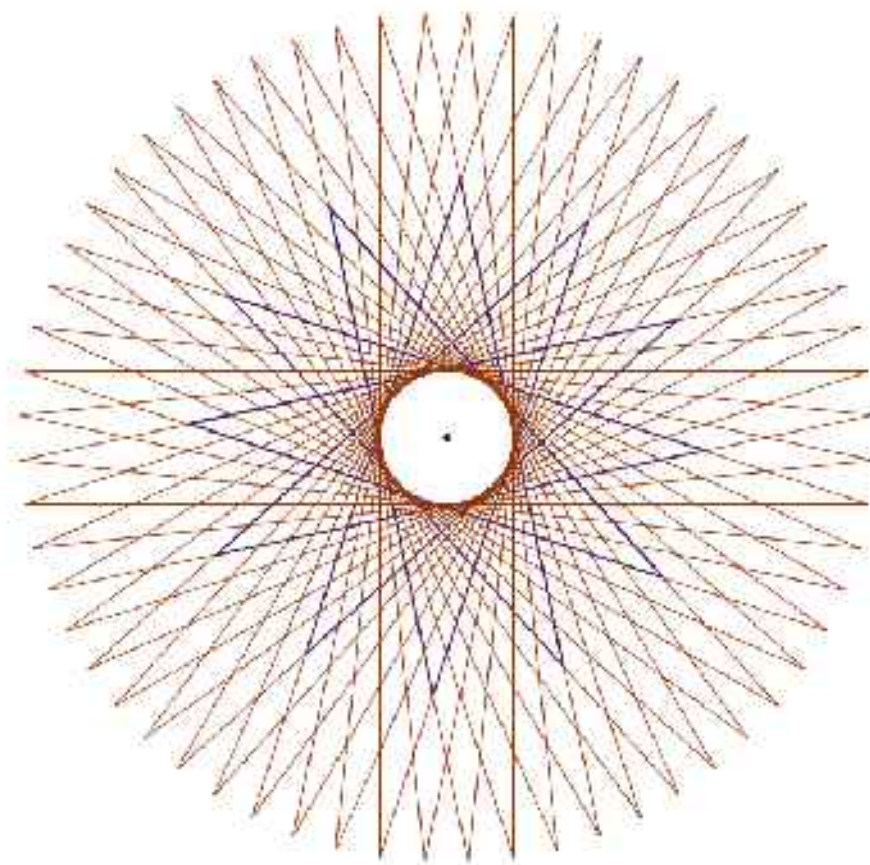
The 60-pointed star features a Twelve and a Five. Here is a sequence of 60-pointed stars, showing the Twelve gradually emerging. In the first picture, the outer star is a 60-29. This means the 60 points are connected 29 points apart. The Twelve is at 60-25:



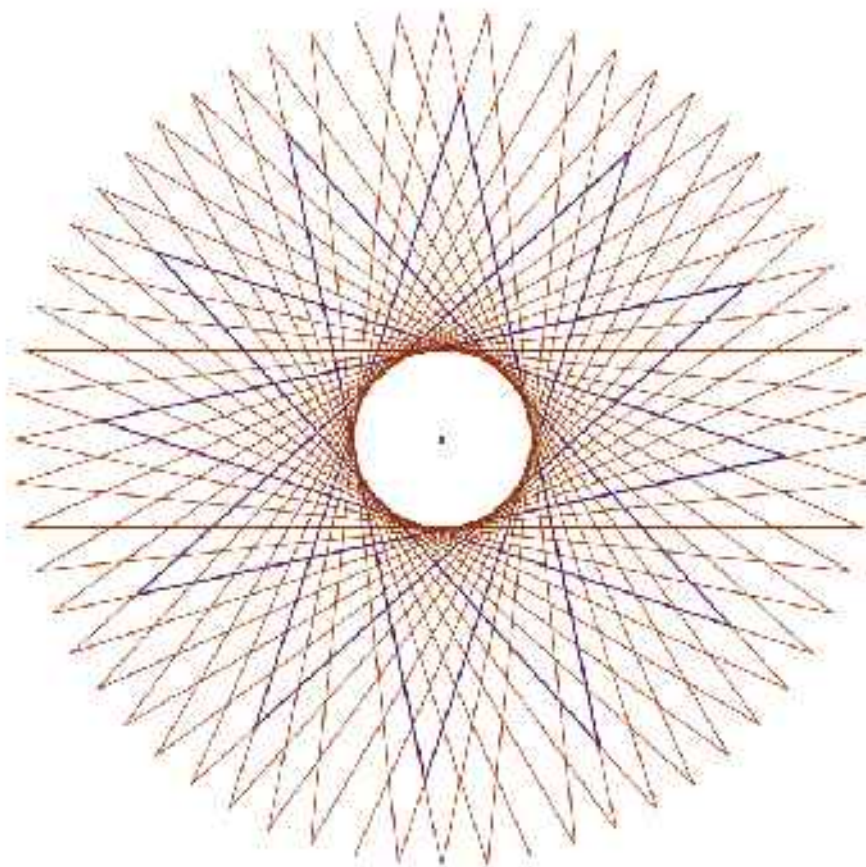
In the next picture, the outer star is a 60-28. Looking at the ratios, $60::28 == 15::4$, so the outer star is four 15-pointed stars. The Twelve at 60-25 is closer to the edge.



In the next picture the outer star is 60-27. The ratios are $60::27$
 $== 20::9$, so we'll have three 20-pointed stars as the outer star.
The Twelve at 60-25 is still closer.

