



## Sacred Geometry

FROM THE MANDALA TO FRACTALS, PEOPLE ACROSS CULTURES HAVE GIVEN SPIRITUAL SIGNIFICANCE TO REPETITIVE PATTERNS FOR MILLENNIA. BUT IS THERE AN EXPLANATION?

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What if I told you that when Pythagoras discovered his groundbreaking mathematical concept, he was tripping balls? Of course, he wouldn't have described it that way, but according to at least one account in Brian C. Muraresku's "The Immortality Key," the Greek philosopher may have done his best thinking while high on psychedelic wine in a dank, dark cave. He also believed that "God is a number" and thus is one of the godfathers of "sacred geometry" because he sought to unite the physical, mathematical, and metaphysical worlds.

In modern parlance, "sacred geometry" is an umbrella term. Sometimes, it refers to the repetitive shapes and patterns common to psychedelic trips. More often, it signifies a universal geometric system that is said to reveal secrets about our cosmos and the nature of our souls. In psychedelic and spiritual communities, its healing powers are widely discussed. But how do we explain how and why these kinds of geometric hallucinations appear? And, more importantly, why are so many people drawn to these seemingly transcendent symbols today as a spiritual salve?

Mainstream science generally places less importance on visual hallucinations compared to the psychedelic experience as a whole. However, Marco Aqil, a Ph.D. candidate at the Spinoza Centre for Neuroimaging in Amsterdam, recently co-authored a paper that expands on a theory about why these geometric patterns can present themselves during a trip. It's all conjecture, he said, but you can computationally model what could be happening in the visual cortex. Neural activity in the visual system can oscillate. And different combinations of oscillations can produce complex geometric patterns, including well-known sacred

geometry symbols like Metatron's Cube. But Aqil, who has personal experience with psychedelics, is at a loss to scientifically explain their spiritual import. "There seems to be a connection between visual experience, specifically abstract geometries, and meaning and sacredness," he said. "But research cannot yet explain why."

Of course, the impasse between science and spirituality is nothing new. Over the years, many academics have worked themselves into knots trying to translate the transcendent nature of psychedelic trips. In 2002, the cognitive psychologist Benny Shannon published *The Antipodes of the Mind*, considered the first complete mapping of the ayahuasca experience. During his research, Shannon drank the brew hundreds of times and had numerous visions, including geometric patterns and shapes. In search of a satisfactory academic explanation, he explored an array of theoretical frameworks, eventually culminating with the assertion that "what a drinker will experience is the reflection of that person's full being at the moment at hand." But only pages later, he acknowledged that it might not be possible to understand the ayahuasca experience without considering a kind of cosmic consciousness or divine spirit. "Cognitive theories model the purported machinery of the mind," he wrote, but "cannot explain how the music of the mind is played."

The psychedelic experience represents a small fraction of the mystical uses of geometry over time. It's ubiquitous throughout human creation—built into the pyramids in Ancient Egypt, the Yantras in India, the Gothic churches in France, the Islamic mosques in Spain. In the 1930s, Carl Jung brought the mandala, a geometric figure common in Eastern religions

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like Buddhism and Hinduism, into Western thought. He concluded that the exterior circle around the mandala was a symbolic representation of the individual in the collective unconscious, a kind of shared memory bank for all of humankind. He began asking his patients to make mandalas in therapy. If a person were in balance, that balance would be externalized geometrically in their drawings. Many believe that sacred geometry represents a kind of order in the universe. Similarly, Jung felt that working with the circular form of the mandala could help restore order to the Self.

Difficult as it may seem to bridge the scientific and spiritual divide, few would argue with the assertion that geometry is sacred in that it reveals the infrastructure of life. Repetitive geometric forms are ever present in nature. Flowers bloom with beautiful symmetry. Fractal patterns guide the development of many plants and trees. The Fibonacci sequence, which is mathematically related to the golden ratio (1.61:1), famously corresponds with the spiral formations in sunflowers, pine cones, and the Nautilus shell. However, the countless videos, posts, and memes that attempt to sweep all of these examples together into one grand story may trigger the defenses of those who aren't psychedelically or spiritually inclined. They can present as conversion narratives rather than explanations because they state that there is a greater truth and, in doing so, suggest that it is the *only* truth.

But science is guilty of the same schtick. For Dr. Marilyn Walker, an anthropologist and author of the book *Sacred Geometry*, proof, especially scientific proof, may be beside the point. "I don't care," she said when I asked her about the evidence for sacred geometry. "Because...it's a two-sided discussion that never had a union." She meant that there is a certain egotism to the modern scientific perspective (Benny Shannon called this "dogmatic scientificism") because it refuses to accept that which cannot be comprehended or verified with its own methods. Another possible paradigm would be to view sacred geometry not as a hypothesis that must be proven but as a teacher of hidden wisdom that reveals more as a person becomes increasingly aware. Rather than ask what is the evidence for sacred geometry, Walker said, ask what is your experience with it?

This kind of experiential approach has long been the dominant paradigm in the world of visionary art. The American artist Adrian Ras-mussen works extensively with sacred geometry, notably in the mandalas that he laser-cuts

from wood. But for him, sacred geometry is only one of the numerous methods like yoga, meditation, and breathwork that help people access altered states where they can find refuge in something bigger than themselves. Nevertheless, sacred geometry remains one of the most frictionless ways of communicating the ineffable. "It's like putting a square peg in a square hole," he said. That is, it can be broadly understood because it exists at a level below or beyond language, which is heavily influenced by culture, education, and class.

The power and therapy of sacred geometry lie not only in its reception but also in its creation. The tattoo artist Halley Mason began integrating these shapes and forms into her work more than a decade ago after a kundalini awakening and ayahuasca study in Peru. People come to her for large pieces that sprawl out over their chests, arms, and backs and often require two or three full days of work. She refers to these tattoo sittings as "journeys" not only for the mental and physical fortitude they require but also for the act of "channeling" that occurs. For both Mason and her clients, the meaning and therapeutic aspects arrive when enough control is relinquished for this sacred act to take place.

No matter how sacred geometry appears, it has become a modern visual shorthand for mystery, divine intelligence, and grand design. And its healing effects appear to occur when a person can allow the mind to release its need for rationality. Sacred geometry functions as both a signal, drawing those interested in it toward each other, and a sieve, straining out those who must seek explicit proof. Put another way, embracing sacred geometry requires entering into a faith-based contract with the unknown. The first step requires the suspension of disbelief.