Transcript of the audio from the video "Sonic Geometry - The Language of Frequency and Form"
https://www.youtube.com/watch?v=FY74AFQ12qQ
It has been said that if there is ever to be such a thing as a true universal language it will most likely be expressed in the realms of mathematics, geometry, energy patterns, and frequency. Could it be that this language, or at least the foundation of it, already exists here on earth? Is it possible that over the course of thousands of years we have been somehow guided in the process of creating this new form of communication and if so, what type of information will be conveyed through it that could not be expressed any other way? In the search for answers we must be prepared to trek through both time and space to open our eyes and minds wide enough to notice compelling coincidences and to stand back far enough to see if the building blocks of some kind of mathematical, spatial, frequency based language emerge.

But before we begin our journey we will pause here in the present day to notice some of the ways that we measure and tabulate the world around us. This is an important step, for how we count to measure things can be as revealing as why we count them. First, we will take a look at the way we measure time. For all practical purposes the smallest unit is one second and we all know it takes 60 seconds to make a minute and then 60 of these minutes to make an hour. This hour of course is the unit by which we divide our days and these days become months, years, decades, centuries and so on. Speaking of 60 let's take a moment to notice that all geometry, whether it is two or three dimensional, is also derived from base 60 mathematics that provide the foundation for a 360degree circle which in turn provides us with all the angles and formulas for creating virtually every shape known to humankind.

Now let's look at how many cultures from all over the world have chosen to count and group things. Right away we see that we have been
attracted to the number 12.12 eggs in a dozen. 12 months and a year. 12 inches in a foot. 12 signs of the zodiac. Strangely whether it's tallying disciples or mythical God's the number 12 appears often in the telling of our greatest stories about ourselves. And what about distance? Your local town might be measured in meters or other units but when we talk about measuring our planet the standards we all use revert back to base 60 units of miles, minutes or geometrical degrees. Are you noticing the pattern here? We seem to be encountering a lot of 12 s and 60 s. Are they related and if so how?

To answer that piece of the puzzle we must travel roughly 5,000 years back in time to visit the ancient Sumerian culture of Mesopotamia for here is where our $12 / 60$ based math comes from. This counting system, which was invented by the same people who produced the world's first written language, involved counting the knuckles of the four long fingers on one hand and then multiplying them by all five digits on the other hand. If you do this you will get a maximum number of twelve knuckles times five fingers which of course total 60 . How these cosmic jumps in language and mathematics occurred so suddenly is open to debate but it is interesting to note that the ancient Sumerians themselves wrote about being given this information by sky-god visitors they called the Anunnaki. Who and what the Anunnaki were is a hotly contested subject but one thing that cannot be denied is the fact that over 5,000 years ago a mathematical system was born that incredibly still serves us today. So now that we have our various units of measurement, all based on the Sumerian 12/60 counting system, let's jump forward to a few pivotal moments in history and see what other numbers patterns and synchronicities appear.

In the sixth century BC on the Greek island of Samos the famed mathematician Pythagoras led a school of thought that married philosophy, mathematics, music and of course geometry. And while Pythagoras did not discover advanced geometry he did apply it in new ways, especially to music. For instance, he noticed that when a taut string was plucked it would create a tone and when that string was
divided in half it would make the same tone only twice as high in pitch. Pythagoras then came up with numerical ratios based on harmonic fifths and this led to the creation of the musical scale found at the root of most modern music. It is important to note that according to Pythagoras all musical notes were found by using mathematics and as such were given number values according to their placement in a kind of master grid. For instance, by using fifths beginning from note number one he was eventually guided to note 27 . And to find the same note twice as high in pitch he simply kept doubling it to $54,108,216,432$ and so on up the scale.

If you've ever heard of Pythagorean tuning you know that the number 432 is quite important. To Pythagoras himself it probably wouldn't have stood out more than any other in his numerical grid but in our quest to find a universal language based on mathematics and frequency this particular note represents a significant piece of coincidental evidence. You see many ancient musical instruments from Tibetan bowls to Native American flutes happen to produce the same tone, a tone that vibrates at 432 cycles per second. That's compelling but even more intriguing is the fact that Pythagoras was not calculating vibration cycles to find tone 432 it just happens to be the same number. What's more, for decades most modern musical instruments were also tuned to this same fourth octave A with a value of 432 cycles. How could this be? Who chose this particular note as the key stone for an instrument tuning and more importantly why?

