

The Buddhabrot and the *Unus Mundus*: A Qualitative Exploration of Fractal Patterns and Archetypal Symbols

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Abstract

This study conducts a qualitative comparative analysis exploring apparent visual correspondences between the Buddhabrot fractal and symbolic materials associated with the *Unus Mundus* (related to cosmic order, union of opposites or other themes) or linked to altered states of mind. The findings highlight subjective visual similarities between the Buddhabrot's fractal patterns, and some symbolic materials related to these themes. While such similarities may stem from perceptual tendencies, cognitive heuristics, or cultural transmission, they also deeply resonate with concept of the *Unus Mundus* explored by Jung and Pauli. Though no causal relationship is posited, these observations raise the possibility that the Buddhabrot may visually echo symbolic motifs from diverse settings, inviting further inquiry.

Keywords: *Unus Mundus*, synchronicity, Mandelbrot set, Buddhabrot, symbolism, fractal, Pauli, archetype

1. Introduction

1.1 Archetypes

Jung's theory of archetypes proposes that the human psyche is structured around universal patterns that manifest symbolically across cultures and historical periods (1968). These archetypal motifs of the collective unconscious, manifest in myths, religious iconography, and visionary experiences. Symbols, such as mandalas, have been discussed as manifestations of deep, archetypal ordering principles, particularly in relation to wholeness and the structure of the psyche (1974).

Modern research in cognitive science, eco-bio-psychology, and anthropology has expanded on Jung's model (2022). Knox (2004) reconceptualizes archetypes as emergent patterns of meaning shaped by relational experience and cognitive processing rather than pre-existing structures of the unconscious. Similarly, Hoffman (2018) argues that human perception functions as an evolutionary interface, favouring certain patterns of symmetry, recursion, and hierarchical structuring not because they reveal an objective reality, but because they enhance cognitive efficiency. Such perspectives suggest that recurring symbolic forms across cultures may be driven by perceptual constraints and cognitive heuristics rather than innate universal images.

While the universality of archetypal forms is well-documented, the question remains whether they are mere cognitive constructs shaped by perception or expressions of underlying patterns.

1.2 Number and the *Unus Mundus*

Jung's speculative concept of the *Unus Mundus* proposes that psyche and matter emerge from a deeper, unified order, an underlying reality that transcends dualistic thinking (1952). This idea suggests that patterns of meaning are not merely projections but may be embedded in the fabric of reality itself. Jung initially approached this notion through his theory of synchronicity, which describes meaningful coincidences that defy classical causality. These events, he argued, reveal an acausal connecting principle between psychological and physical domains. However, Jung did not formulate a precise mathematical or physical model for the *Unus Mundus*, this task would later be taken up by Wolfgang Pauli, whose background in quantum physics provided new insights into the nature of ordering principles in both psyche and nature.

Pauli extended the idea of the *Unus Mundus* further into the realm of mathematics, symmetry, and natural law (2001). His fascination with meaningful patterns in nature led him to speculate that archetypal structures are not confined to the human mind but also shape the fundamental laws of physics. Pauli speculated that numbers and mathematical relationships often encode deep, organizing principles that appear in both physical and psychological phenomena (2006). He saw symmetry, particularly in quantum mechanics, as an expression of a hidden order that governs reality at all levels, much like Jung saw archetypes as structuring principles of the unconscious. This mirrors Pauli's belief that certain patterns might emerge naturally, not as imposed mental constructs, but as manifestations of a deeper pre-existing framework of reality.

Marie-Louise von Franz later expanded on these ideas, further suggesting that number might be the missing key to understanding the relationship between psyche and matter (1974). She argued that numbers serve a dual function: they are logical constructs used in mathematics,

but they also hold symbolic and qualitative significance, appearing in myths, religious systems, and synchronistic events. If Jung and Pauli were correct in their intuition that a deeper mathematical order underlies reality, von Franz proposed that future discoveries in mathematics might eventually reveal a single framework uniting the symbolic and the rational characteristics of numbers.

Symbols associated with the *Unus Mundus* often reflect themes of cosmic order, transformation, and the relationship between matter and the divine (1963). Across cultures, such symbols appear in sacred architecture, religious iconography, and visionary art, sometimes suggesting a hidden unity underlying existence. The Tree of Life, present in various traditions, is frequently linked to the microcosm-macrocosm relationship. Mandalas and sacred geometry are associated with wholeness and self-organizing principles, while alchemical symbols like the Philosopher's Stone represent the reconciliation of opposites. Many Egyptian symbols relate to cosmic harmony and renewal, while several prehistoric megalithic structures, such as Stonehenge, suggest early attempts to align human experience with celestial cycles.

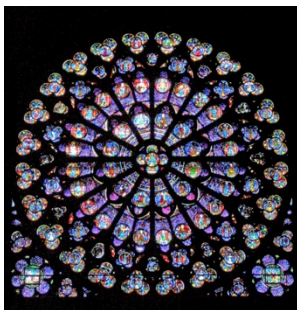
1.3 Fractals

Benoît Mandelbrot's discovery of fractal geometry (1982) revealed that many systems exhibit self-similarity, meaning patterns repeat across different scales. These structures emerge in biological and geophysical systems, often through iterative processes and nonlinear dynamics.

Fractal structures are widely observed in natural and biological systems, where they serve as optimized solutions for energy efficiency, growth, and structural stability (Ball, 2009). For example:

- Geophysical formations: River networks, mountain ridges, and cloud formations exhibit fractal-like branching structures, arising from self-organized criticality and energy distribution (2006).
- Biological morphology: Tree branching, blood vessels, bronchial structures, and neural pathways form self-similar hierarchies that optimize surface-area-to-volume ratios and connectivity (1994).
- Cognitive and neural systems: Brain networks exhibit fractal-like connectivity, where synaptic formations and neuronal activity follow self-similar principles (2004).

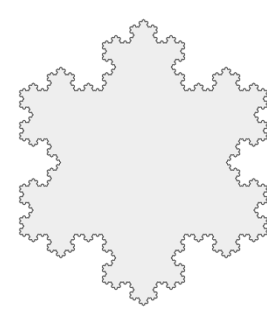
These findings align with Jung's notion of archetypal patterning, suggesting that the human psyche itself may operate through self-organizing principles (2004). If cognition and perception are structured fractal-like, then recursively structured symbolic forms may emerge spontaneously across cultures, independent of direct transmission.



