

# Stonehenge: A Universe in Stone

## Part Two: A Sonic Pattern of the Universe

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In part one we saw how the production of sound might have been a key component in the design of Stonehenge. We saw also how its layout appears to reflect the use of a unit of measure equaling 9 imperial feet (2.74 meters), while various of its individual components conform to a decagonal geometry based upon both the regular dodecahedron and the small stellated dodecahedron. If these surmises are correct, then how might Stonehenge's underlying geometry relate to the monument's potential role as a sonic temple?

Answering this question requires us to explore the ancient Greek belief that the universe possesses a dodecahedral structure. Moreover, that the universe emits a primordial sound that, although inaudible to the human ear, can be reproduced using musical harmonies.

**Key words:** Pythagoras, Plato, dodecahedron, Philolaus, *harmonia*, *musica universalis*, Poincaré Dodecahedral Space, cosmic microwave background, big bang,

### Plato and the Pythagoreans

Idea that the universe bears a dodecahedral shape was proposed by the philosopher Plato (428/427-348 BCE. See fig. 1) in his influential work the *Timaeus*, written circa 360 BCE. His statement to this effect comes as he explains the metaphysical

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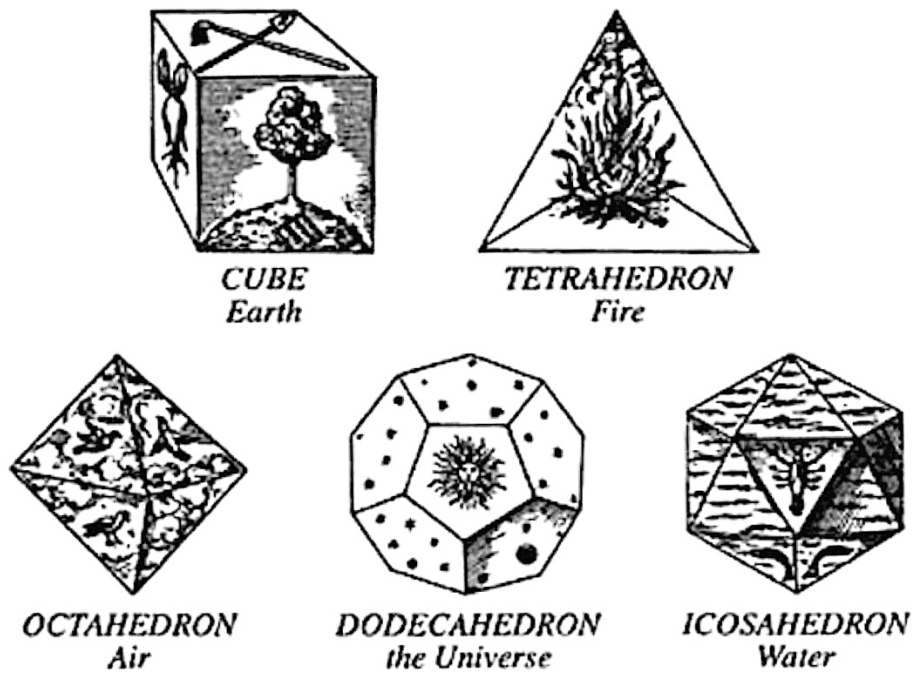
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properties of the five regular polyhedra—the tetrahedron, cube, octahedron, icosahedron, and dodecahedron.



*Fig. 1. Plato (left), holding a copy of the Timaeus, with Aristotle (right). Section of “The School of Athens” by Raffaello Sanzio, 1509. Credit: Wed Gallery of Art/Creative Commons 1.0.*

The first four are each ascribed one of the four elements: fire for the tetrahedron, earth for the cube, and air and water, respectively, for the octahedron and icosahedron.[1] Regarding the fifth, the dodecahedron, Plato tells his reader, “And whereas a fifth figure yet alone remained, God used it [the dodecahedron] for the universe in embellishing it with signs.”[2] (See fig. 2.) With these words Plato is saying that the influence of the 12 signs of the zodiac is decided by the dodecahedral, that is 12-sided, structure of the universe.



*Fig. 2. The five regular polyhedra as defined by Plato. Note the dodecahedron captioned as “the Universe.” Public domain.*

Plato, however, would not appear to have been the first to explore this theme. It almost certainly came from the Pythagorean school or academy. Founded at Croton in Italy in the sixth century BCE by the philosopher and polymath Pythagoras of Samos, its function was to study and disseminate universal knowledge through an understanding of mathematics, geometry, and musical harmonies, all of which were considered interrelated and divine in origin.

One Pythagorean in particular would seem to have heavily influenced the writings of Plato and this was the Presocratic philosopher Philolaus of Croton (born 480 BCE). It was his works that Plato eagerly sought during the construction of the *Timaeus*.<sup>[3]</sup> For Philolaus the dodecahedron was an expression of quintessence, the

“fifth essence” or fifth element of nature, as well as the “aether” that binds together the universe.[4]

That the dodecahedron was considered of extreme importance to the Pythagorean community is known from the curious story of Hippasus of Metapontum. He lived sometime between 530 BCE and 450 BCE and was perhaps a contemporary of Philolaus. Hippasus was expelled from the Pythagorean school, and according to one tradition was drowned whilst on a fishing trip for revealing the hidden properties of the dodecahedron.[5] Clearly, there was something important about the dodecahedron that the Pythagoreans did not want the public to know. Was this to do with the part it played in the construction of the universe?