Here is where a deeper mystery begins to emerge and to explore it we will need to go back to the Pythagoras' other passion, geometry. It is not an exaggeration to say that to Pythagoras and his disciple's geometry and math held a key to the nature of all life everywhere and maybe it does. Let's look at (position 6:20 of the video) the first four geometric shapes the circle, triangle square and pentagon. In each of them are angles of degrees that when added together always total a specific number relative to that particular shape. For instance, if we take a triangle the sum total of all three interior angles are always 180 . For both
the square and circle it is 360 . For a pentagon, it is 540 . Now at this moment let's step back and look at these numbers in a different way as there seems to be something about them that reaches beyond a simple sum of angles. Did you notice that they happen to be in the same numerical neighborhood as tone 432? What's more they all add up to 9 just like 432.


As an experiment let's take a look at the numbers found in basic geometric shapes then apply those numbers as vibration cycles to hear the tones they produce. First, let's listen (position 7:13 of the video) to what the hundred and eighty total degrees contained in a triangle sound like. And here's a square's and circle's 360 in cycles per second. A perfect octave up from the triangle. What about the Pentagon at 540? That sounds like a harmonic fifth of the other two. That's interesting. What are these tones? They are F sharp and its perfect harmonic fifth of C sharp. Let's keep going. What does a hexagon 720 sound like? Another F sharp. Here's a seven-sided heptagon which totals 900 . This is an A sharp which happens to be the note required to complete an F sharp major chord in perfect three-part harmony. And finally, the octagon
where we get 1080 - another C sharp. Suddenly geometry is expressed by tones and these tones just happen to create the most beautiful form of music - a perfect three-part major chord in the key of F sharp.

Is this something we've been missing for years? Is it important? To the famous philosopher and mathematician Plato the answer would have been a resounding yes. For it is Plato who advanced the study of twodimensional geometry into three-dimensional geometry and who began to recognize that nature whether expressed as a tone, the pedal design of a flower, or the spiraling design of a seashell seemed to follow a 3d mathematical pattern. In fact, it became an obsession of Plato to try and find the simplest three-dimensional geometric shapes and his quest ultimately revealed what we now call the Platonic solids. In essence, these forms represent the most elemental construction blocks found both in human made and natural forms.


So, let's see if and how they fit into our geometry tone grid. First there is the tetrahedron (position 9:39 in the video) or a three-sided pyramid comprised of four interlocking triangles. As we did before let's add up all the angles found in those four triangles. The answer 720 which we have already seen is the tone F sharp. Next, we have the cube whose six 360 degrees squares totals 2160 . What does it sound like? 2160 is a high C sharp and as you will see later a very interesting number for other reasons as well. Next up is the octahedron constructed of eight triangles. This shape totals 1440 which is another perfect $F$ sharp higher up the scale. The Icosahedron is made up of twenty triangles so the total number of degrees is 3600 . As a tone, 3,600 vibration cycles create the A sharp needed to complete yet another F sharp major chord. That sounds like this.

At this point we have seen how two and three-dimensional geometry can be expressed by the notes found in an F sharp major chord. Could this also be true with what is known as sacred geometry? To find out we will first need to build a design called the germ of life (position 11:16 on the video) which when repeated goes on to reveal the seed of life then Flower of Life pattern found at sacred sites all over the world. First, we start with a circle at 360 degrees which is the familiar F sharp. We then add our second circle bringing the total to 720 - another F sharp. Three circles total 1080 which provides the harmonic fifth of C sharp. Four circles are 1440 - another F sharp. Five circles total 1800 or the A sharp needed to once again provide the harmonic third of an F sharp major chord. And finally, the sixth circle which brings the total to 2160 another C sharp. Amazing, it's as if we can now both see and hear the Flower of Life pattern that is intrigued humankind for thousands of years.