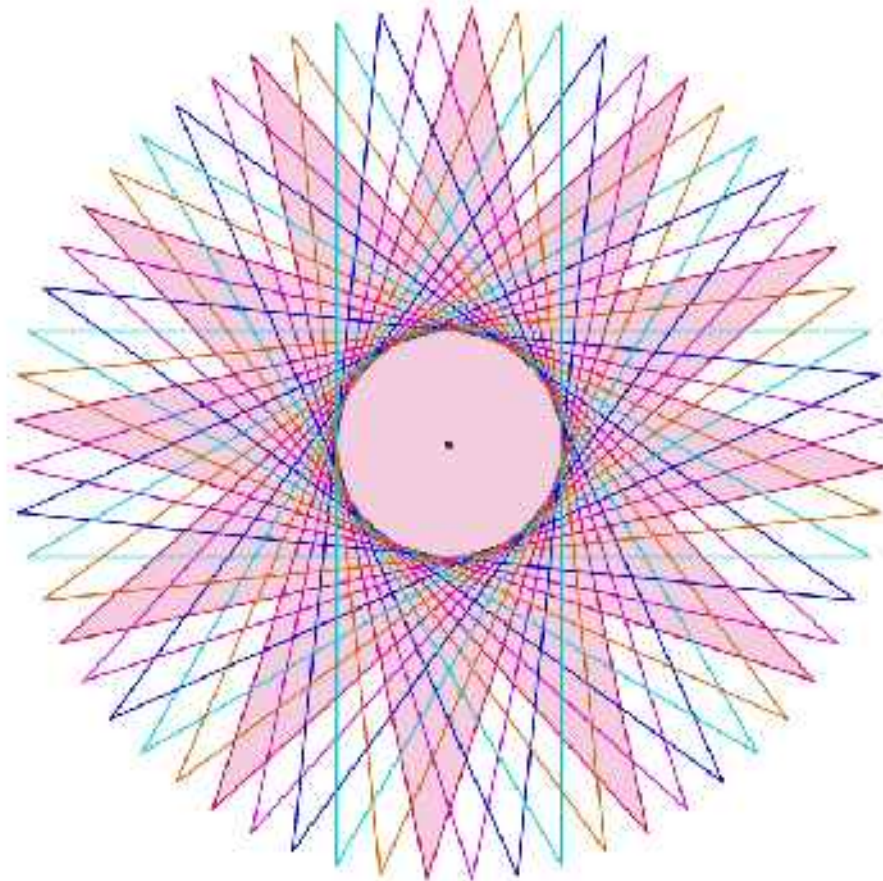


In these pictures, the Twelve appears to grow, but actually the outer star is shrinking while the picture remains the same size. The next picture shows the twelve at 60-25 inside the 60-26. The ratios are $60::26 == 30::13$. The outer star is two 30-pointed stars.

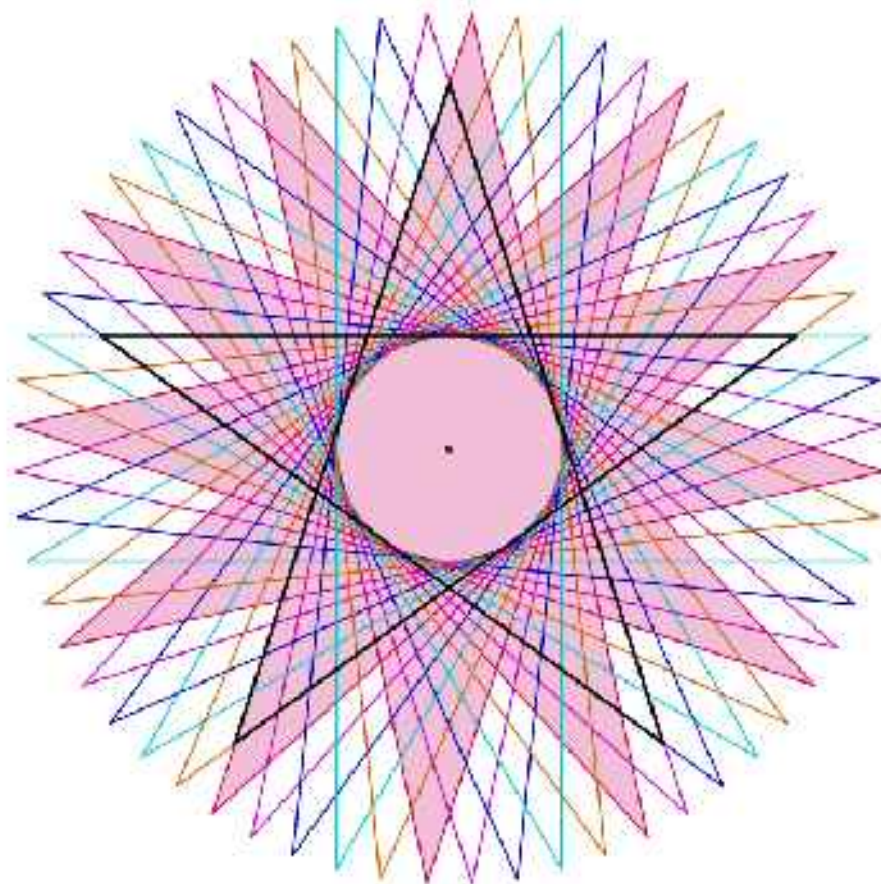


This picture shows that the next star inwards is the Twelve itself – can you see it? The ratios for the Twelve are $60:25 == 12::5$.

The next star, the 60-25, is five 12-pointed stars.



This is the last picture of the 60-pointed stars. This is the 60-25 as above, the next star in is the 60-24. The ratios are $60::24 == 5::2$, so the pentagon is what is expected:



I find this picture especially satisfying.

$60 = 12 * 5$, so this is the smallest picture where the Twelve and the Five are together. The meaning seems to be: **the intelligible subject is embedded in and takes its form from the intelligible object.**

When we take the degrees in a sign as 5 groups of 6 degrees, we are talking about the subject's ability to mirror in its own processes the intelligible object in its world.