A. Fractal-like Pattern in art
Notre-Dame rose window



B. Fractal-like Pattern in Nature
A real snowflake



C. Mathematical Fractal Pattern
Koch snowflake

Figure 1. A. Notre Dame rose window **B.** A real snowflake **C.** Koch snowflake

Many sacred traditions have depicted cosmic and spiritual order through geometric and recursive imagery, a pattern found in:

- **Mandalas and Sacred Geometry:** Tibetan, Hindu, and Buddhist mandalas frequently depict nested, self-similar patterns representing psychic and cosmic order (1974).
- **Temple and Cathedral Architecture:** Many Gothic cathedrals, Hindu temples, and Islamic mosaics exhibit repeating, fractal-like symmetries, scaling from large architectural forms to intricate decorative elements.
- **The Tree of Life in Mysticism and Mythology:** Found in Kabbalah, Norse cosmology, and Mesoamerican traditions, the Tree of Life is often depicted as a self-similar branching structure, symbolizing the microcosm-macrocosm relationship (1963).

These structures bear a visual resemblance to fractal formations, not because of an explicit mathematical understanding in antiquity, but because the psyche itself may be attuned to self-similar forms (2004).

The Buddhabrot, a visualization of the Mandelbrot Set, has been noted for its organic, human-like, and sacred geometric appearance. Unlike standard Mandelbrot Set renderings, the Buddhabrot highlights points that escape to infinity, creating a structure that echoes symbolic imagery found in spiritual traditions.

Its recursive, self-similar patterns evoke structures associated with archetypal symbolism, including:

- Luminous anthropomorphic forms found in religious iconography (e.g., depictions of divine beings in Hindu and Buddhist art).
- Energetic mappings such as the Chakra system, where focal points are arranged along a vertical axis.
- Sacred geometric designs, which emphasize order and symmetry.

This paper examines whether the Buddhabrot's structural patterns are similar to archetypal imagery and symbol across traditions which are related to the concept of *Unus Mundus*, to determine if further investigation may be warranted. The study does not suggest any direct causal relationships at any point.

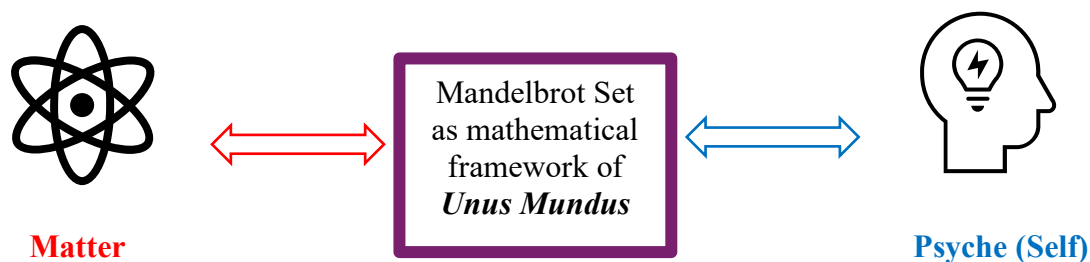


Figure 2. The union of matter and psyche in the *Unus Mundus*

2.0 Materials and Methods

This study explicitly employs an explorative, qualitative and subjective comparative approach and does not in any way posit any causational relationships between the Buddhabrot and comparative materials. We focused on structural similarities between the Buddhabrot fractal patterns and archetypal imagery across different cultural traditions.

This study explores whether the recursive forms of the Buddhabrot exhibit structural similarities to symbols subjectively related to the concept of the *Unus Mundus* (cosmic order, the Tree of Life motif, union or play of opposites, connection between earth and heaven, or the microcosm-macrocosm relationship). Additionally, since fractal-like structures frequently emerge in visionary states, psychedelic and schizophrenic art were also explored.

The analyses utilized high-resolution visualizations of the Buddhabrot (ran at 20,000 iterations) (2010). To enhance the visual contrast of the Buddhabrot fractal, a green or black and white filter was often applied using the standard image editing tool within MS Word.

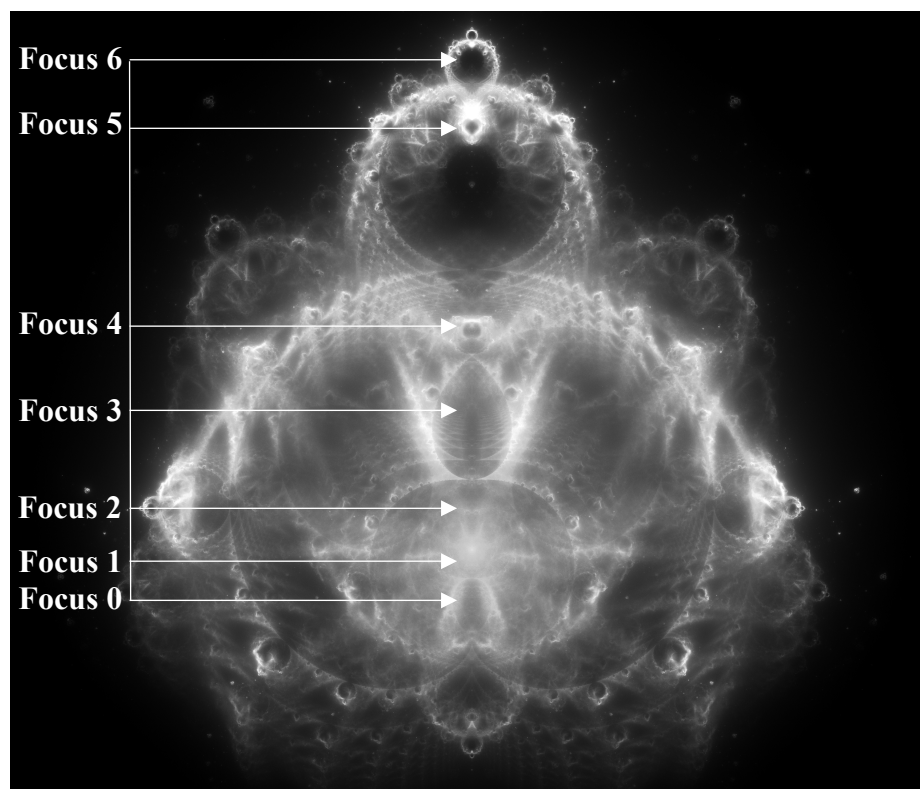
Comparative analyses were conducted by overlaying the Buddhabrot with images, ensuring no manipulation of the original patterns beyond basic adjustments in colouring, tilt, width, and height to enhance contrast and visualization. No structural alterations were made to the Buddhabrot. The author has permission to use all images in this paper, most of which have a type of Creative Commons license or are in the public domain

Given that the Buddhabrot is a highly complex, as is often the case material, it is not easy to prescribe an overarching protocol to assist future researchers in finding possible similarities between its structure and case materials. While quantitative image analysis methods will be explored in future studies, this paper focuses on a qualitative, subjective, structure-based visual exploration.

