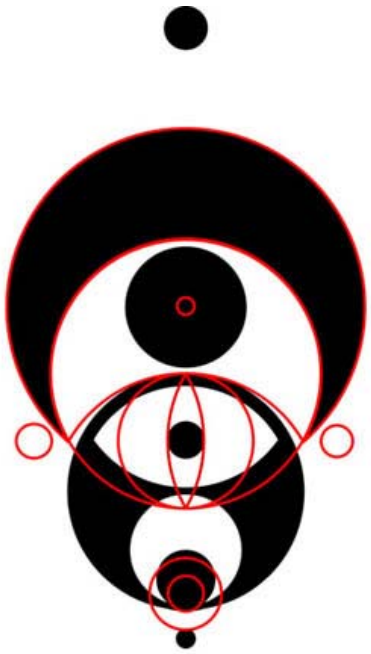
Miamisburg and Serpent Mound, Ohio, Crop Formations: Geometries Compared

Left: Miamisburg, Ohio, pattern in 8-foot-tall corn reported on September 1, 2004, near ancient Miamisburg Mound.
Length 222 feet. Aerial photograph © 2004 by Jeffrey Wilson. **Right:** Pattern discovered by soybean farmer near ancient
Serpent Mound in Locust Grove, Ohio, on August 17, 2003. Length 271 feet. "Eyes" in both patterns are Vesica Pisces
geometries created by overlapping circles and both patterns have two small circles outside main pattern.
Aerial photograph © 2003 by Jeffrey Wilson and Roger Sugden.

September 22, 2004 Ellettsville, Indiana - Back on September 8, I posted an **Earthfiles** about possible balls of light reported by Ted Robertson and Jeffrey Wilson of the Independent Crop Circle Research Association's (ICCRA), who investigated the Miamisburg, Ohio formation in tall corn near the ancient Miamisburg earth mound. Included in that Earthfiles report was a geometry comparison between the 2004 Miamisburg Mound, Ohio, corn formation and the 2003 Serpent Mound, Ohio, soybean pattern researched and drawn by Bert Janssen of The Netherlands. The similarities shown below are remarkable.



Red diagram of 2003 Serpent Mound formation in soybeans at Locust Grove, Ohio,
superimposed over black and white 2004 Miamisburg, Ohio, formation in corn.
Comparative diagram © 2004 by Bert Janssen.

Upon seeing Bert Janssen's geometry comparison, Ted Robertson at first disagreed that the large outer ring and crescent would overlay so neatly between the two crop formations. He did several computations and drawings himself and recently sent the one below as his final

which does show remarkable similarity in the two geometries. This week he talked with me about why he first thought the patterns were based on different ratios and consequently, would not fit together so perfectly. But as he worked with his own diagrams, he kept making surprising discoveries.

Interview:

Physical Challenge of Making Complex Pattern in Tall Corn

Ted Robertson, B.S., Biology (Pre-Med, Indiana University), Harpsichord Maker and Field Researcher, Independent Crop Circle Research Association (ICCRA), Ellettsville, Indiana: "My first thoughts in seeing the Miamisburg formation from the airplane is that it looked to be the general shape and design bilaterally symmetrical, a larger ring, a smaller ring, a Vesica Pisces, satellite circles looked closest to Serpent Mound than perhaps any other crop circle in the United States I have seen.

The other thing that first came to my mind about Miamisburg is that this is the most complex formation, geometry-wise, in tall corn that we've probably ever come across in the world. There have been larger patterns, such as Vacaville, California, but that was sort of like a crude caterpillar with just a series of circles. So, I recognized the Vesica in Miamisburg which reminds me of the Serpent Mound.

Another physical comparison, I realized, was the resolution in corn. It is more widely spaced rows, about 30 inches apart. The plants themselves are spaced about a foot apart. So, whatever makes a small design in a corn field, it tends to look more chunky. And in Miamisburg, in fact, this crop circle looks a little bit more chunky (than Serpent Mound). The paths are wider than Serpent Mound. In Serpent Mound being in soybeans with very closely spaced plants, you get a higher resolution in the 'artistic canvas.' In Serpent Mound, it is a much more elegant design very fine pathways and thinly spaced rings and crescents with a lot more detail possible.