### **At the Center of It All**

Philolaus (see fig. 3) was a quite remarkable scholar. For instance, he was the first person to propose that the earth was neither static, nor at the center of the cosmos. For him the sun, moon, the five visible planets, along with the fixed stars, an anti-earth and the earth itself, circumnavigated what he called the Central Fire. This was seen as “the hearth of the universe,” “the house of Zeus,” and “the mother of the Gods.” Philolaus considered the Central Fire the primary force behind cosmic creation, placed at the center of the universe by God himself.[6]

As archaic as Philolaus’s ideas on the cosmos might seem today, it is difficult not to compare them with the manner our solar system revolves around Galactic Center. Even though Philolaus can never have known about this grand galactic

merry-go-round that takes many millions of years to complete, he clearly was thinking along these lines with his concept of the Central Fire.



*Fig. 3. Pythagoras on the right with Philolaus, left, seen using musical pipes of various lengths to test their musical tones. From Theorica musicae by Franchino Gaffurio, 1492 (1480?). Public domain.*

Philolaus is also thought to have reworked Pythagoras's well-recorded discovery of musical intervals, even associating them with his own model of the universe.[7] For Philolaus a divine *harmonia* was created by the movement of the celestial bodies around the Central Fire.[8] Plato would afterwards rework these ideas for his own dialogues, and following the European renaissance the concept of the *musica universalis*, the “music of the spheres” or “harmony of the spheres,” was popularized by the likes of German astronomer and mathematician Johannes Kepler (1571-1630) and English astrologer, mathematician, and Rosicrucian Robert Fludd (1574-1637).

Is it possible that Pythagorean notions regarding the dodecahedral structure of the universe and its association with a divine *harmonia* was known to the builders of Stonehenge? More important, do they have any basis in truth? The answer would appear to be yes.

### **Poincaré Dodecahedral Space and the Cosmic Microwave Background**

The idea that the universe might in fact be a dodecahedron was first floated in modern times in a paper by famous French mathematician Henri Poincaré (1854-1912). Published in 1904, it introduced the world to what would afterwards become known as the Poincaré conjecture, which argues for a spherical topology behind the structure of the universe. This raised the question of whether the universe was not infinite and flat, but instead was a closed three-dimensional manifold, which by its nature would need to be imagined as a 12-sided, dodecahedral sphere.[9]

It was an interesting concept, yet one without any substantiating evidence. That was until the early 2000s when the possibility of the universe being what is known today as a Poincaré homology sphere was given a dramatic boost. For it was then that an examination of data received from a space satellite studying what scientists refer to as the cosmic microwave background appeared to confirm Poincaré's predictions.

The cosmic microwave background refers to the afterglow left behind by the enormous plasma cloud created in the first 380,000 years after the big bang. This eventually cooled down and transformed into the atomic matter that fills the universe today. The microwave radiation left behind by the plasma cloud can still be mapped today since it remains out there in the depths of space. This was

successfully achieved between 2001 and 2010 by a NASA spacecraft named the Wilkinson Microwave Anisotropy Probe (WMAP).

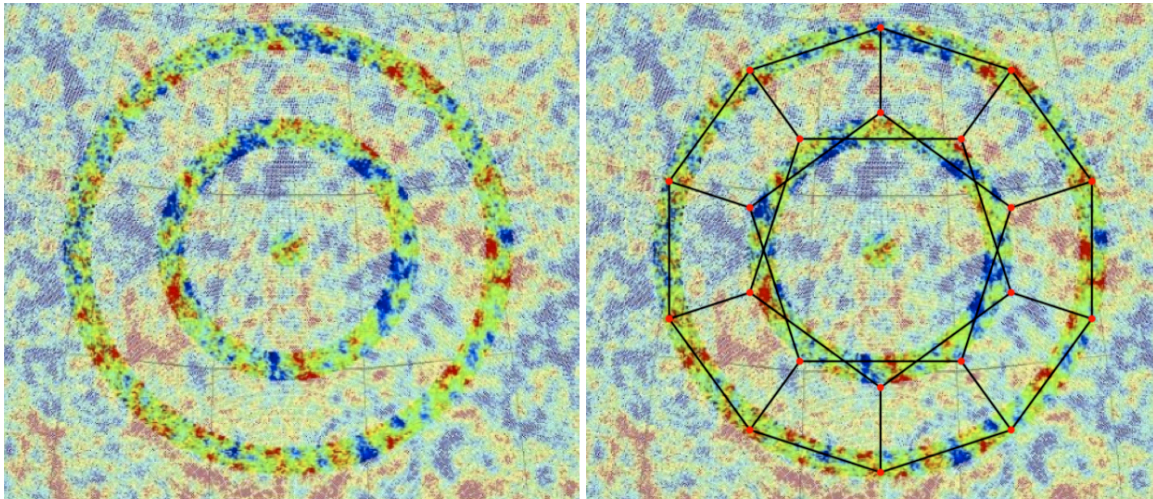
If the universe is isometric in that following the big bang it expanded outwards in every direction at the same rate and speed then the temperature of the cosmic microwave background should be constant in whatever direction you look. This was not, however, what was found. Strange fluctuations in its temperature and density were recorded indicating that the universe does not conform to the standard cosmological model, which predicts that it should be infinite and flat. Instead, it appears to be finite and curved invoking the possibility that it outer limits conform to a spherical typology made up of Poincaré dodecahedral space.[10]

In addition to these findings, strange concentric rings have been noted within the cosmic microwave background. What causes them is unknown although it has been suggested they are gravitational intrusions emanating from beyond the material universe.[11]. The current author has noted that when these concentric rings appear they can reflect an underlying dodecahedral geometry just like that seen at Stonehenge (see figs. 4a & 4b). If this finding is more than simply a happy coincidence, it could provide additional evidence of the universe's dodecahedral topology.