To help towards systematic and reproducible analysis, this study used the following criteria:

Geometric Similarity – Identifying similar shapes and symmetry in the Buddhabrot (e.g. Focus centres) and comparative images. **Compositional Similarity** – Assessing the spatial positioning of elements and the degree to which structural motifs are compositionally similar.

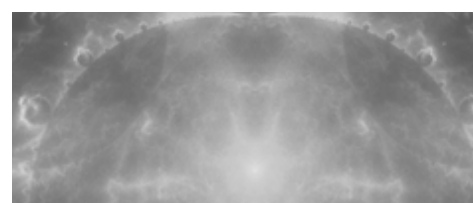
For comparative analysis, the Buddhabrot was divided into seven key areas, termed Focus 0–6, running along the central vertical axis. Focus Centres each correspond to distinct geometric formations within the fractal's apparent hierarchical symmetry.



Focus 0

Focus 1

Focus 2



Focus 3

Focus 4



Focus 5

Focus 6

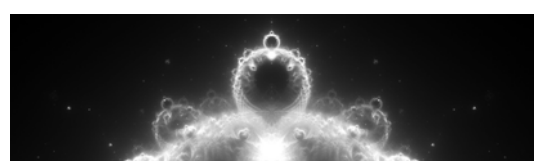


Figure 3. Assigned focus areas of the Buddhabrot visualisation of the Mandelbrot Set

To assist future analyses, it is important to acknowledge different aspect of the fractal identified in this work. The Buddhabrot fractal exhibits a highly complex structure with distinct symmetrical features that give it an anthropomorphic appearance. It appears organic and fluid yet geometrically structured.

1. Vertical Symmetry & Central Axis:

- The Buddhabrot is vertically symmetric, with a central axis that runs from bottom to top, dividing the fractal into mirrored halves.
- This symmetry contributes to its humanoid resemblance, with an implied head, torso, and base.

2. Base & Lower Region (Focus 0-2):

- The lower part of the Buddhabrot often appears rounded, giving it the impression of a round stomach or womb-like structure.
- This region contains dense layers of overlapping contours, which sometimes appear as rings or circular forms.

3. Central Region (Focus 3-4):

- The middle section is densely structured, containing round motifs, radiating filaments and interwoven arcs.
- This region resembles a heart positioned within the torso

4. Upper Region (Focus 5-6):

- As the structure ascends, the third eye motif (Focus 5) and crown (Focus 6) resemble Buddha-like imagery

The various Focus Centres within the Buddhabrot fractal exhibit highly intricate forms, making them difficult to reduce to simple geometric descriptions. However, they can be broadly characterized as follows:

- **Focus 0:** An ovoid shape, flanked by diverging lines on either side
- **Focus 1:** A crescent-shaped arc, opening upwards
- **Focus 2:** A central core, with diverging radiating lines moving upwards
- **Focus 3:** A tear-drop or ovoid shape, between two diverging pillar-like forms
- **Focus 4:** A central circular motif, with wing-like extensions either side
- **Focus 5:** A bright circular form, from which apparent radiating forms extending up
- **Focus 6:** A final circular motif positioned at the topmost point of the apparent head

3. Results

This section makes comparative analyses between Buddhahot and cultural outputs from a vast range of time periods across the globe. As stated, their selection is based on their subjective symbolic resonance to archetypal themes related to the *Unus Mundus*.

Sacred Structures

- *Stonehenge* (2500 BC) – Selected for its alignment with celestial cycles, reflecting early human attempts to connect earth and cosmos (2012).
- *St. Peter's Basilica* (1500 AD) – Examined as a sacred architectural symbol of divine connection between heaven and earth (1982).

Ancient Symbolism of Transformation and Divine Connection

- *Tutankhamun's Necklace and Coffin* (3000 BC) – Chosen for their association with cosmic balance and the divine (2008).
- *Alchemical Emblem* (1740 AD) – Included due to its relation to the Philosopher's Stone, which Jung associated with the integration of opposites (1740).

Tree of Life Motif Across Cultures

- *Assyrian Tree of Life* (800 BC) (1993)
- *Mayan Tree of Life* (250 AD) (2016)
- *Chintz Panel* (1000 AD)
- *Lopin Window Art* (1194 AD)

All selected for their visual and symbolic connection to the Tree of Life, a motif that often represents the microcosm-macrocosm relationship in various traditions.

Visionary Art and Altered States of Consciousness

- *Hieronymus Bosch's Garden of Earthly Delights* (1500 AD) – Chosen for its enigmatic, visionary quality and its links to alchemy and altered states (2022)
- *Leonardo da Vinci's John the Baptist* and *Mona Lisa* (1500 AD) – Included due to their reported use of sacred geometry and symbolic union of opposites (male/female, earth/heaven and emotional ambiguity) (2011).
- *Schizophrenic Art* (1922 AD) – Examined due to Prinzhorn's reports of repetitive forms in the artwork of individuals with schizophrenia (1922).
- *Psychedelic Art* (2016 and 2026 AD) – Selected due to this art forms association with fractal-like imagery (2016).

Stonehenge: An ancient prehistoric monument in England, built around 2500 BC, consisting of massive stone circles aligned with the movements of the sun, reflecting humanity's early attempts to connect with divinity and the cosmos (2012).

Subjective analysis: The inner and outer circles radiating from Focus 1 are similar to the Sarsen Circle and the two outer rings of holes at the center of Stonehenge. The uppermost point of the teardrop-shaped Focus 3 visually corresponds with Block C along the avenue, while Block B shares a positional similarity with the central circular structure of Focus 4. Additionally, Focus 5 is positioned in a way that suggests a resemblance to the path of the summer solstice sunrise, which historically passes to the left of the Heel Stone. Further analysis is required to determine the significance these subjective observations.