So now we have two-dimensional geometry, three-dimensional geometry and even sacred geometry being represented by different variations of an F sharp major chord. How is this not common knowledge? How have we missed this connection? There are actually three explanations. One, for reasons ranging from the mundane to the conspiratorial, musical instruments are no longer tuned to an A vibrating at 432 cycles per second but rather 440 . Two, modern tuning calls for equal temperament which no longer adheres to Pythagoras whole numbers simplicity. And three, the tuning method required to reveal geometric shapes is based on a mathematical grid rather than mathematical ratios. This grid, if it had a name, would probably be called something like factor 9 because the number 9 is found not only in the sum of every note on the grid but also as the number required to move up or down the scale. For instance, if we started at note A at 216 cycles (position 13:13 of the video) all we would have to do is add or subtract the number 9 to reveal all the other tones in that octave. And it is here on this incredible factor 9 grid that we find not just some of our
geometric numbers but all of them. Conversely modern A 440 tuning reveals not one correlation to geometric numbers.

|  | "Factor 9" | Grid Built on 432 |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| C | 126 | 252 | 304 | 1008 | 2016 |
| C\# | 135 | 270 | 540 | 1080 | 2160 |
| D | 144 | 288 | 576 | 1152 | 2304 |
| D\# | 153 | 306 | 612 | 1224 | 2448 |
| E | 162 | 324 | 643 | 1296 | 2592 |
| F | 171 | 342 | 684 | 1368 | 2736 |
| F\# | 180 | 360 | 720 | 1440 | 2880 |
| G | 189 | 378 | 756 | 1512 | 3024 |
| G\# | 198 | 396 | 792 | 1584 | 3168 |
| Ab | 207 | 414 | 828 | 1656 | 3312 |
| A | 216 | 432 | 864 | 1728 | 3456 |
| A\# | 225 | 450 | 900 | 1800 | 3600 |

Now let's go back for a moment and take a look at one of these numbers 2160, the number expressed by both the cube and the germ of life Pattern. You may have already noticed that without the zero it is exactly half of our magic 432. That's worth noting but what is even more intriguing is the way this number keeps showing up in other large-scale measurements. To discover one of these measurements we will need to jump forward from Plato's time to when the Mayan civilization was Flourishing. Roughly 1500 years ago, Mayan stargazers were the most accomplished astronomers the world had ever known. Their concept of cyclical time led to many incredible discoveries; the accurate length of the year, the exact dates of seasonal changes, even the moments when solar and lunar eclipses would occur. But their most amazing discovery was of something known as the precession of the equinoxes which makes note of a very slow wobble of Earth's axis. Somehow aware of the fact that this wobble takes 25,920 years to complete, the Mayans
called this cycle one great year with each of its 12 great months requiring 2160 earth years to complete. And what about this. Did you know that the diameter of our Moon when measured in miles also happens to total you guessed it 2160? Lastly watch what happens when we apply simple division to this highly synchronous number. 2160 divided by two is 1080, the angle some of the octagon. By three 720, the total of the hexagon. By four 540, the pentagon. By five, are you ready, it's the key tone of 432 . And by six 360, the number of both the square and circle. All F sharps and C sharps with our 432 A thrown into the mix as if it were some kind of clue to solving a cosmic riddle.

Maybe we should look at this number even more closely. As we've stated our closest celestial neighbor the moon is 2160 miles across and 216 is exactly half of 432 . What about the other large object in our sky? Were you aware that our Sun is 864,000 miles across? Incredibly, where the moon's base number sequence is half of 432 the sun's number sequence is exactly twice 432. And do you know how many seconds there are in a day? 86,400 or 43,200 for the 12 hours of day and 43,200 for the 12 hours of night. Or try this. Take the 360 degrees found in the circular shape of our sun and moon and then multiply it by the 12 hours of either day or night. The answer 4320. Or how about this? What is the only whole number that when squared comes to within 0.01 percent accuracy to measuring the speed of light -432 .