Another big problem for whatever created the Miamisburg formation is the height of the corn. Miamisburg has standing centers, multiple crescents and other standing internal elements as well as downed plants. The height of the corn makes viewing other parts of the corn design difficult. When I first got in there even though I saw it first from the air it was difficult to know exactly which circle I was in and what part of the formation and to get an overall picture of what the design looked like. It is a rather complex design and very compact.

Also, corn is tough and it takes more energy to down than say, wheat, or other smaller plants. (Biophysicist W. C. Levengood measured *17 times more energy* to break corn stalk fibers versus wheat or barley. (See **09-05-04Earthfiles**).

Also, to measure the formation in mature corn, the standing centers must be taken into account and it is rather difficult to maintain accurate measurements through the standing crop especially very large measurements through multiple areas of standing crop as the tape must be threaded through the standing plants all the while trying to maintain a straight line of measurement. The largest circle single elements in the Miamisburg formation has a diameter of about 122 feet. That's a rather large distance.

Also, after a few rows have been navigated, the standing corn blocks the view of the starting place. Also, if one were to hoax a formation in corn, the ropes used or tape measures might have to be suspended above the tops of the corn which can be 7 to 8 feet tall. If that's used as a radius, the poles would have to have considerable tension for the large circles to keep the line taut over the top which is rather difficult. In this formation with its smooth curves, its large standing elements and accurate circles, making this with a rope or tape measure would be very difficult to do. Once the corn is flattened by mistake, it cannot be made to stand up again.

YOUR POINT IS THAT IT WOULD BE DIFFICULT FOR ANYONE IN 8-FOOT-TALL CORN TO MANUALLY MAKE SUCH A LARGE, COMPLEX CIRCLE.

That's right, because usually people walk around with stomping boards to create the diameter and it would have to brush along the tops of the plants. Someone would have to stand in the center and hold it. Not only that, there are places in the Miamisburg formation that taper down to I wouldn't say a single standing plant, but only about six plants wide sort of like a veil effect.

Then, there aren't that many mistakes, which really threw me for the geometry analysis.

Miamisburg, Ohio, Corn Formation Geometry

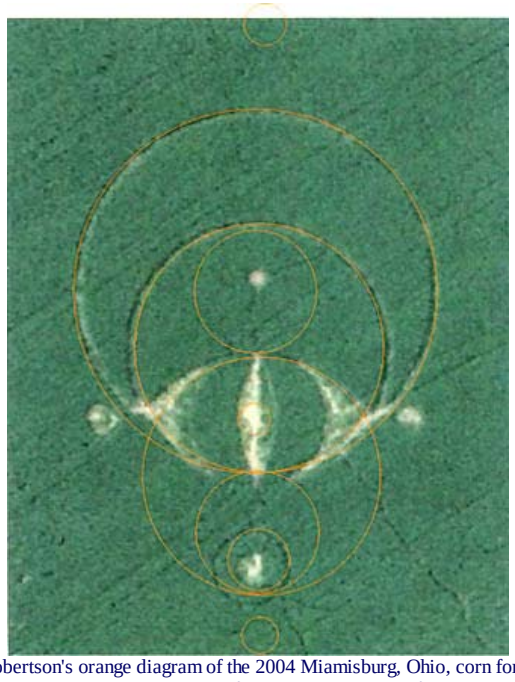
When Bert Janssen first put out his diagram, I thought, 'How could that be?' I checked and I didn't get what he got. I was convinced there was a 2:1 ratio going on, alternating with a 3:2 ratio. What that means is that the Serpent Mound has near a 4:3 ratio of the outer circle to the inner circle you know the large crescent? That is a 4:3 ratio, so I could not understand how there could be a nearly perfect match between Miamisburg and Serpent Mound.