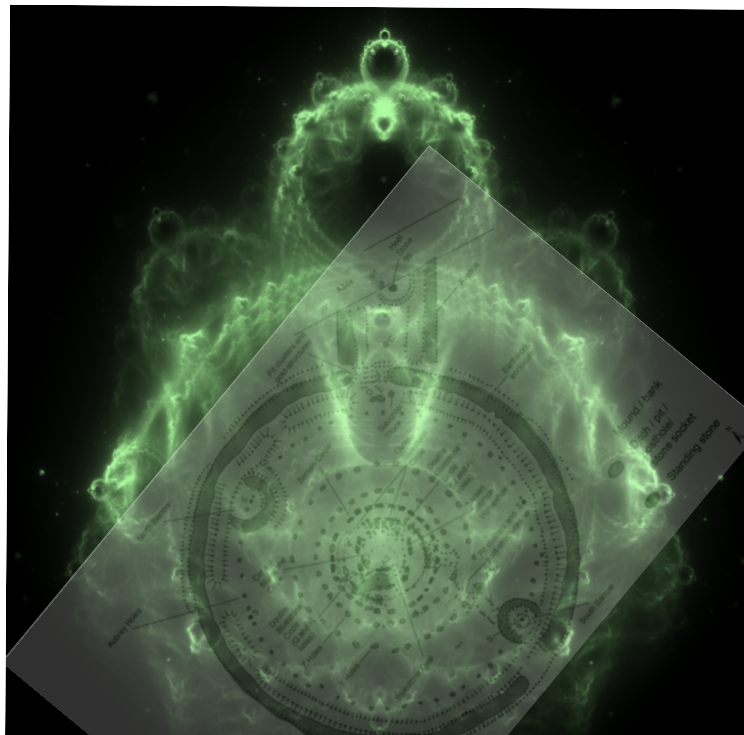


Figure 4. Plan for Stonehenge overlaid with Buddhabrot

St Peter's Basilica, Vatican, dated around 1500 AD

St. Peter's Basilica in Vatican City, completed in the early 16th century, is one of the most renowned works of Renaissance architecture and one of the largest churches in the world.

Subjective analysis: In the satellite image, the outer circle of Focus 2 appears to be similar to a circular structural boundary. Focus 3 visually matches the length of the central avenue, and the brightest region of Focus 5 coincides with the top of the dome, often referred to as the lantern. Further analysis is required to determine the significance these subjective observations.

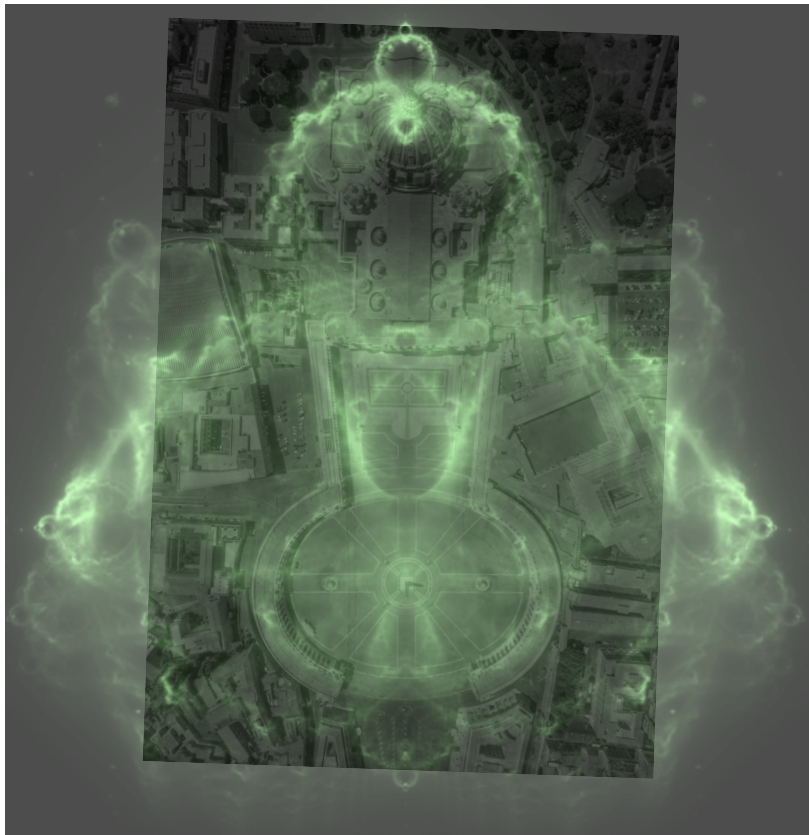


Figure 5. St Peter's Basilica overlaid with Buddhabrot

Winged Scarab Pendant of Tutankhamun: Discovered in his tomb, this pendant dates back to the 14th century BC (2008).

Subjective analysis: Focus 3 appears subjectively similar to the central Scarab, as its teardrop shape closely follows the contours of the figure. This creates an impression that the Scarab beetle is extending toward the circular form within Focus 4, a composition that bears a resemblance to the well-known motif in Egyptian art where a Scarab beetle holds the sun. Additionally, the figure of the King is positioned within Focus 5, where it appears illuminated. While these similarities suggest notable visual correspondences, many other possible points of similarity can also be observed. Further analysis is required to determine the significance these subjective observations.



Figure 6. Pendant of Tutankhamun overlaid with Buddhabrot

Tutankhamun's Coffin: Tutankhamun's coffin is adorned with intricate inscriptions, protective deities, and symbols that emphasize his divine status (2008).

Subjective analysis: The horizontal lines around Focus 1 appear to be like those on the coffin. Focus 3 seems to correspond with the crossing of the hands, with the flail on the left overlapping one of the spiral filaments extending outward. The circular form of Focus 4 visually mirrors the intersection of the flail and crook, as well as with one of the golden horizontal lines on the tomb. Additionally, Focus 5 is positioned in a way gives the impression of a third eye motif. Finally, Focus 6 coincides with the position of the snake emerging from the crown region. While these correspondences suggest structural similarities, many other possible similarities may be observed. Further analysis is required to determine the significance these subjective observations.



The Hermetical Triumph: Although this emblem has an earlier origin which is hard to trace, this version is from 'The Hermetical Triumph' (1745). The translated caption "from the caves of metals, the hidden one emerges, who is the venerable stone of Hermes" speaks to the alchemical process.