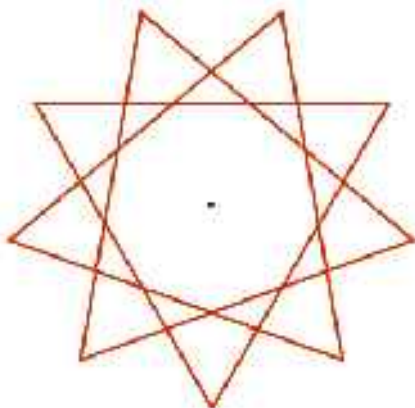
7. The Nine

From 60 to 360 we multiply by 6. What is added by the 6? This bothered me for a long time. Now I would answer: **going from 60 to 360 adds the Eight and the Nine.**

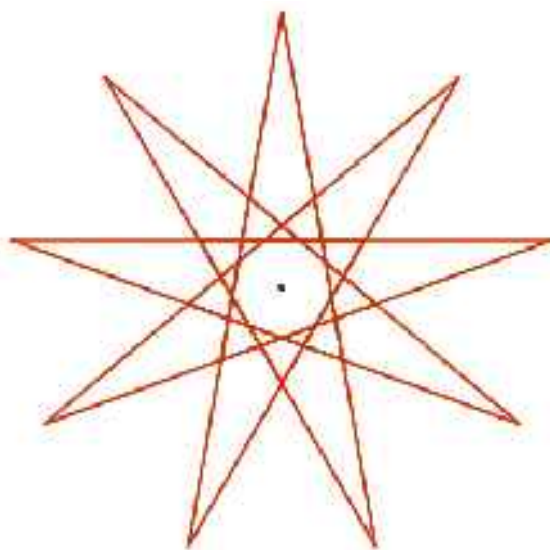
The 72-pointed star features a Nine, a Twelve, and – later – an Eight. I found the 72-pointed star just as beautiful as the 60, but much more puzzling, because of the presence of the Nine and its dominant position. This picture cited by Jung in the *Rosarium Philosophorum* was my introduction to the alchemical character of the Nine. Note that each stem has two flowers, so that King, Queen, and Holy Ghost each are represented by a triangle:



Rendering this picture geometrically gives the 9-3, the 9-pointed star of three triangles:



This star of three triangles sits at the center of the larger nine-pointed star, the 9-4:



The alchemical pictures are interpreted historically as portending a certain inner transformation wherein the male and female parts of the psyche unite into one. I'd like to suggest that there is an additional meaning available to the present psychological climate, namely that **the secret of human relationship lies in the presence of a Third.** The Dove in the alchemical picture represents the Holy Ghost, but in these times it could manifest as anything shared by the pair of people in question – a child, a shared endeavor, a shared ideal, a shared inner goal, or anything

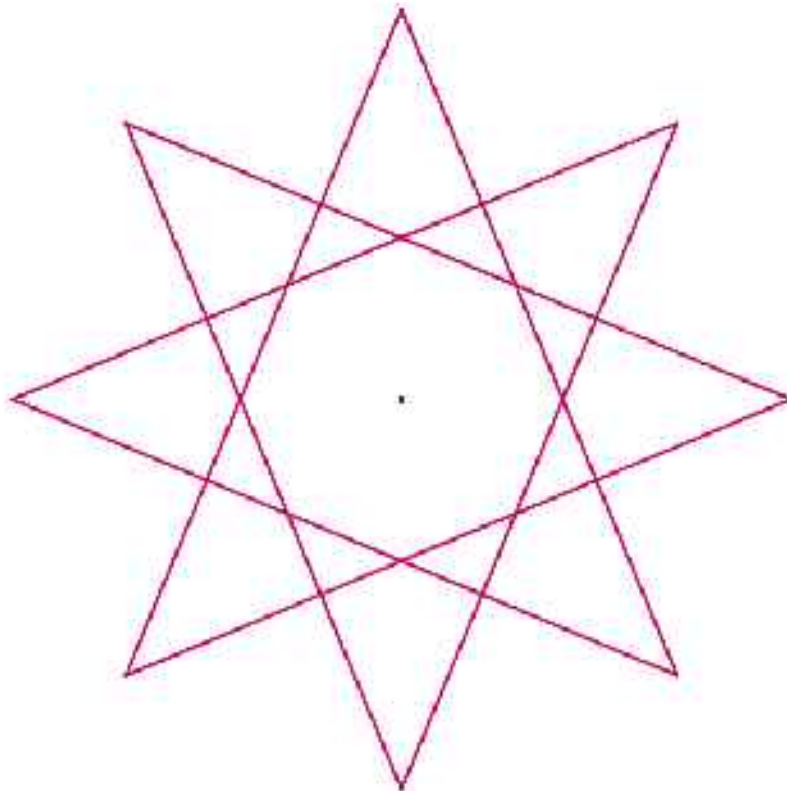
else powerful enough to bridge the two egos and compel the self-sacrifice required for this transformation.

What does the larger nine-pointed star signify?

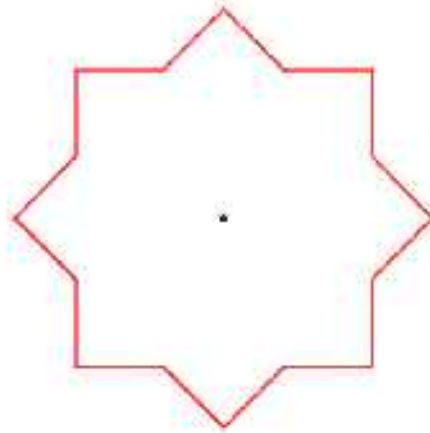
The 9-4 star must be at least a container for the 9-3, an already profound process at the heart of human relationship. There is within each of us the seed-consciousness of the shared worlds we experience with others. This is represented by the Nine. We don't have the details of those seed-states, but if Grace appears perhaps we will at some later time. Perhaps in the Enneagram, Gurdjieff experienced some of this, but I can't tell from what he left us.