### **The Primordial Sound**

To understand how Stonehenge might have functioned as a sonic temple it is important to understand the sound component thought to have accompanied the coming into being of the physical universe. John G. Cramer, Emeritus Professor of Physics at the University of Washington took the measurement data from the Plank

Space Telescope, which has also been monitoring the cosmic microwave background, and converted the energy frequencies into audio sound; this being available to listen to online.[12]



*Fig. 4a & 4b. Left, one of the strange concentric rings noted in the map of the Cosmic Microwave Background. Right, a two-dimensional view of a dodecahedron overlaid on the same image showing that these unexplained rings can show an underlying dodecahedral structure. Credit: WMAP/Roger Penrose/Vahe Gurzadyan.*

If the recreation of this primordial sound of creation has true scientific merit, then one cannot help but think of Philolaus's concept of a divine *harmonia* as well as the *musica universalis* proposed by Plato and afterwards expounded upon by the likes of Johannes Kepler and Robert Fludd.



## **Detecting the Dormant Sound**

Paul Devereux and Jon Wozencroft of the Landscape & Perception Project, in their paper on the use of bluestones at Stonehenge, make a very interesting statement relevant to this debate, for according in them:

We found sufficient acoustic evidence among the Stonehenge bluestones to indicate that at least some of them would have been ringing rocks in more resonance-conducive circumstances. Even without this evidence, the fact that bluestones at this iconic monument were brought from a soundscape [in the Preseli Hills of West Wales] could by itself have caused the Neolithic architects to have treated them with special veneration. *We might consider this to be a case of “dormant sound.”*[13] (Current author’s emphasis)

As Devereux and Wozencroft point out themselves, the term “dormant sound” was “first coined by cosmologists investigating the [sound] frequencies unleashed by the Big Bang.”[14] In other words, they are comparing the primordial sound of creation thought to have been produced in the wake of the big bang with the proposed sonic output of Stonehenge’s bluestones.

The question then becomes: how might the Grooved Ware People responsible for the construction of Stonehenge’s earliest phases have gained such profound knowledge of the cosmos? Indeed, were they even aware of it?

## **Carved Stone Balls**

What we can say is that the prime movers behind the spread of the Grooved Ware culture into mainland Britain and Ireland would appear to have had an incredibly

advanced mindset. Not only were they responsible for the creation of almost all of the most iconic stone circles in Britain but they also produced carved stone balls that remain one of the greatest enigmas of the Neolithic Age. Each one fits comfortably into the hand and has a series of protruding knobs that vary in number from three to 160 (see fig. 5). Among the different designs are all five of the regular polyhedra including the dodecahedron (see fig. 6).[15]



*Fig. 5. Neolithic stone balls forming part of an exhibition on Neolithic and Bronze Age art and innovation hosted by the British Museum in 2022. Credit: Andrew Collins.*

The role of these tennis ball-sized objects, which are generally made of hard igneous rock, continues to puzzle archaeologists and prehistorians. In the opinion of the present author their most likely function was as points of contact with

otherworldly realms experienced during deep shamanic states. In many ways they replaced stone, clay, or wooden idols used by many Palaeolithic and later Neolithic cultures to connect with deities seen as anthropomorphic in nature. So instead of gods and goddesses, the petrospheres represented more abstract ideas of otherworldly consciousness.



*Fig. 6. Neolithic stone ball with ten equally spaced knobs giving it the likeness of a dodecahedron.*

*Credit: Andrew Collins.*

Visionary experiences accompanying the handling of the carved stone balls might easily have been accompanied by the glimpsing of geometrical forms coupled with sudden downloads of information. This might have included details regarding the structure of the universe and the presence out in the cosmos of a primordial sound of creation.

## Sound Cymatics

Whilst pondering these thoughts I looked online and found that in 2018 my colleague J.J. Ainsworth had suggested a relationship between the creation of sound and the generation of a dodecahedral structure using cymatics.[16] This is the manner that the geometrical structure of sound frequencies can be made manifest using such mediums as iron filings, salt, flour, smoke, and water.

J.J. came to these realizations after turning her attention to the function of the 130-odd fist-sized metal dodecahedrons of Gallo-Roman origin that have been found across northern Europe (see fig. 7). They have hollow interiors with a circular hole at the center of each of their 12 faces from which a series of concentric rings are often seen to radiate. At the 20 corners or vertices of the metal dodecahedrons are small spherical knobs, their purpose unknown.



*Fig. 7. Roman bronze dodecahedron found at Tongeren, Belgium, in 1939. Credit: Gallo-Roman Museum, Tongeren/Creative Commons CC0 1.0.*

No one has suitably been able to explain the function of these dodecahedrons, with theories ranging from them being child's toys to devices used to aid the knitting of gloves. The fact that not one of these dodecahedrons has been found in Rome suggests they did not form part of regular Roman society, and instead must have emerged out of a long-standing tradition adhered to by the indigenous inhabitants of northern Europe.

In all likelihood the Roman dodecahedrons had either the same or a similar function to the carved stone balls produced by the Grooved Ware culture during the Late Neolithic Age. In other words, they were hand-held points of contact enabling the holder to connect with hidden realms where geometrical forms, including we must assume the dodecahedron, held some deep cosmological meaning. Did this include knowledge regarding the structure of the universe?

The concentric lines surrounding the circular holes seen on the dodecahedrons' 12 faces are patently suggestive of sound waves emanating from a central source. I suspect these metal objects belonged to a sub-strata of European society that had adopted some aspects of Pythagorean and Neoplatonic cosmology. If so, then were they in fact representations of the universe in microcosmic form, the holes and concentric lines radiating from their faces signifying the creation of the *musica universalis*?

Interestingly, on the faces of a solid dodecahedron found in 1982 in Geneva, Switzerland, the names of the 12 signs of the zodiac appear.[17] (see fig. 8) Although this has led to this particular example being seen as a device used in astrology, its existence makes us recall Plato's words from the *Timaeus*: "And whereas a fifth

figure yet alone remained, God used it [the dodecahedron] for the universe in embellishing it with [the 12 zodiacal] signs.” As we have seen, such ideas were almost certainly borrowed from pre-existing Pythagorean sources, most likely the works of Philolaus.