What I think is going on are basically two things which are rather enigmatic about the layout of this Miamisburg crop circle. If you notice in the aerial view, there are two circles that create the Vesica Pisces. The one that is toward the narrow part of the formation which is closest to the Miamisburg Mound that has been flattened while the other one has been left standing. In either one, they both have a circular element which is half the diameter approximately. In other words, the circle that creates the Vesica on the top, or narrow part of the formation, is actually smaller than the circle that creates the other half of the Vesica Pisces in the standing formation. And the ratio of the smaller circle is exactly as far as I can tell a 3:2 ratio compared to the outer ring. Whereas the standing one is 3:4 ratio.

Miamisburg, Ohio, Orange Pattern Superimposed On Aerial of Serpent Mound Aerial Photograph

THAT'S WHERE YOU COME INTO SOME KIND OF SYNCHRONICITY WITH THE SERPENT MOUND OF 2003?

Exactly! It's almost like that ring was put there almost exactly like Serpent Mound, maybe to give a continuity over the years, or some significance like instant recognition.



Ted Robertson's orange diagram of the 2004 Miamisburg, Ohio, corn formation superimposed over aerial photograph of 2003 Serpent Mound formation in soybeans.
Aerial photograph © 2003 by Chris Steele.

I also discovered that the two satellite circles (Miamisburg) there is one at the tip of the formation and another out in the field at the other end those happen to be a 3:4 ratio as well. That means the smallest elements of the crop formation and the two largest elements in this crop formation are both 3:4 ratios.

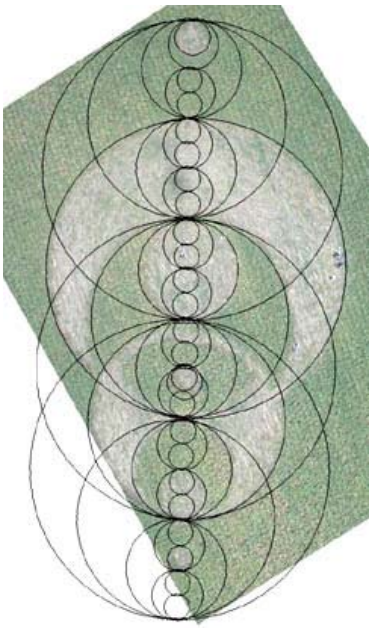
WHICH RESONATES WITH SERPENT MOUND 2003.

That's right. Serpent Mound was very complex and slightly less than a 3:4 ratio.

THEN YOU HAVE THE COMPLEXITY THAT THE REST OF MIAMISBURG IS A 2:3 RATIO.

That's right. In addition, it's also has an element in a 1:2 ratio which is what another geometry researcher calls a 'yin yang' fractal.

Miamisburg and Serpent Formations Fit Fractal Framework of 1:2, 2:3 and 3:4 Ratios

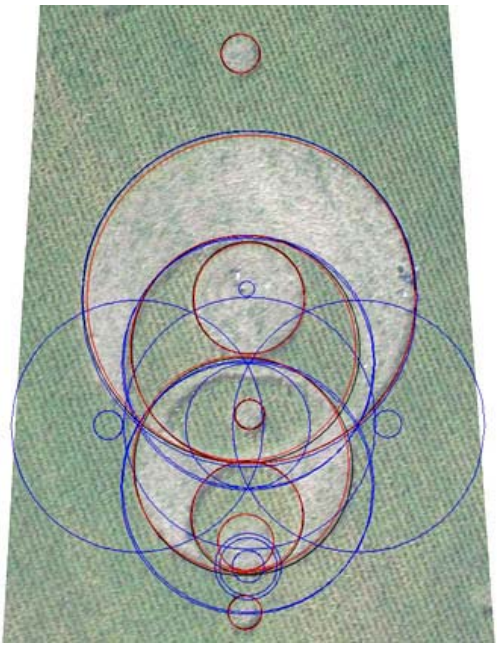


1:2, 2:3 and 3:4 fractal ratios in Miamisburg overlay diagram comparing Serpent Mound to Miamisburg formations.
Fractal diagram © 2004 by Ted Robertson.