8. The Eight

The Eight is another part of the 360 that appears in the 72. Here is the 8-3, eight points connected 3 points apart:



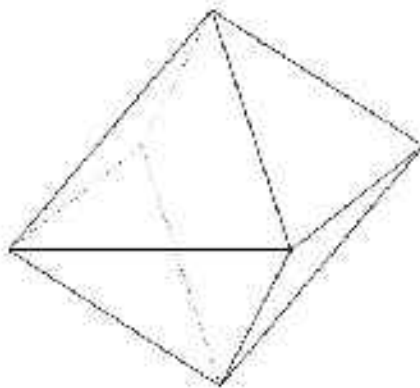
If you peer inside the 8-3, you find the 8-2, the star of two squares



which stands for the Whirling Dervish, connecting the Eight with the flow of energy in and around a human life.

The structure of the Energy is also addressed in the Chinese art of Chi Kung.

The space around the body is composed of the six directions – up, down, left, right, back, front – and these make up the vertices of the octahedron, the eight-faced regular solid, the fluorite crystal.



In either case, this mastery of the Energy and its Space is the Eight.

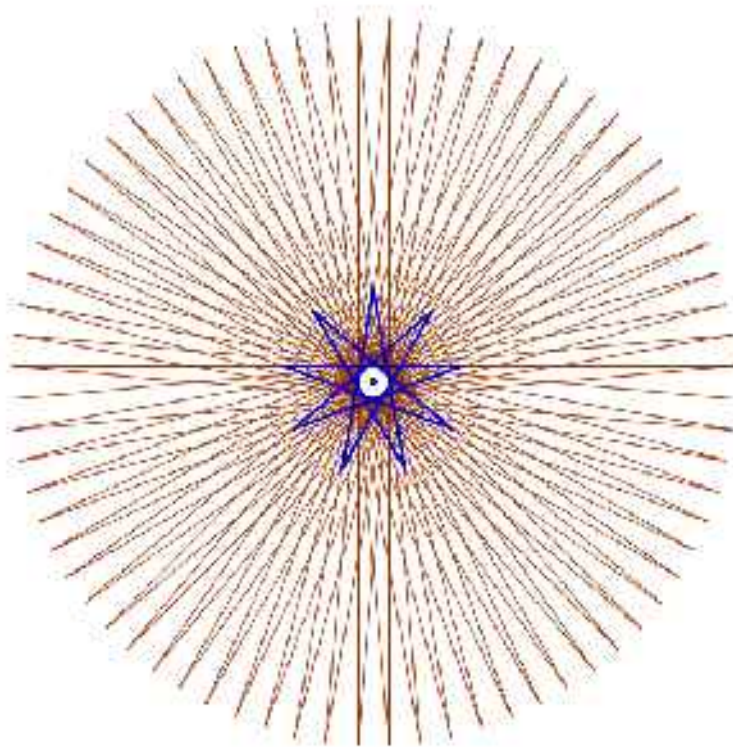
9. The 72-pointed star

This star is much more complex than the 60.

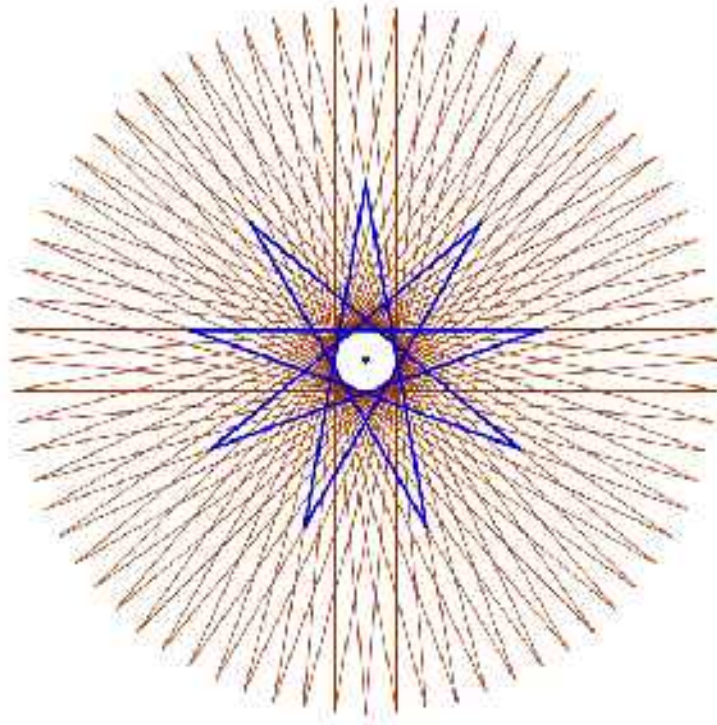
The important ratios in the 72-pointed star are

- $72::32 == 9::4$ – the nine-pointed star is at 72-32;
- $72::30 == 12::5$ – the 12-pointed star is at 72-30; and
- $72::24 == 8::3$ – the 8-pointed star is at 72-24.

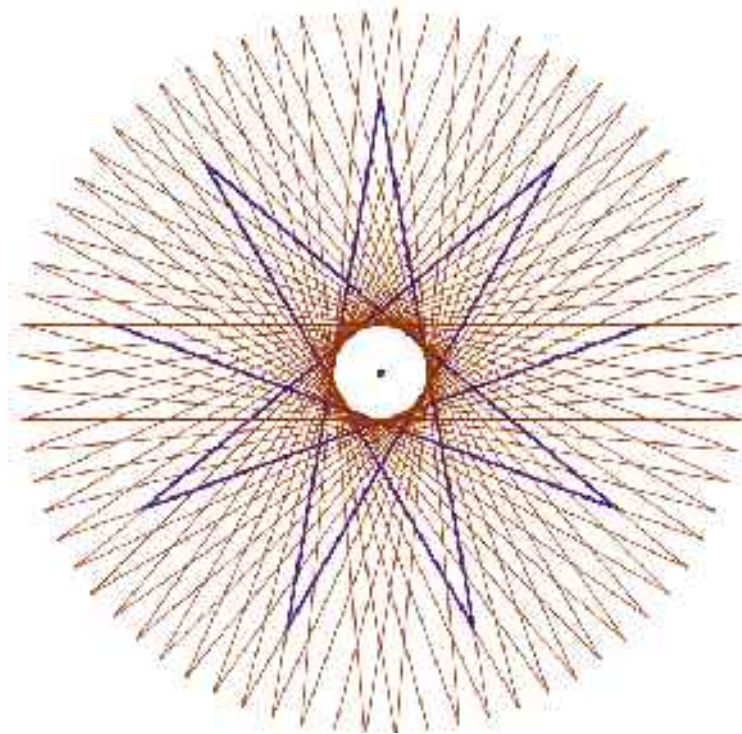
This first picture of the 72 shows the 72-35 star with the Nine hanging at 72-32:



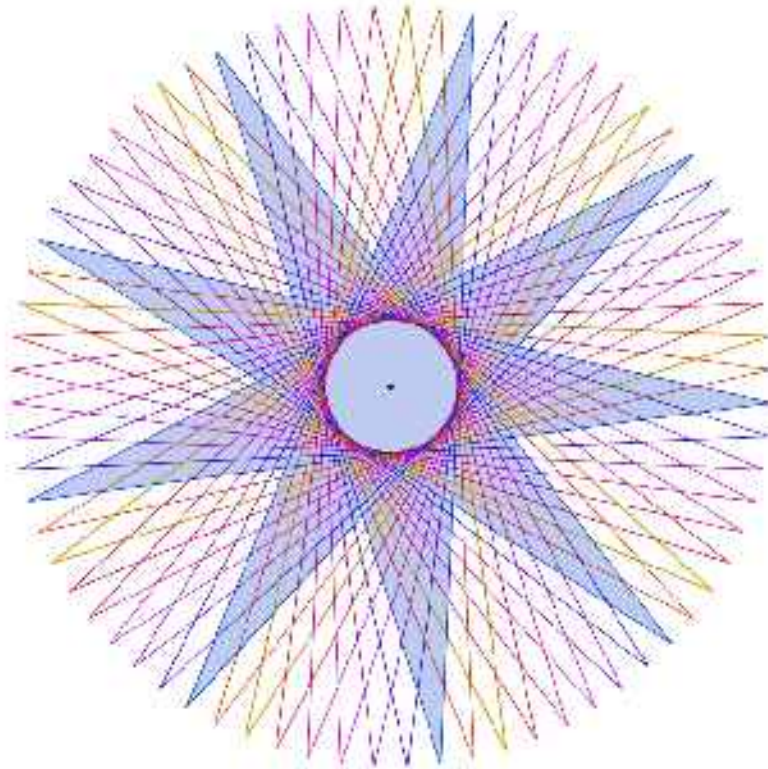
The next star is the 72-34 with hanging Nine. The beauty of the Nine grows as the pictures progress.



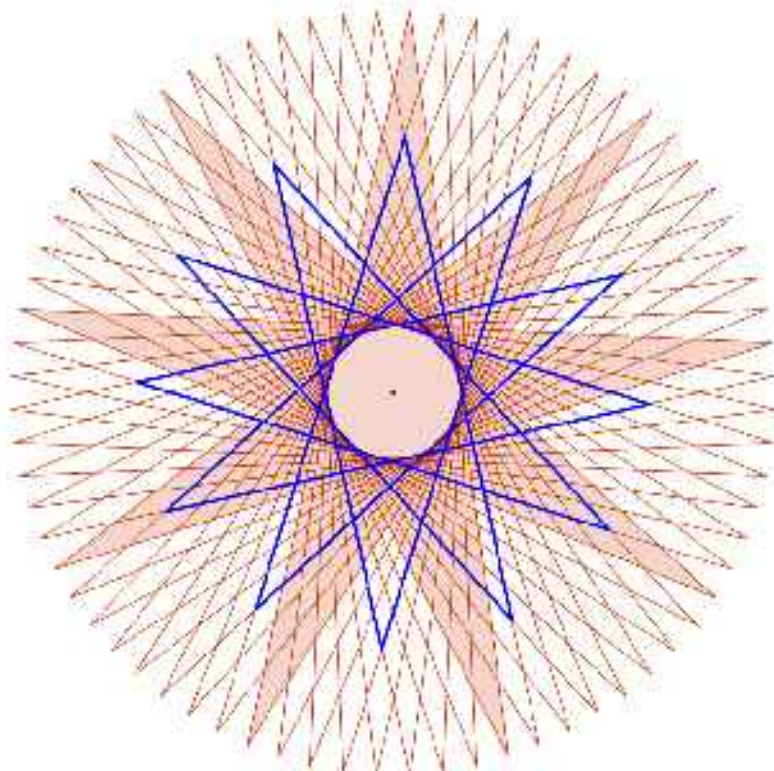
Here is the 72-33 with hanging Nine:



The 72-32 is eight 9-pointed stars:



The Twelve is at 72-30, shown here hanging in the 72-32:



Compare this picture with the 360 on page 1.

The Twelve hangs subordinate to the Nine. The Nine transcends the Zodiac and leads to the secret of the 360. When introspection arrives at the Nine, it finds a magical container, continually transforming itself into the different shapes of human consciousness, a shape-shifting act that we recognize dimly in the shifting paradigms by which humanity understands its world.

These different shapes are again represented in the shifting paradigms of Astrology.