How then might we more directly link Philolaus’s concept of a divine *harmonia* with the “dormant sound” that Devereux and Wozencroft link to the bluestones of Stonehenge? Did its builders’ simply ring the stones and hope for the best, or was there a specific harmony they were attempting to achieve?



*Fig. 8. Dodecahedron found in Geneva, Switzerland, with one of the names of the zodiac signs on each of its 12 faces. Public domain.*

### **Wave Frequency**

In an article on the Durrington Shafts and their possible role as sound resonators published in 2020 engineer Rodney Hale and the present author showed how a unit of measure equal to 144 feet could have been employed in the measurements both of Stonehenge and of Durrington Walls, as well as in the geographical relationship between the two monuments.[18] The distance, for instance, from the center of

Stonehenge to the center of Durrington Walls as defined by the placement of the 20 known pits encircling it, is ideally 10,368 imperial feet [3.16 kilometers), which is 72 x 144 feet. The diameter of Durrington Walls itself is ideally 1440 feet (440 meters), which is 10 x 144 feet.

A wavelength equal to a length of 144 feet corresponds to a vibrational frequency of 7.815 Hz, hinting at the fact that the Grooved Ware People responsible for the creation of Durrington Walls and Stonehenge were aware of some hidden property surrounding this measure and perhaps even a connection with sound wavelengths.

Exactly half of 144 feet is 72 feet, a figure that can be applied to many of the measurements in the Stonehenge landscape. For instance, the henge at Stonehenge has a diameter of 360 feet, this being 5 x 72 feet, while that of the Aubrey Holes is 288 feet, which 4 x 72 feet. The distance from the center of Durrington Walls to the center of Stonehenge is, as we have seen, 10,368 feet, which is 144 x 72 feet, while the diameter of Durrington Walls is ideally 1440 feet, which is 20 x 72 feet.

I strongly suspect that a unit of measure equal to 72 imperial feet was important to the builders of Stonehenge. This seems especially so in the knowledge that 72 is 8 x 9, with multiples of both 8 and 9 clearly figuring in the monument's layout and design, and perhaps even within the Altar Stone. When standing its wide face could well have preserved units of measure equaling both 8 feet and 9 feet—see part one of this article. Perhaps not unconnected is the fact that Philolaus saw a 9:8 ratio in music as evidence of his concept of a divine *harmonia*, a conviction

strengthened in the knowledge that a 9:8 musical interval equals one complete tone.[19]

A wavelength of 72 feet reflects a vibrational frequency of 15.63 Hz, very close to the 15.71 Hz resonant frequency determined by Hale in connection with the Durrington Shafts. So did both 7.815 Hz and its first higher harmonic of 15.63 Hz relate in some manner to the dodecahedral shape of the universe as well as the primordial sound of creation?

### **The Mereon Matrix**

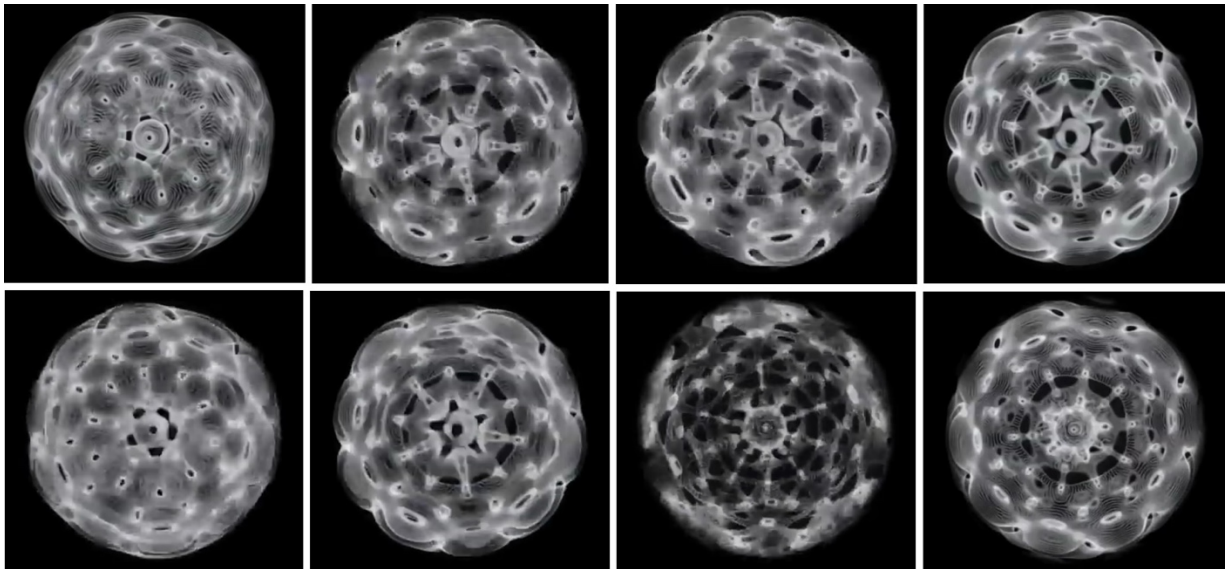
I put the matter to John Stuart Reid, inventor of the CymaScope, a cymatic instrument that enables the visualization of sound frequencies within fluidic mediums. (See the CymaScope webpage <https://cymascope.com/the-mereon-matrix/> for more information on Reid's work). He suggested I investigate what is known as the Mereon Matrix. This is the name given to a complex geostructure formula developed by a team of geometricians building on the works of Plato, Kepler, and American architect, engineer, and futurist R. Buckminster Fuller (1895-1983).[20]