This diagram makes clear the fractal nature of the Miamisburg design and how the entire formation fits completely inside the fractal framework with its 1:2, 2:3 and 3:4 ratios. It's a picture that's worth perhaps a thousand words. It is so elegant that it might inspire others to use it as a starting point for further research on the geometry.

IF YOU WERE TRYING TO SUM UP FOR A GENERAL AUDIENCE WHAT SOME KIND OF INTELLIGENCE, WHATEVER IT IS, THAT MADE SERPENT MOUND 2003 AND MIAMISBURG, OHIO 2004 AND YOU WERE TRYING TO LOOK AT THE MATHEMATICAL RATIOS OF THE GEOMETRIES IN THOSE TWO PATTERNS SEPARATED BY ONE YEAR - WHAT COULD YOU SAY THAT YOU THINK ARE THE MOST IMPORTANT CONNECTIONS BETWEEN THE TWO?

In the geometries, that outer ring with crescents in both of them is almost a dead ringer. It's the largest connection. The similarities between Miamisburg and Serpent Mound as far as the outer ring is that the inner ring of the crescent is displaced forward outside it overhangs the larger crescent in both cases for the 4:3 ratio. Geometry-wise, they both also have a Vesica Pisces. They both flowed clockwise and both are aligned to mounds, the Serpent Mound and Miamisburg Mound. The Miamisburg corn formation seems to miss the Miamisburg a little to the south, almost through a tangent.



In his final composite comparison, Ted Robertson drew on an aerial photograph of the Miamisburg, Ohio, corn formation its geometry in red, compared to the blue geometry lines of the 2003 Serpent Mound. Geometry analysis © 2004 by Ted Robertson, ICCRA.

SO, BOTH FORMATIONS A YEAR APART ARE SAYING PAY ATTENTION TO THE SERPENT MOUND AND TO THE MIAMISBURG MOUND.

That's right. And Bainbridge also we forget that one had one of its arms pointing to the Seip Mound, also in 2003. (See: **10-02-03Earthfiles.**)

DIDN'T BOTH MIAMISBURG AND SERPENT MOUND HAVE THE SMALLER CIRCLES SEPARATED FROM THE MAIN FORMATION?

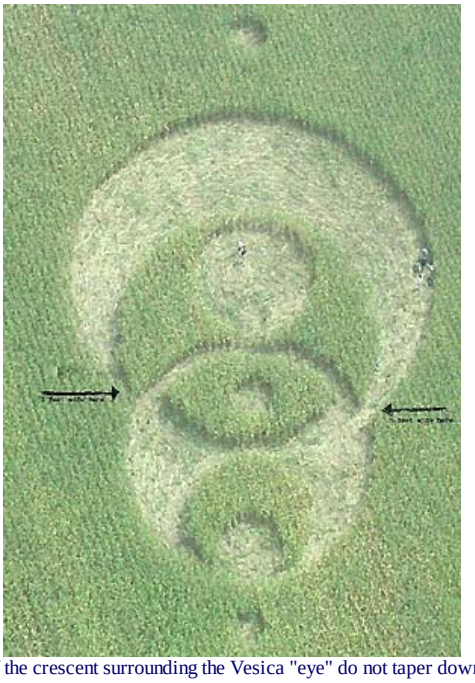
That's right. In Serpent Mound there were 4 circles three were actually separated and one of them had a ring around the circle. There were 4 equally spaced circles and if you drew a circle connecting all of them, they would all be tangent to that central circle which equals the circle creating the Vesica and crescent, too.

Differences in the Geometries

To me, the Serpent Mound geometry is highly suggestive of a seed (flower) of life pattern, the basic foundation, the underlay. Although Miamisburg has a Vesica and it does have a similar outer crescent in a 3:4 ratio, it seems to me based more on a fractal of 1:2 and 2:3, with a 4:3 element thrown in. The Serpent Mound is not quite 4:3 in its outer ring because it's based on sacred geometry and is quite complex.

Another anomaly in the Miamisburg formation is in the large crescent that surrounds the Vesica 'eye.' The tips do not taper down equally. One tapers down to a point (on right) and

that tip is only three feet at its widest. The other crescent tip on the left is six feet where it comes to point.