Subjective analysis: The lowest region of the Buddhabrot appears to correspond with the depiction of fire beneath the ground in the drawing. The outer circle around Focus 0 visually mirrors the ascending hills flanking either side, while the inverted triangle-like shape of Focus 0 coincides with an inverted triangular form in the artwork. Additionally, Focus 3 is similar to the intertwined serpents, and the central circle of Focus 4 coincides with a circular form where the serpents' heads meet. While these observations highlight notable structural correspondences, further study would be needed to assess their significance. Further analysis is required to determine the significance these subjective observations.



Figure 8. Hermetical Triumph Emblem overlaid with Buddhabrot

The Assyrian Tree of Life: An ancient symbol that appears in Assyrian and Mesopotamian art, dating back to the early first millennium BC (1993). It represents a sacred tree, often depicted with a trunk with flowers and wavy branches flanked near divine figures or kings.

Subjective analysis: Focus 0, 3, 4, and 5 appear to exhibit visual correspondences with structural elements of the image. Focus 3 seems to echo the central region, while Focus 4 visually mirrors the lotus centre positioned at the top of the Tree of Life. Additionally, Focus 5 coincides with the head of the deity at the highest point of the structure. While these correspondences suggest structural parallels, many other similarities may also be observed. Further analysis is required to determine the significance these subjective observations.

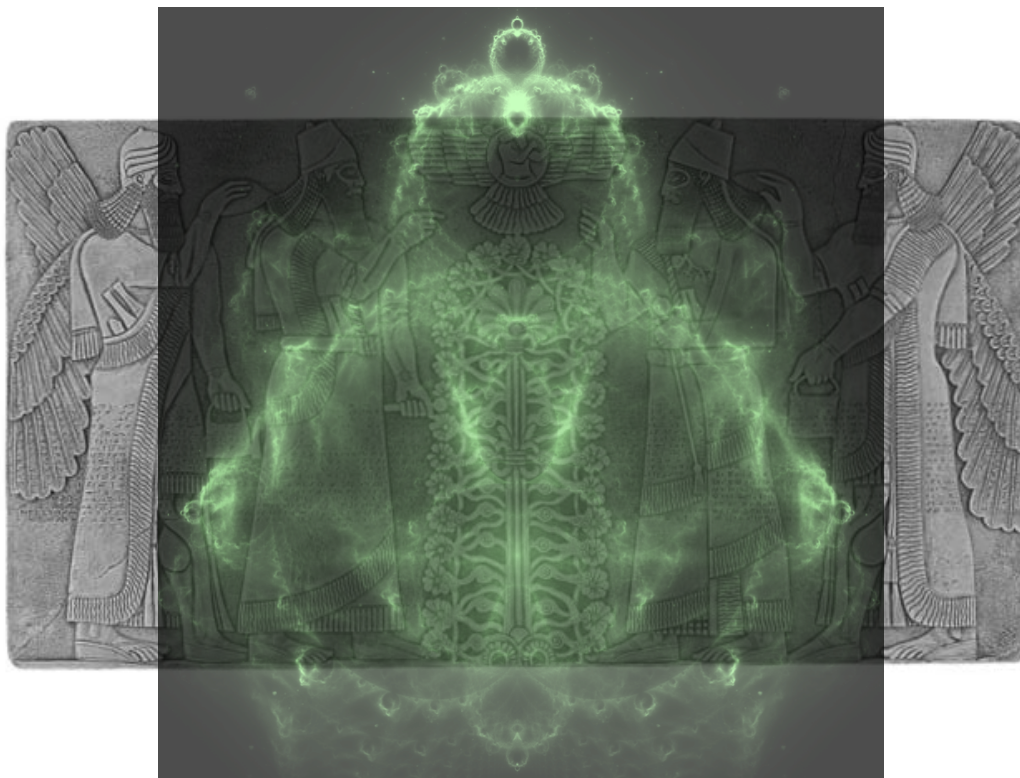


Figure 9. Assyrian tree of life overlaid with Buddhabrot

Mayan World Tree: Sometimes known as Yaxché or the Ceiba tree, is a central symbol in Mayan cosmology.

Subjective analysis: All Focus centres appear to exhibit some degree of visual correspondence with elements of the image. The radiating horizontal line and luminous centre of Focus 1-2 seem to echo the motif at the base of the tree. Moving upward, Focus 3 mirrors a shape resembling a child-like figure, while Focus 4 visually resembles the open mouth of a face. Additionally, Focus 5 is positioned near an eye-like motif within the bird at the top, and the full-moon shape of Focus 6 appears to coincide with the upper boundary of the artwork, where it is seemingly truncated. While these comparisons highlight potential similarities, further analysis would be required to determine their significance.

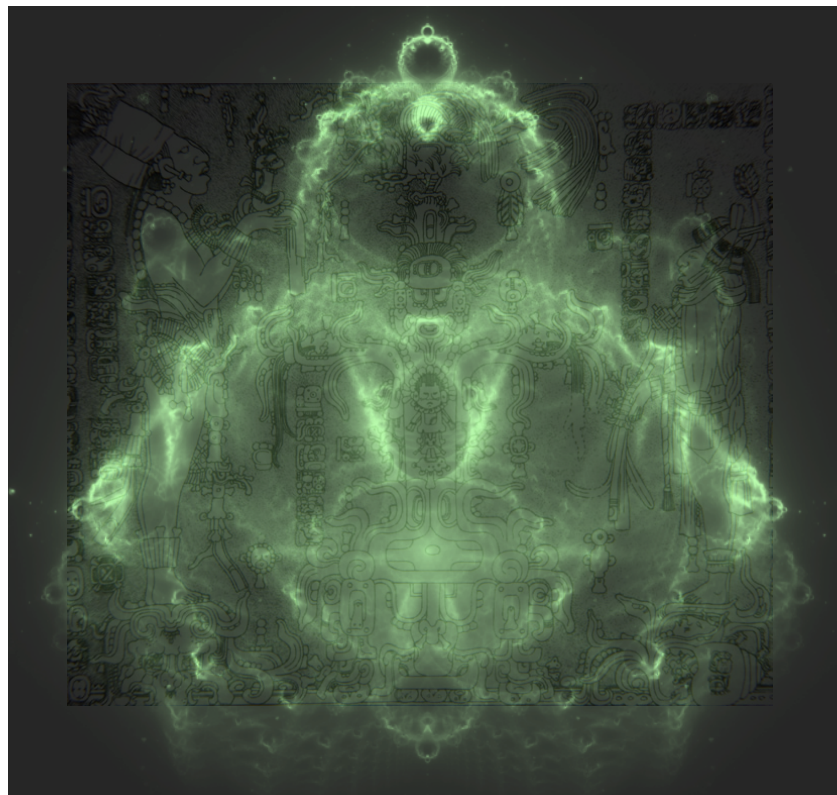


Figure 10. Mayan tree of life overlaid with Buddhabet

Chintz Panel (palampore): A palampore (2017) is a type of decorative hand-painted or block-printed cotton textile that originated in India during the 17th and 18th centuries. It is typically characterized by its elaborate floral designs, often featuring a central tree of life motif.