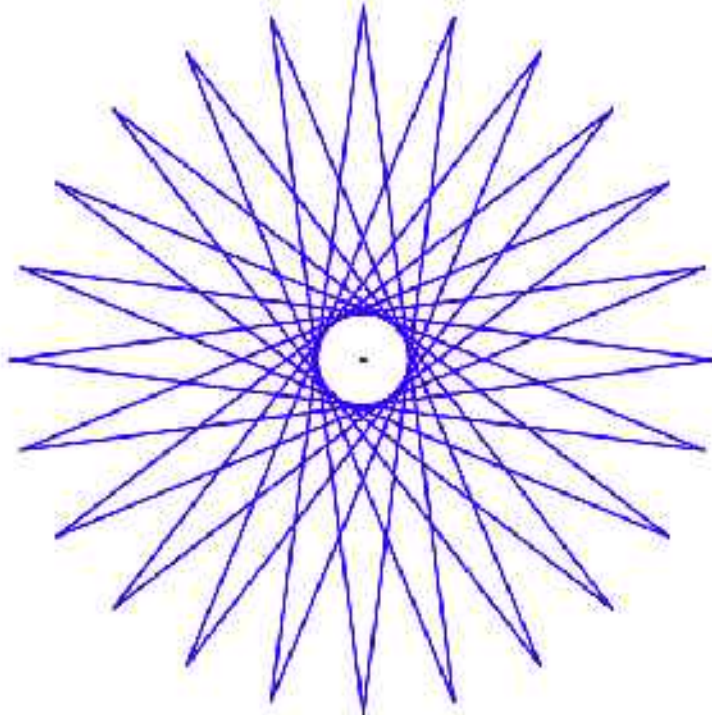
The presence of the Zodiac (the Twelve) subordinate to the Nine shows how astrology changes character responsive to the changes in human consciousness. So the horary astrologer of the 17th century morphs into the natal astrologer of the 20th century. Where to from here?

When we take the degrees in a sign as 6 groups of 5 degrees, we are talking about the ability of the individual – as a representative of humanity – to grow new paradigms that accurately represent the changing shape of our common universe.

From his seminal text the Sabian Symbols in Astrology, it would appear that this is the view taken by Marc Edmund Jones.

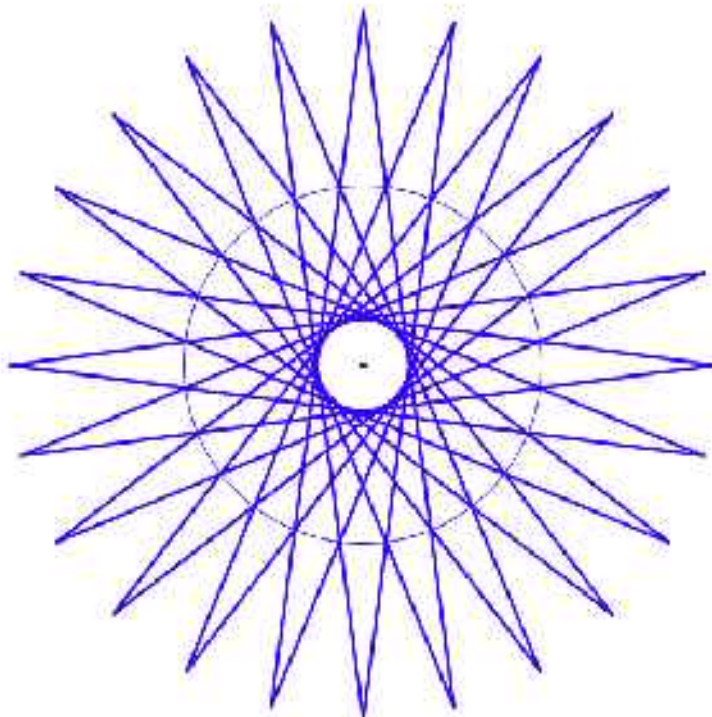
Appendix 1: The Language of These Stars

To illustrate, begin with a 24-pointed star. The 24 is an important component of the 360. The ratio is $360::165 == 24::11$.



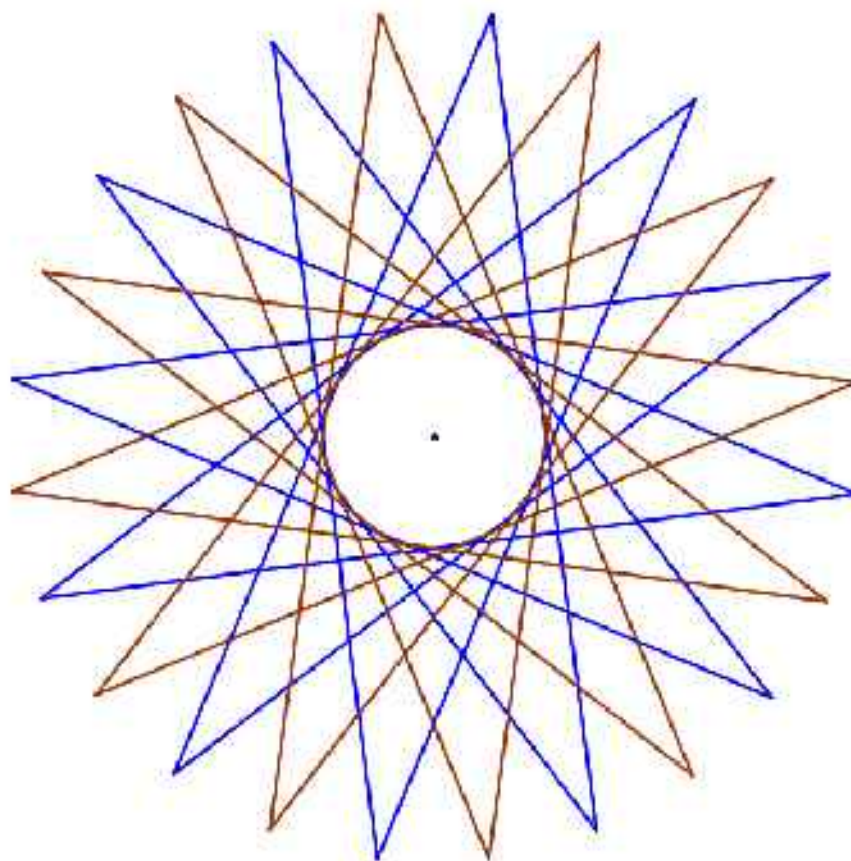
This star has 24 points, and each vertex of the star is 11 points apart on the circle from the previous one.

In the next picture, I've drawn a circle at the first set of intersections.