The team were able to calculate the Mereon Matrix's primary frequency as 7.97 Hz.[21] This, of course, is close to the 7.815 Hz suggested by the repeated use of a unit of measure equivalent of 144 feet in connection with the layout of Durrington Walls, Stonehenge, and the relationship between the two monuments. A value of 7.97 Hz is close also to the 10 Hz resonant frequency determined in connection with Stonehenge's layout and design by Dr Rupert Till, Professor of Music in the Department of Music and Drama at the University of Huddersfield.[22]



In 2012 Reid was asked whether he could verify the vibrational frequency of the Mereon Matrix. For this the CymaScope was tuned to 7.97 Hz and when the amplitude was increased geometric patterns started to appear within the medium of water (see fig. 9). These then transitioned into every predicted stage of the Mereon Matrix, something that can be watched online.[23]

Amazingly, when the dial was turned  $1/100^{\text{th}}$  of a hertz either way of 7.97 Hz the geometrical patterns simply vanished. The success of the experiment showed that extremely low frequency vibration can create complex wave patterns, something previously only thought possible using much higher vibrational frequencies.



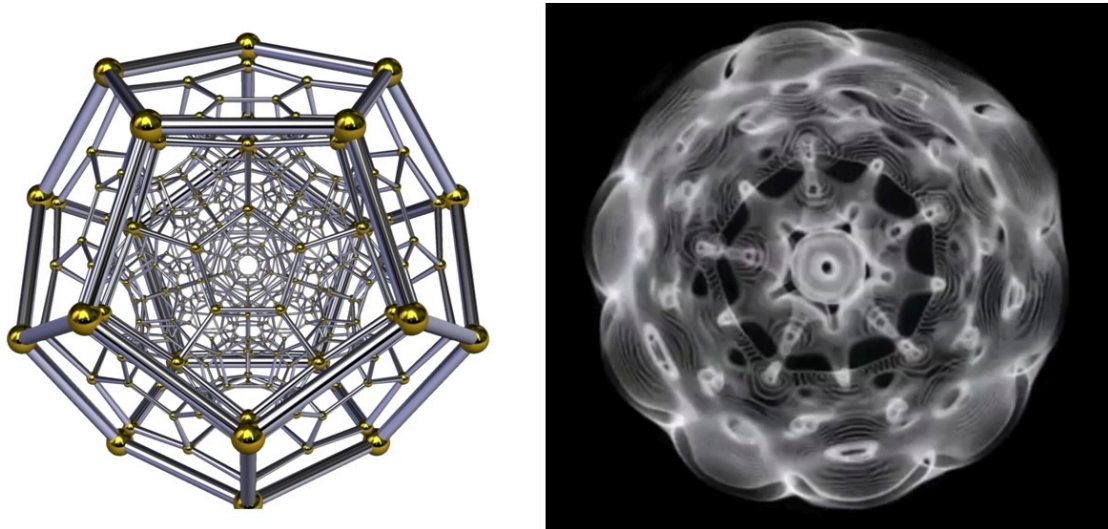
*Fig. 9. Eight stages in the evolution of the Mereon Matrix generated into visible manifestation at the predicted frequency of 7.97 Hz using the CymaScope instrument.*

*Credit: <https://mereon.org/cymascope.com>.*

## Synchronizing with the Primal Cause

The immediate importance of these findings in connection with Stonehenge's role as a sonic temple featuring apparent dodecahedral geometry is that at the core of the Mereon Matrix is an intricate decagonal structure. This includes the dodecahedron's four-dimensional analogue form known as a hyperdodecahedron, inside which are 120 mini dodecahedrons (see fig. 10).[24]

The Mereon Matrix team predicts that 7.97 Hz is the vibrational frequency at the heart of cosmic creation, and, as we shall see, there are reasons to suspect they could be right. Even if this proves to be the case, there can be no way the builders of Stonehenge were aware that the primordial sound of creation resonated at a frequency of 7.97 Hz.



*Fig. 10. Left, hyperdodecahedron containing 120 cells or polyhedral constructs (credit: Robert Webb (<http://www.software3d.com/Stella.php>)/Wiki Commons License) and, right, the Mereon Matrix showing its own very clear dodecahedral structure (Credit: <https://mereon.org/cymascope.com>).*

What they might have understood is that a specific frequency or frequency range was somehow linked with cosmic creation. So how might they have brought this particular sound frequency into manifestation?

As previously mentioned, the main unit of measure that seems to have been used in the construction of Durrington Walls and Stonehenge, as well as in the geographical relationship between the two monuments, is equal to 144 imperial feet, which as a wavelength equals a frequency of 7.815 Hz, very close to the Mereon Matrix's own prime frequency of 7.97 Hz. Did the Grooved Ware People see a distance of 144 feet, and even 72 feet, as representative of this primordial sound of creation? Could this be why they chose to use these particular units of measure in the overall layout and relationship of their monuments?

That the Grooved Ware People might have seen a measurement of 144 feet as significant seems confirmed in the knowledge that the ditch surrounding the Stones of Stenness on the Orkney Isles, arguably one of the oldest stone circles in Britain, has a suspected diameter of 144 feet, and thus a radius of 72 feet.

Although the Stonehenge builders might not have known about the Mereon Matrix, their acknowledgement of the importance of very low frequency sound could indicate the Grooved Ware People's conscious attempt to synchronize their monuments with the primordial sound of creation.