Subjective analysis: The outer radiating circle in the lower region of the fractal is positioned in a way that mirrors a similar circular motif in the image. The oval shape of Focus 3 echoes a central oval motif, while the winged form of Focus 4 appears to be structurally similar with a comparable shape in the artwork. Additionally, the brightest part of Focus 5 appears to coincide with the upper boundary of the image, where it is seemingly truncated. The eye-like formations in the Buddhabrot visually correspond with two floral motifs. While these observations highlight structural parallels, further study would be required to assess their interpretative significance

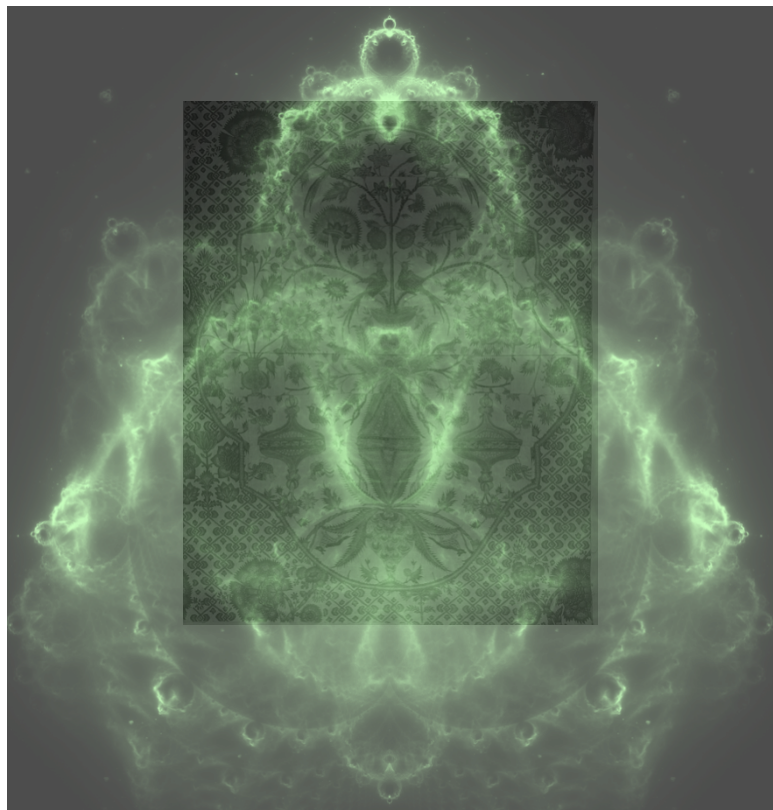


Figure 11. Chintz panel displaying tree of life overlaid with Buddhabrot

Window by Lucien-Leopold Lobin: Lobin was a renowned French artist and master glassmaker known for his vibrant and intricate stained-glass windows, which often featured religious themes. His window depicted below would have been part of the 19th-century Gothic Revival in church art.

Subjective analysis: The outer circular form of Focus 2 appears to echo the positioning of plants flanking either side. Similarly, Focus 3 mirrors the vase, while Focus 4 is similar to the sprouting clover motif. These observations highlight potential structural parallels, though further analysis would be required to determine their significance.

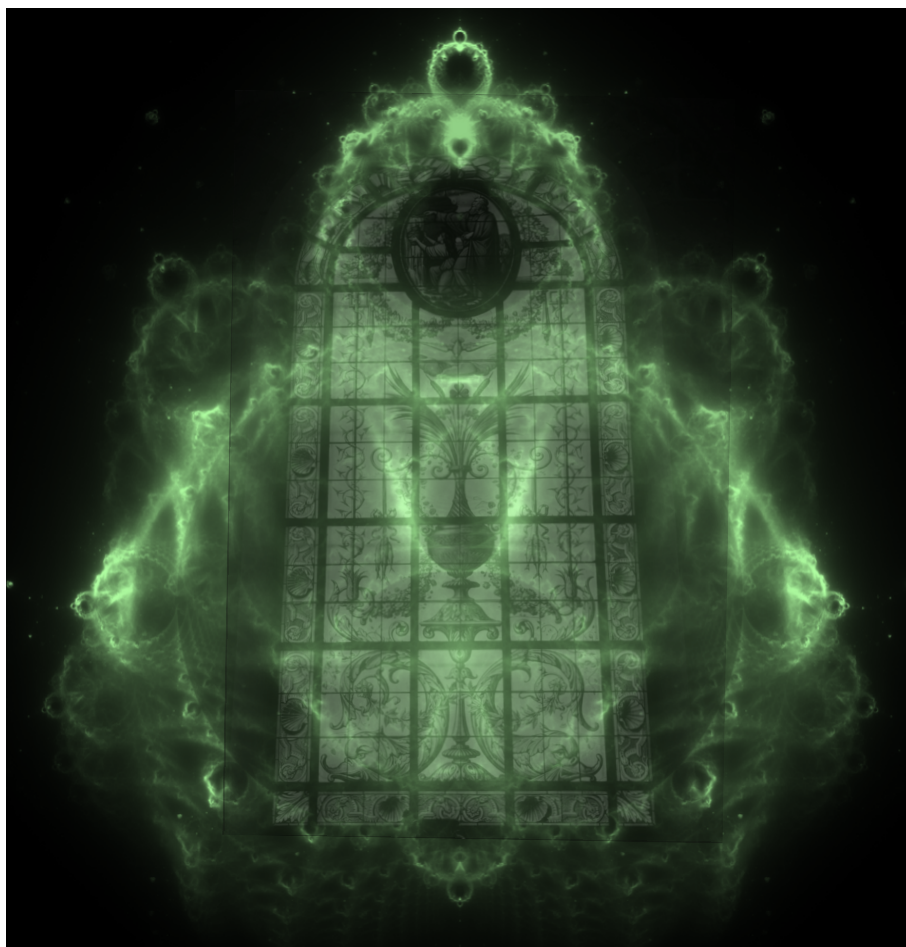


Figure 12. Lobin window overlaid with Buddhabrot

The Garden of Earthly Delights, Hieronymus Bosch, dated around 1500 AD

The Garden of Earthly Delights by Hieronymus Bosch, painted around 1500 AD, is a highly enigmatic triptych (2022).