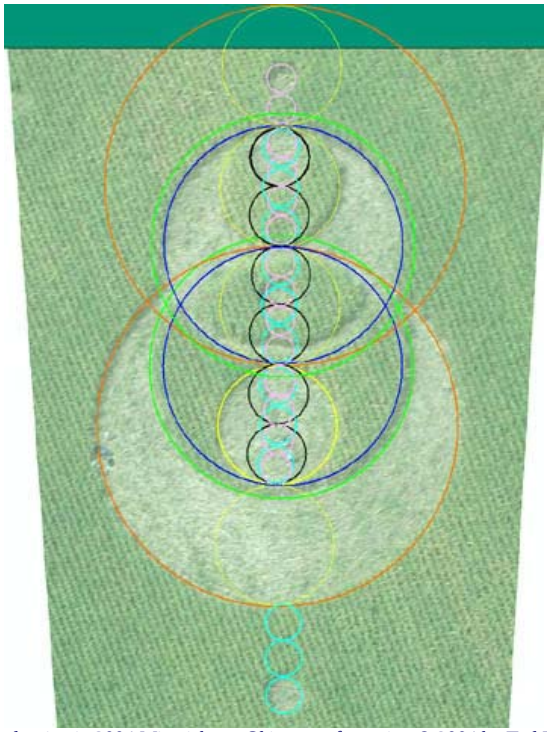
The tips of the crescent surrounding the Vesica "eye" do not taper down equally.
One tapers down to a point (on right) and that tip is only three feet at its widest. The other crescent tip on the left is six feet where it comes to point. Analysis © 2004 by Ted Robertson.

ON PURPOSE?

It's hard to think it's a mistake.

WHAT COULD IT MEAN?

It's like we've got two circles going on to create that circle where it tapers down. It's almost like it might be following one circle and not the other. It's one of my blue circles and then one of my green circles. It's like it follows both the 2:3 and 4:3 ratios. When you are in there, you almost miss that opening because it is so narrow.



Color coded ratios in 2004 Miamisburg, Ohio, corn formation © 2004 by Ted Robertson.

Ted Robertson text: "The Miamisburg 2004 formation: the isolated PINK circle at the very top of the diagram and the isolated LIGHT BLUE circle at the bottom have a size ratio of 3:4. Likewise the ratios of the second largest circle in GREEN to the largest circle in RED also have a ratio of 3:4. Thus, the largest and smallest elements of the design are of identical proportion being 3:4 ratios.

> The series 1-2-3-4 can be found in the various circles sizes found in the formation that neatly fit inside the YELLOW circles. For example, the YELLOW circle contains two BLACK circles (ratio 2:1), three LIGHT BLUE circles (ratio 3:1) and four of the PINK circles (ratio 4:1). Three YELLOW circles fit inside the red circle which gives a 3:1 ratio.
>
> The underlying framework for this crop circle is based on a Yin Yang diameter fractal of 1:2 proportions with an additional 2:3 sequences added. The 2:3 sequences create the largest circle outlined in RED and also the LIGHT BLUE satellite circle and its twin located in the center of the Vesica Pisces (also marked in LIGHT BLUE).
> The large crescent area between the RED and GREEN circles is approximately the same shape as found in the Serpent Mound formation of 2003."

THIS SUBTLETY SEEMS PURPOSEFUL AND THAT LEADS TO THE QUESTION: WHAT KIND OF MATHEMATICAL LANGUAGE ARE WE DEALING WITH FROM FORMATION TO FORMATION, YEAR TO YEAR?

In the United States, it seems to be getting more complex as far as I can tell. I always welcome surprises and evolution in the designs. It keeps it interesting. Serpent Mound was a big step for the U. S.