### **The Heart of Creation**

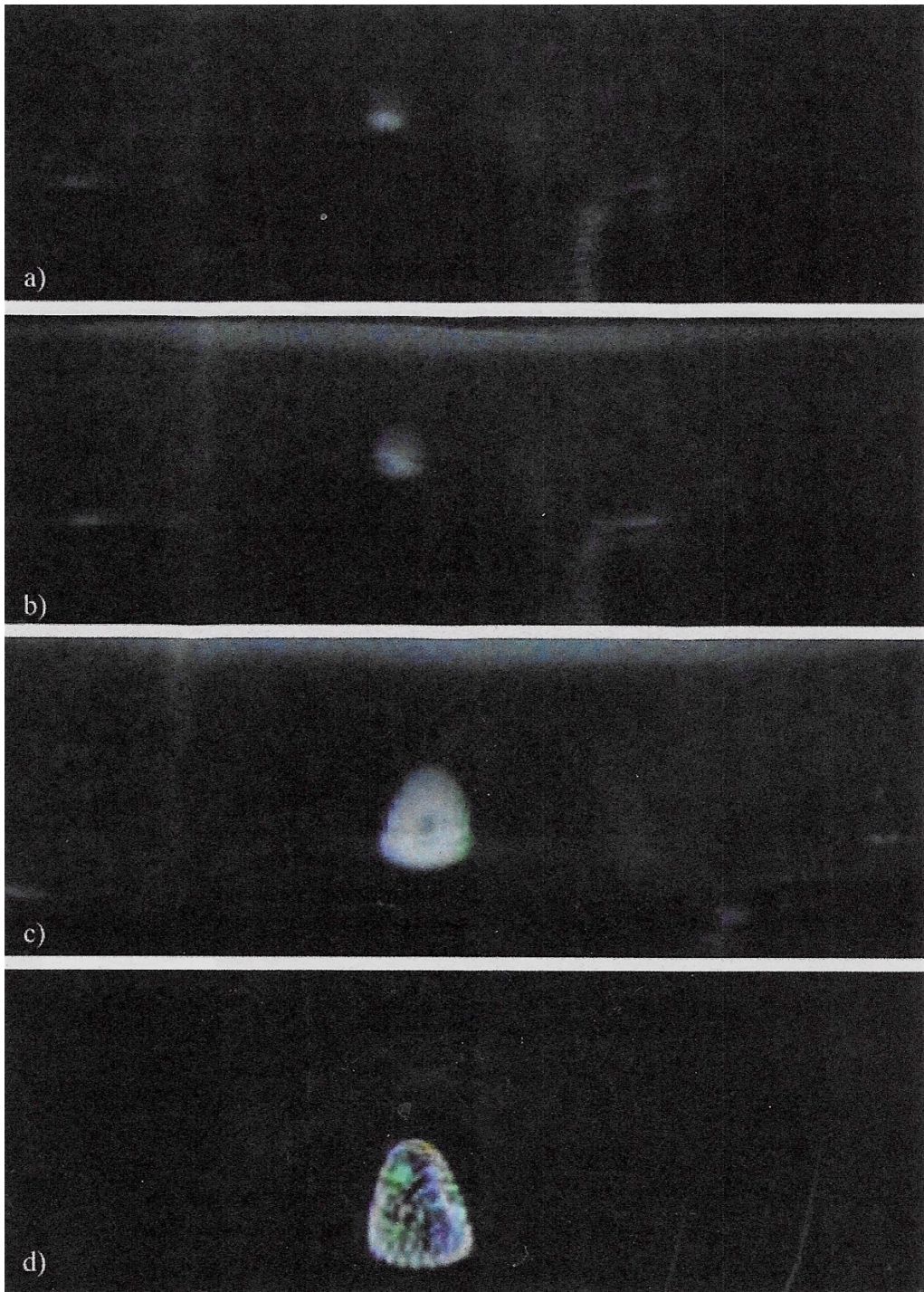
Can a connection really be made between the Mereon Matrix and the theorized big bang that brought forth the universe? The answer could well be yes. When in 2012

John Stuart Reid used the CymaScope to bring into manifestation the Mereon Matrix at its predicted prime frequency of 7.97 Hz a small blue sphere of plasma unexpectedly appeared on the water surface immediately above the center of the geostructure.[25] The team were unable to photograph this phenomenon on the first occasion it occurred. So the experiment was repeated with the camera lens now level with the surface of the water. The resulting photographs of the blue globe can be viewed in the book *The Mereon Matrix*, edited by team members Jytte Brender McNair, Lynnclaire Dennis, and Louis Kauffman.[26] (See also fig. 11.)

What this exercise appears to demonstrate is that the Mereon Matrix's prime frequency reveals not only its holographic geometrical form as a dodecahedral pattern, but also that it can trigger the manifestation of tiny globes of plasma. This is basically the same plasma produced during the first 380,000 years after the big bang, which eventually transformed into the atomic matter that fills the universe today.

## **Conclusions**

In conclusion it would seem that as a representation of the universe in its dodecahedral form Stonehenge was designed to reproduce the primordial sound of creation. This was achieved through the use of advanced acoustics and specific units of measure (equal to 4.5 feet, 9 feet, 72 feet, 144 feet, 360 feet, etc.), along with the employment of whole number ratios (most obviously fivefold and tenfold) in the division of individual features.



*Fig. 11. Four images showing the tiny blue globe that appeared above the surface of the water as the CymaScope was used to bring the Mereon Matrix into manifestation at the predicted vibrational frequency of 7.97 Hz. Credit: <https://mereon.org>.*

In addition to this, the monument's perfect synchronization with the movements of the sun and moon across long-term time cycles, including the 18.61-year lunar standstill cycle, the 19-year Metonic cycle, and the longer triple Saros eclipse cycle of 54 years and triple standstill cycle of 56 years, aligned it with the perceived mechanisms of cosmic time. This appears to have been compounded by the carefully chosen number of stones forming its various individual components. These each reflected different cycles of time.