Subjective analysis: Focus 0 appears to correspond with the figure of a man holding a mushroom-shaped object, while the circular forms around Focus 1 and 2 align with the pond, where a woman seems to be positioned near the centre of Focus 2, creating the impression that she is holding it in her palm. Additionally, Focus 3 visually coincides with the spherical structure in the lake, and Focus 4 traces an apexed shape within the composition. While these correspondences suggest visual similarities, their interpretative significance remains open to further exploration.

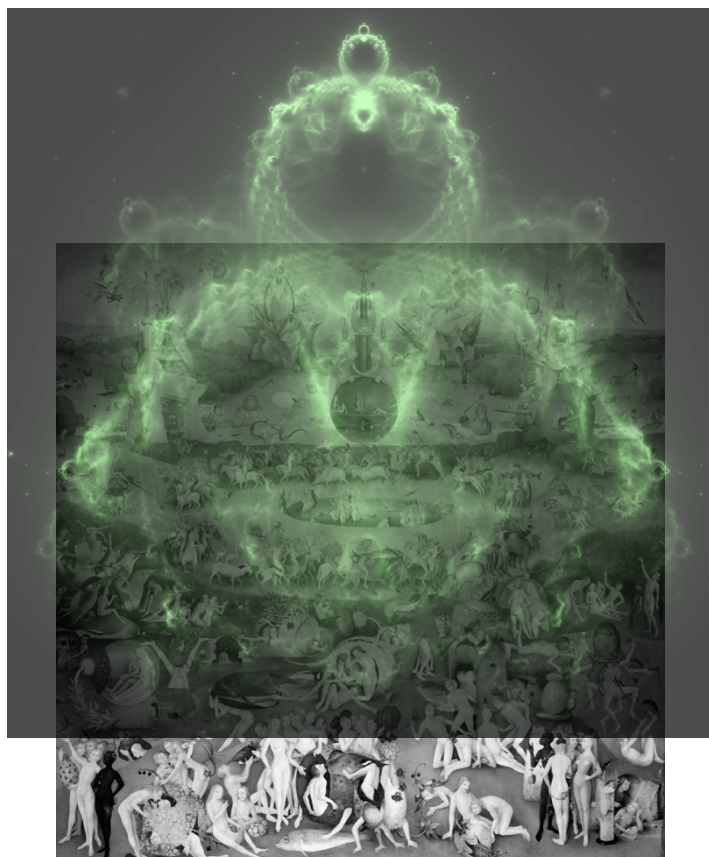


Figure 13. Bosch's garden of earthly delights overlaid with Buddhabrot

Saint John the Baptist: This work by Leonardo da Vinci shares a visual connection with the Mona Lisa through the use of sfumato, which creates a soft, blurred effect. Both paintings feature enigmatic expressions and are shrouded in both numinosity and mystery. The figure's smile in Saint John the Baptist is often compared to the Mona Lisa's famous smile (2011).

Subjective analysis: Relative to his nose, the angle at which he is pointing is approximately 35 degrees. When the Buddhabrot is rotated, several visual correspondences emerge.

Aligning the eyes of John with those of the Buddhabrot, his chin appears to fit within a shaded inverted triangle above Focus 4. Additionally, the base of Focus 3 appears to coincide with his two fingers. Notably, Focus 0 mirrors his elbow. While these observations suggest possible similarities, the significance of these observations remains open to interpretation.

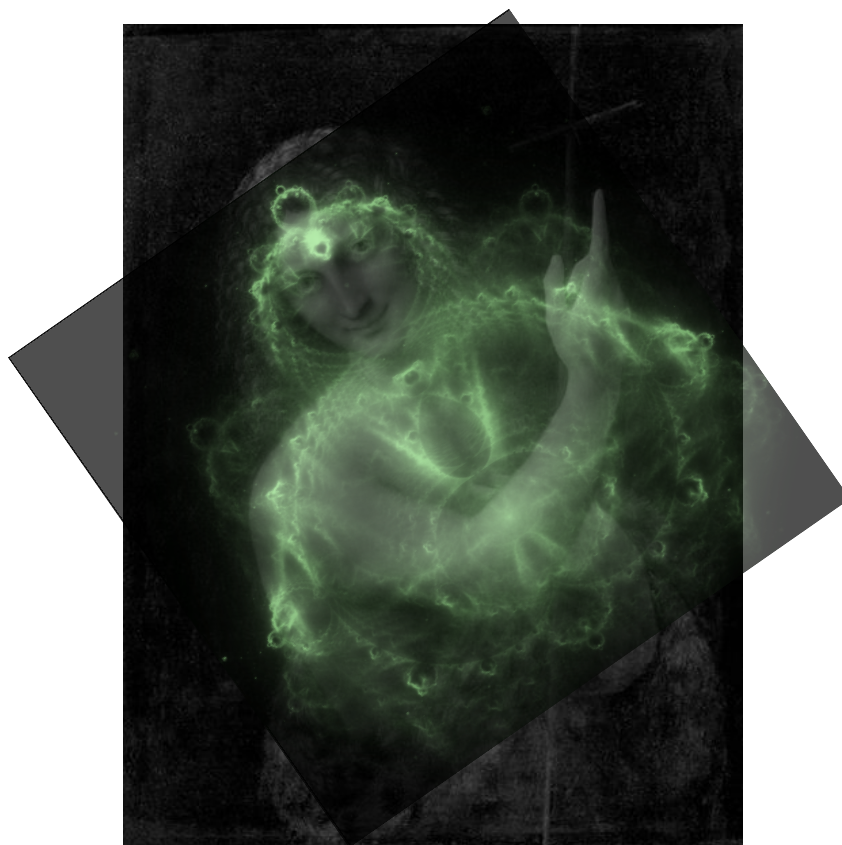


Figure 14. Saint John the Baptist overlaid with Buddhabrot

The Mona Lisa: A portrait of a woman with an enigmatic smile.