Clockwise Flow and Single Standing Stalks

There is another interesting thing about the Serpent Mound and Miamisburg comparison that is almost the same. It's so subtle that it's easy to miss. I wrote this down on paper:

> 'As I found in the Serpent Mound, everything flowed clockwise. So, if you have a figure 8, where the two circles meet at their junction in the center of the figure 8 the top of one will be flowing in the opposite direction of the bottom of the other because both circles are flowing clockwise in the path almost like a 2-lane highway where they meet.
>
> Now in Serpent Mound, this tapered down to a SINGLE plant stalk around the lower perimeter where it was next to the other circle. To me, if this were made by people, they would have to hand-bend maybe 150 plants along the diameter of the circle to create that effect. It was so subtle because the leaves were in the way that I did not recognize this until essentially the plants had defoliated like soybeans do about a month later. Even then, it was so subtle up close, you could barely recognize it.'

I saw the same thing in corn in Miamisburg and that's located underneath the Vesica. It was a single series of plants like a line of plants end to end where the Vesica tapers down beautifully to a single corn stalk series, one after the other, and winds back up.

GOING THE OPPOSITE DIRECTION.

Right. Well, they are facing the opposite direction, but they are both going clockwise. Everything in this formation just like Serpent Mound is clockwise.

The amazing thing, too, was there was a single stalk in the center of each of the five circles standing. Just isolated. Everything else goes around it unharmed.

WHAT DO YOU THINK IT IS ADDING UP TO, THE LINK BETWEEN SERPENT MOUND 2003 AND MIAMISBURG MOUND 2004?

I think each crop circle seems to build on knowledge of the next one. I think to me it's a big jigsaw puzzle. It's got a lot of pieces and you try to figure out an underlaying framework, to understand the intent of whatever made it. I tend to underestimate the complexity of the designs. And I'm pleasantly surprised with Serpent Mound and Miamisburg.

That's why when Bert first put out his diagram, I thought it could not be. But in the end, I think we were both right. It's slightly I almost think the Miamisburg design was meant to be tricky, almost like playing a little game on us. I think we are at the point where we have Airplanes, we can take aerial photos, we have computers to do drawings. If we did not have those things, it would be much more difficult to put the effort into deciphering the geometry.

Mathematical Language?

Credits

IT IS THE GEOMETRY THAT I HAVE FELT FOR A LONG TIME AS A REPORTER THAT IS A LANGUAGE AND WE HUMANS HAVE FAILED SO FAR TO UNDERSTAND THAT LANGUAGE THAT REPEATS FROM YEAR-TO-YEAR IN SOME OF THE PATTERNS AND SEEMS TO LINK SOME PATTERNS THAT ARE 10 OR 12 YEARS APART TO CURRENT ONES. IN THIS CASE, 2003 TO 2004. WHAT IS IT ABOUT THE CONNECTION BETWEEN THE SERPENT MOUND AND THE MIAMISBURG MOUND IN OHIO THAT MIGHT BE IMPORTANT TO OUR PRESENT DAY IN WHATEVER IS THE SIGNIFICANCE OF CROP FORMATIONS?

I definitely think that whatever they symbolize, it's showing there is an awareness an awareness of previous formations, an awareness of the mounds, an awareness of this Miamisburg field that is surrounded by urban development and possibly the awareness of the high school the second one that was decided to be built there about the time the Miamisburg formation happened.

A lot of people we asked how they felt in there? And they said there was a high amount of energy in the Miamisburg crop circle. They felt excited when they are in there I have to say like they are on caffeine. A lot of people felt watched and restless. It's not a very relaxing place. But I have to say that the feeling changes and so do a lot of the odd effects. They are there one night and not there the next night. They seem to come and go.

I sense a playfulness. In a way, it's a playfulness that we don't have a definite answer and it keeps us a little bit more lighter spirited. To me, that's how I feel when I look at this.

DO YOU AGREE THAT WE ARE DEALING WITH SOME KIND OF LANGUAGE IN MATH?

I think that's definitely true. It's hard to keep all the details straight and all the coincidences of the ratios. Especially with Serpent Mound, it seems to be pointing out that there is something about Sacred Geometry that holds hidden truths. And strangely, you don't feel alone in those formations."

Websites:

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http://www.cccrn.ca/

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