To the shamanic priesthood responsible for the functioning of Stonehenge the Altar Stone, located at or near the center of the Station Stone Rectangle, was arguably seen as an embodiment of the controlling force behind this creative process. It was probably for this reason that this six-tonne stone slab was so important to the Grooved Ware builders of Stonehenge, and why perhaps it was brought there from the Orkney Isles of Scotland as much as 5000 years ago.

In ancient societies the driving mechanism behind the turning of the heavens was often considered to be a sentient force responsible for the creation of the sky itself. Bearing in mind the Grooved Ware culture's likely Mesolithic origin among the Uralic-speaking peoples of northern Europe one possible identity of this sky deity is the proto-Finno-Ugric creator god Ilmarinen (from the root *Ilmar*, "sky" or "air," and *Ilmari*, "sky-being"). In Finnish mythology he is the shaman-blacksmith and inventor who crafts the dome of the sky and forges the *Sampo*, the world pillar that supports the heavens. If, as I suspect, Stonehenge's Altar Stone was considered anthropomorphic in nature then it could easily have been seen as an embodiment of this cosmic deity.

For the Pythagoreans the universe possessed a dodecahedral form, the existence of which determined how the 12 signs of the zodiac were able to influence the world. It is possible that similar notions were understood by the Grooved Ware culture, and, if correct, why they chose to construct Stonehenge with an underlying dodecahedral geometry seen perhaps as three-dimensional in nature. Indeed, proposals suggesting that Stonehenge could have possessed a domed roof offer some support regarding this possibility.[27] With the Altar Stone standing in the middle of the Station Stone Rectangle, corresponding to the very center of the monument's geodesic form, was it imagined as an expression of the dodecahedron's actual consciousness, helping to effect the manner the celestial bodies influenced the cyclic rise and fall of life on earth?

By synchronizing themselves with the cosmic mechanisms behind cyclic time the Grooved Ware People, or indeed their ancestors, would seem to have become aware of the presence just beyond normal perception of a primordial sound seen as at the core of cosmic creation. Although inaudible to the human ear, we know that the Pythagoreans sought to recreate this sound using a deep understanding of mathematical principles, sacred geometry, and divine harmonies. It is therefore possible that the Grooved Ware People sought to do the same through the construction of monuments like Stonehenge.

The sound produced both at Stonehenge and at other sites in the local landscape appears to have included infrasound. This would seem to have been at frequencies very close to the Merein Matrix's prime frequency of 7.97 Hz, which its discoverers firmly consider to be at the heart of creation. This is so close to the

7.815 Hz determined from a wavelength of 144 feet, found in measurements at Stonehenge, Woodhenge and Durrington Walls, that it surely hints at the manner the Grooved Ware people were aware that very exact distances were important in the recreation of the primordial sound.

When earth mysteries writer John Michell, writing in *The View Over Atlantis* in 1969, proposed that the sounds made at Woodhenge in its role as a giant Aeolian harp constituted a “sonic pattern of the universe,” familiar to the megalithic builders of Britain, I believe he was correct. This divine tone was surely also the “dormant sound” that Paul Devereux and Jon Wozencroft have alluded to in connection with their own findings regarding the true function of Stonehenge’s bluestones, and the function in general of bluestones in their role as “singing stones” and rock bells. Somehow these melodious sounds, along with their corresponding presence at normally inaudible frequencies, were, I am now convinced, considered by various ancient societies from the Neolithic Age onwards to be at the root of cosmic creation, something today being confirmed by modern-day science. This then, in the opinion of the present author, and from the evidence provided, becomes the most parsimonious solution behind the original construction of Stonehenge.

### **A Temple of the Winds**

We end this article with an anecdotal story, which will be followed by a few lines from English novelist and poet Thomas Hardy’s classic novel *Tess of the d’Urbervilles: A Perfect Woman*.

Ani Williams is a musician, ancient mysteries writer, and sound therapist. At sunset on the summer solstice in 1992 she took a large harp into the center of the



circle at Stonehenge to allow the wind to turn it into an Aeolian harp. Then in 2012 she took a smaller harp into Stonehenge and simply walked around the monument allowing the strings of the instrument to produce a graceful tone that rose and fell in accordance with her movement and the wind passing through the stones.[28] As Ani's group exited the site a security guard stopped her and asked what that incredible sound was she was making with the harp. So, she told him. He responded by revealing that at night the guards sometimes hear the same eerie sound coming from the stones.

Others have heard similar sounds at Stonehenge. Earth mysteries researcher and master dowser Maria Wheatley says she has heard it just once, at the height of a thunderstorm. She informs me, however, that security guards she has spoken to there say they too have heard this same strange sound, although only in the stillness of the night when there is no traffic on the nearby A303 trunk road.

As we saw in part one, Thomas Hardy reported hearing a deep hum coming from the stones at Stonehenge, somewhere he visited on many occasions during his lifetime (see fig. 12). Thus it seems that, even in its ruinous state, Stonehenge can still, on occasions, function as a sonic temple, a veritable sound machine, re-imagining perhaps the primordial sound of creation produced at the time of the big bang and still traceable today through the eternal presence of the cosmic microwave background.