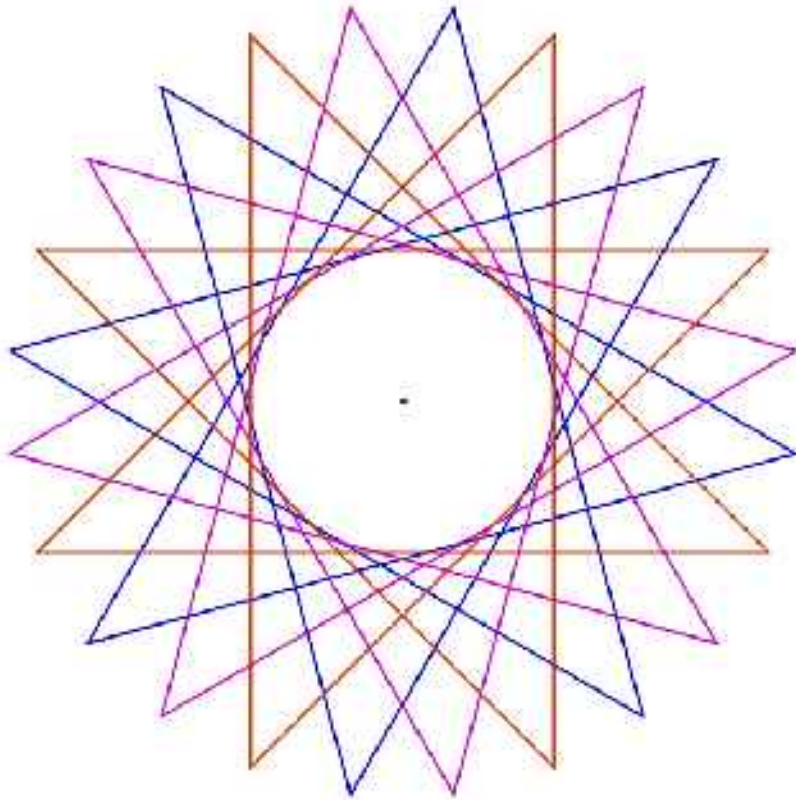
If you look at the star interior to the circle, you can see that the vertices of this inner star are 10 points apart – the 24-10.

Here is that same inner star, the 24-10, standing alone.



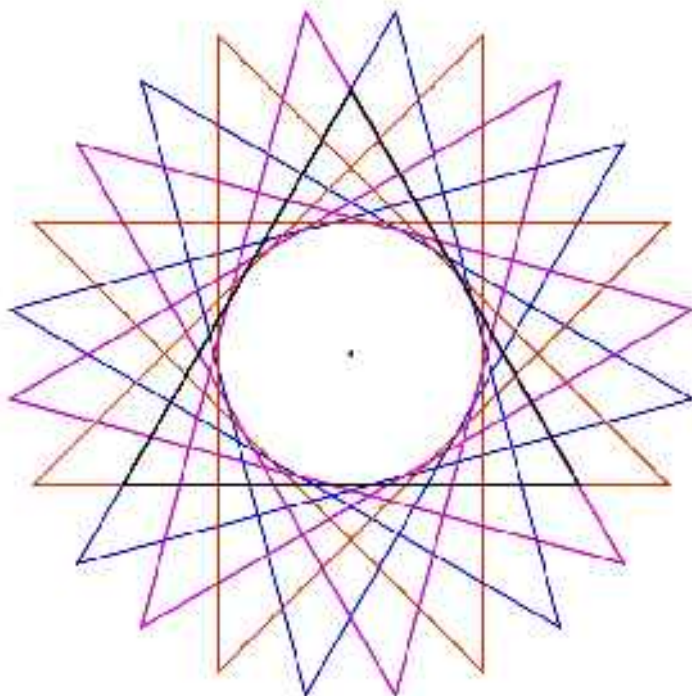
If you look at the ratios: $24::10 = 12::5$. This suggests arithmetically what you see in the picture, that this 24-pointed star is made up of two 12-pointed stars. The two Twelves are in different colors to make this clearer.

The next star inwards has its vertices 9 points apart. $24::9 == 8::3$, so we expect to see a 24-pointed star made up of three 8-pointed stars.



The three Eights are of different colors so you can see them.

The next star inwards is the 24::8 which is made up of 8 triangles – 24::8 == 3::1. In the picture, one of the triangles is shown in black.



When a star analysis reaches the level of squares and/or triangles, this stands for the level of ordinary human consciousness.

The 24 reveals the nesting of the Twelve and the Eight. The triangles stand for the level of ordinary human consciousness, as does the Star of Four Triangles in the Twelve. The Quincunx is where we come to suspect that ordinary things are not what they seem. Between the Triangles and the Quincunx lies another level signified by the Eight. This Eight is the realm of the Energy, where the Dervish whirls, where the Chi Kung master sits.