What is going on here? We have all these different things; earth cycles, time and celestial measurements, geometry, sonic frequency yet they are all represented by the same numbers over and over again. To answer that we must search for the factor common to all of them and that common factor is the five thousand-year-old Sumerian 12/60 counting system. It is what gave us the inches to a foot, the seconds to a minute, and the 360 degrees in geometry. It's almost as if the sky-god visitors who the Sumerians called the Anunnaki provided humanity with a counting system that would lead to the discovery of these synchronicities. Could it be that the number 432 really is some kind of cosmic key that unlocks
a language of higher understanding? And if so, have these sky visitors ever been back to make sure we don't miss the importance of the 432 matrix?

One possible answer can be found in the story of a man named George Van Tassel, a respected aeronautical engineer who believed he was contacted by extraterrestrial beings in the early 1950s. During this encounter Van Tassel said he was provided with a mathematical formula that could be used for everything from time travel to sound frequency healing and which he used to build the world-famous Integratron near Joshua Tree California. What is this formula? It is F equals 1 over $\mathrm{T}(\mathrm{F}=1 / \mathrm{T})$ or frequency equals 1 particular something divided by the number of time. Well what if that one something was the biggest one on our planet? The one great year of 25,920 discovered by the Mayans? And what if the number for time was the most logical choice of 60 ? Suddenly this mysterious equation is expressed as frequency equals 25,920 divided by 60 . Are you ready for the answer - ? it's 432 . Not only the frequency that instruments all of the world have been tuned to for thousands of years but also the number that reveals the synchronistic nature of life on this planet.

Noticing all these coincidences revealed by the 432 matrix and the Sumerian counting system we must wonder if other ancient cultures were aware of them as well? Just scratching the surface, it would seem that they were. For example, let's take the Sumerian 12 and square it for a total of 144 . Right off we see that it is indeed a number and tone contained within our factor 9 grid. Expanding outward we find 1440 then 144,000 which is a number that appears all over the world in the most compelling of ways. Take for instance the Great Pyramid of Giza. It happens to have been covered with a 144,000 smooth white casing stones. To ancient Mayans 144,000 days was the length of their 394 year Baktun, a time cycle which has just begun again. In the Bible, we read that there will be 144,000 chosen ones redeemed from the earth prior to the apocalypse.

Obviously, number sequences like these have been significant to many different cultures and religious sects and to one enigmatic group in particular - the Freemasons. Were the earliest Masons, the supposed keepers of sacred information, also aware of the factor 9 grid, the 432 key, and the number 144,000 ? Their infatuation with the numbers 3 and 13 might be telling. For instance, if you divide 144,000 by 432 the answer is 333.33333 into infinity.

Or take a look at the back of a dollar bill. That famous unfinished pyramid could be revealing some interesting clues. For instance, there are 13 steps climbing the pyramid and 13 times 33.3 is 432.9 . Even the shape of the flat-topped pyramid appears to be made as if someone had drawn four dots in a line then three above it then two above that and then connected those dots to reveal this iconic shape. And of course, let's not forget that the square root of our all-important factor 9 grid is three threes.

Who else knew about 432? The answer is surprising. In India, large cycles of time are called Kali Yugas' and each one is 432,000 years long. In fact, the number 432 appears so often in sacred structures and myths from Stonehenge to the pyramids that author Joseph Campbell could not help but see it as the most important mythological number in history.

So, what do we have here? What is it that's trying to be expressed by all of these coincidences? One answer is that over the course of history we have been somehow guided toward both the subconscious creation and eventual conscious recognition of a grand pattern based on frequency, mathematics, time, space and geometry. Quite possibly these synchronistic numbers shapes and tones represent the building blocks of a language that we do not yet fully understand but could turn out to be the most important language we will ever learn. How will we use it? Who will we be conversing with? Time will tell. Thousands of years ago from locations all over the globe various prophets, shamans and seers described an era when humanity would make some kind of cosmic leap into a next level of consciousness. Here at the dawning of the Age of

Aquarius and the start of a new Mayan Baktun cycle, maybe it's happening.