*All around [Stonehenge] was open loneliness and black solitude, over which a stiff breeze blew ...*

*"What monstrous place is this?" said Angel.*

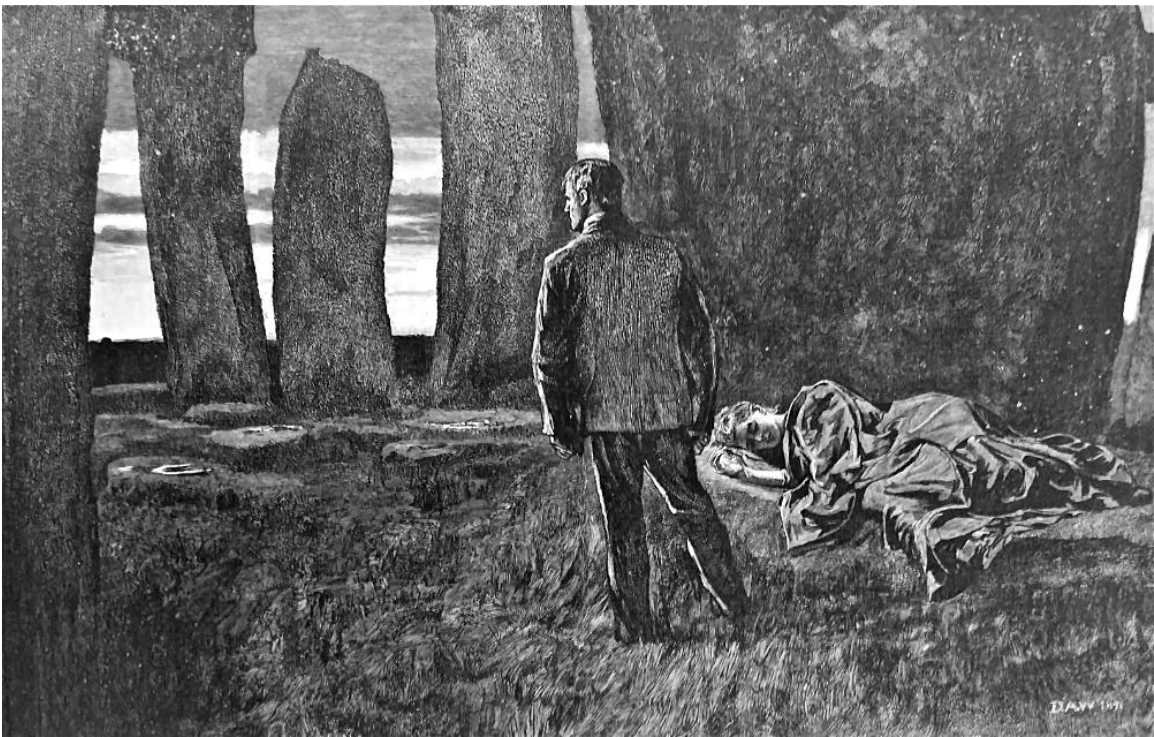
*"It hums," said she. "Harken!"*

*He listened. The wind, playing upon the edifice, produced a booming tune, like the note of some gigantic one-stringed harp ...*

*"What can it be?" [she asked]*

*"A very Temple of the Winds," he said.*

Thomas Hardy, *Tess of the d'Urbervilles: A Perfect Woman*, ch. LVIII.



*Fig. 12. Illustration from 1891 showing a scene set at Stonehenge from Thomas Hardy's novel Tess of the d'Urbervilles: A Perfect Woman by D. A. Wehrschildt. It was published in The Graphic magazine as part of a weekly adaption of the story on December 26, 1891 (page 759, plate 24).*

## **Acknowledgements**

My thanks go out to Simon Banton, Debbie Cartwright, Yvan Cartwright, Richard Ward, Nick Davies, Renée Goulet, Nick Burton, Rodney Hale, Catherine Hale, Hugh Newman, J.J. Ainsworth, John Stuart Reid, and Lynnclaire Dennis, for their help and guidance in the writing of this article.

## **References**

- [1] Plato, *Timaeus*, 54B (tetrahedron—fire); 55e (cube—earth); 56c (icosahedron and dodecahedron—air and water).
- [2] Plato, *Timaeus*, 55c 14-15.
- [3] *The Encyclopædia Britannica*. s.v. “Philolaus,” vol. 21, 414.
- [4] *The Encyclopædia Britannica*. s.v. “Philolaus,” vol. 21, 414.
- [5] See Taylor 1928, 141 n. 1, 359 on the *Timaeus* 55 c, 367 on the *Timaeus* 53 d.
- [6] *The Encyclopædia Britannica*. s.v. “Philolaus,” vol. 21, 414.
- [7] Mark 2022. “Philolaus.” World History Encyclopedia.
- [8] Schluderer 2019.
- [9] Poincaré 1904. For an up-to-date review of this subject see Pellis 2022.
- [10] Luminet et al 2003, Weeks 2004, Roukema et al 2008.
- [11] Gurzadyan and Penrose 2010.
- [12] “Sound of the Big Bang” 2019.
- [13] Devereux and Wozencroft 2014, 66.
- [14] Devereux and Wozencroft 2014, 66.

- [15] See the work of Keith Critchlow on this subject including Critchlow 1979.
- [16] Facebook post by J.J. Ainsworth dated November 19, 2018.
- [17] Jacobs 2023.
- [18] Collins and Hale 2020.
- [19] Bell 2024, cf. Philolaus, Fragment 6a, from Nicomachus, *Manual of Harmonics* 9.
- [20] See McNair, Dennis, and Kauffman 2018.
- [21] Dennis and McNair 2018, 366 fig. 11.1, 368.
- [22] Till 2010.
- [23] “The Inaudible & Invisible Becomes Visible.” <https://youtu.be/9YgVrwcPKa8>.
- See also Reid 2018.
- [24] Dennis and Kauffman 2018, 218–219.
- [25] Dennis and McNair 2018, 376–378, 381.
- [26] Dennis and McNair 2018, fig. 117 on p. 377 & fig. 11.8 on 378.
- [27] See, for instance, the work of Sarah Ewbank at <https://stonehengerroof.uk/>.
- [28] The sound made by Ani Williams’ harp in 1992 was not recorded, although on a separate occasion that same year she again visited Stonehenge and was able to create the same sound. A recording was made and this has been remixed and extended by the present author.

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