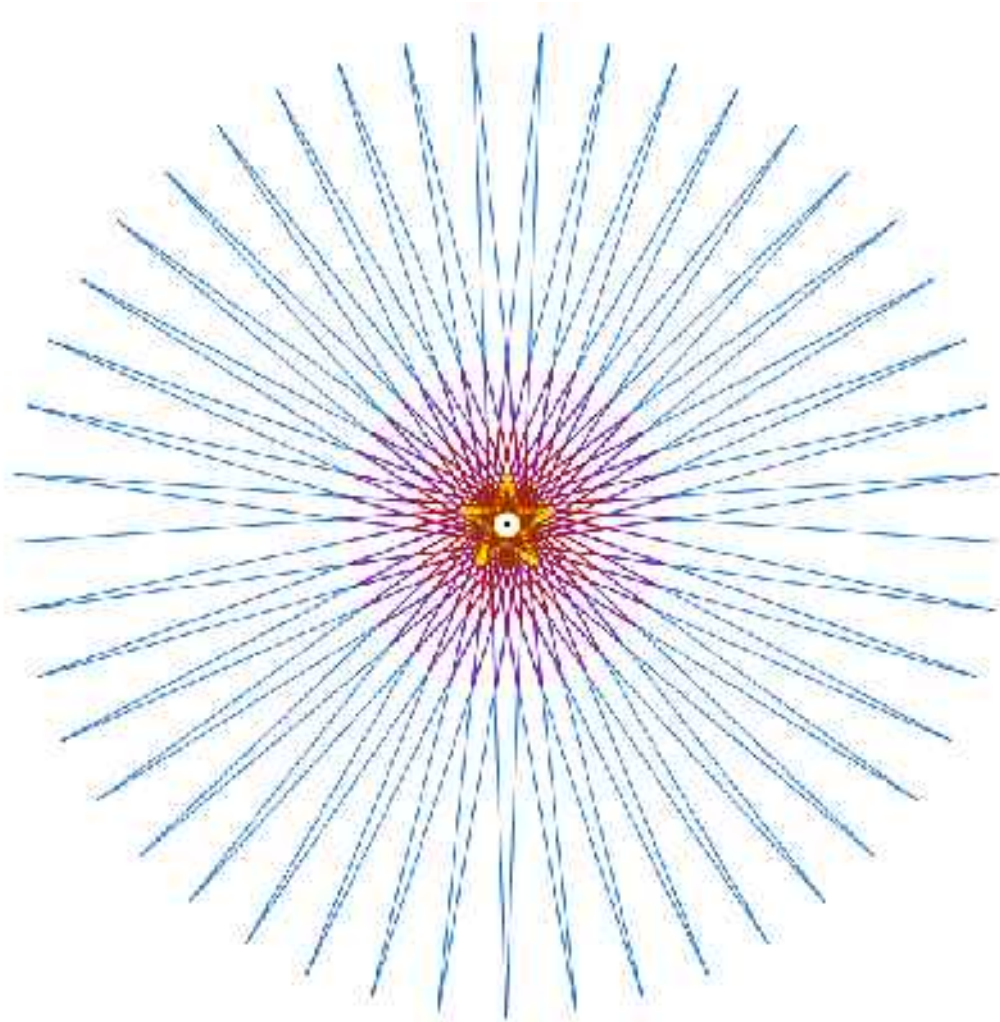
Said in human language, when ordinary things don't work out, the strength to handle this comes from the mastery of the energy.

Or say it in your own words.

This method of reading the diagrams hold true for the more complex stars as well, including the 360.

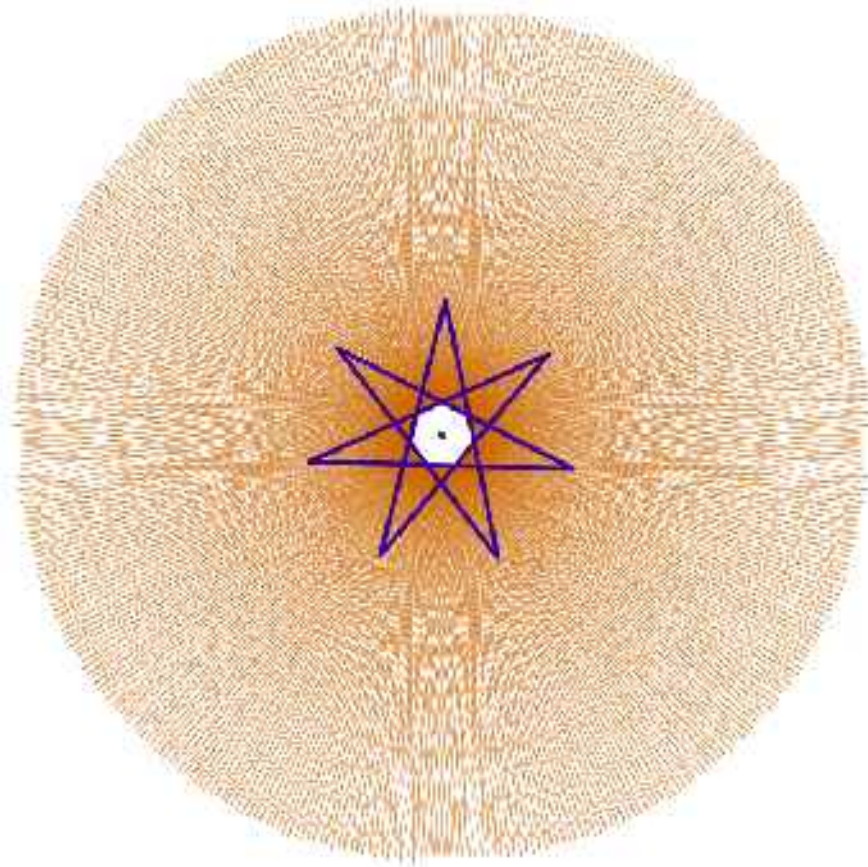
Appendix 2: The 45-22

This is just a pretty picture. $360::176 == 45::22$. The outlines of the 45-21, the 45-20, and the 45-19 are shown. The pentagon hangs at 45-18. The ratios are $45::21 == 15::7$; $45::20 == 9::4$



Appendix 3: the 420

This is another interesting picture. $420 = 3 * 4 * 5 * 7$. Instead of adding the Eight and Nine we add the Seven. The Seven is conspicuously absent from the 360. The figure of Siva dancing translates into Greek as the 7-pointed star. So this picture is a view of Hindu culture seen from the Greek? It might have something to do with architecture? In any case, the picture is beautiful.



The star is 420-200. The Seven hangs at 420-180. The ratios are $420::180 == 7::3$.

Epilog:

The Emperor of Ice Cream by Wallace Stevens

Call the roller of big cigars,
The muscular one, and bid him whip
In kitchen cups concupiscent curds.
Let the wenches dawdle in such dress
As they are used to wear, and let the boys
Bring flowers in last month's newspapers.
Let be be finale of seem.
The only emperor is the emperor of ice-cream.

Take from the dresser of deal,
Lacking the three glass knobs, that sheet
On which she embroidered fantails once
And spread it so as to cover her face.
If her horny feet protrude, they come
To show how cold she is, and dumb.
Let the lamp affix its beam.
The only emperor is the emperor of ice-cream.