Subjective analysis: Her eyes and chin appear to mirror key structural features of the Buddhabrot. Her chin is positioned within a shaded inverted triangle above Focus 4, and her jawline follows the rounded contours of the Buddhabrot's head-like form. Additionally, her cleavage intersects with the outer circle of Focus 2, while the top part of the wall visually mirrors the horizontal line running through the core of Focus 2. Several folds within her dress appear to correspond with the lower regions of the Buddhabrot, and the right side and bottom of the Buddhabrot coincide with her right shoulder and hand, respectively. Furthermore, a rock on the left-hand side traces a curved shape similar to the Buddhabrot's structure. These similarities suggest possible visual correspondences, though their significance remains open to interpretation.



Figure 15. Mona Lisa overlaid with Buddhabrot

Allegorisch-symbolisches Blatt: This artwork, taken from Prinzhorn's *Artistry of the Mentally Ill* was made by a clockmaker with schizophrenia.

Subjective analysis: Focus 0 is similar to a triangular form at the base. The apex of Focus 3 appears to correspond to the lower triangular shape of a chalice, while the central circle of Focus 4 echoes a circular motif positioned at the top of its stem. Focus 5 is positioned in a way that mirrors a luminous star-like motif and Focus 6 is similar to a bell-like structure at the uppermost region.

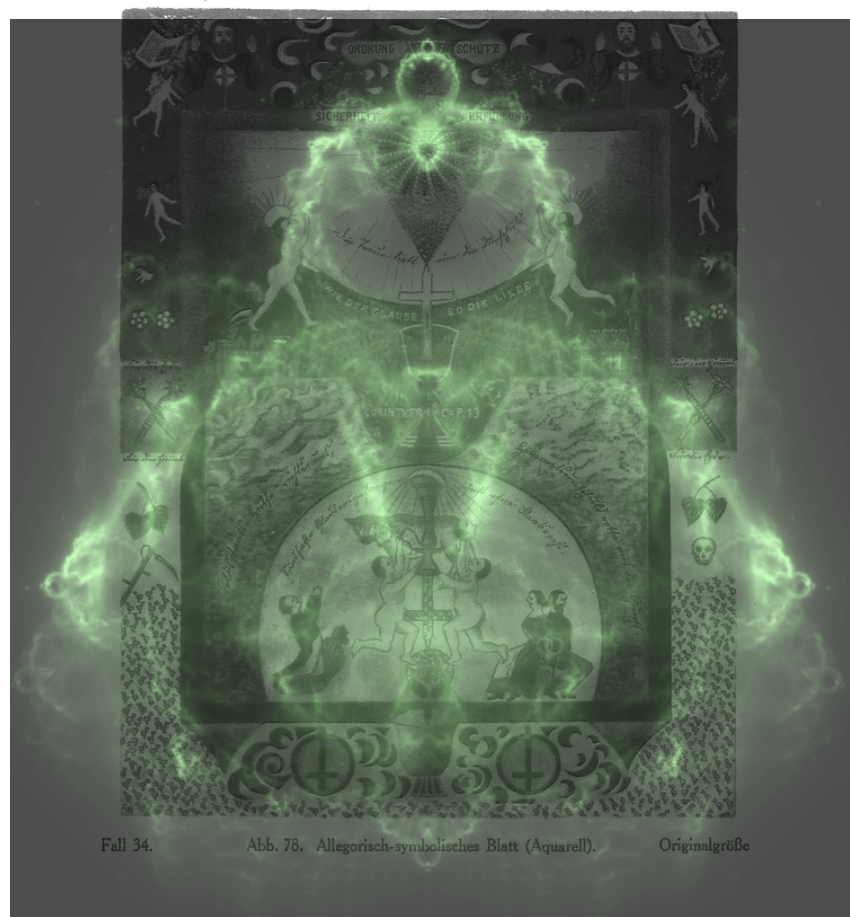


Figure 16. Art from a schizophrenic patient

Modern art piece, Ukayhaw by Envak Enkaqti on DeviantArt

The Buddhabrot patterns can be seen in countless examples of modern art, particularly those which are defined as psychedelic art or created under the influence of psychedelics.

Subjective analysis: As observed in other comparisons, the outer circle surrounding the lower region of the fractal appears to correspond with a structural boundary in the image. The apex of Focus 3 is similar to a triangular form, while the brightest region of Focus 5 visually coincides with a bird-like head shape at the top. These observations highlight potential visual correspondences, though their interpretative significance remains open to further analysis

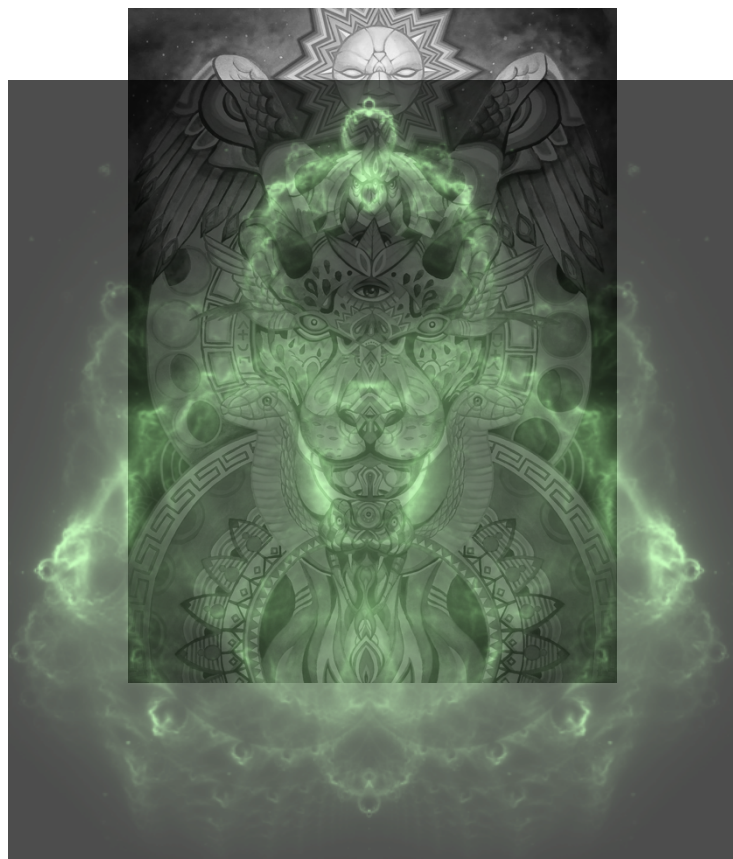


Figure 17. a modern art piece overlaid with Buddhabrot

Piece by feistyfrenchfry67: This is a piece of digital art which was posted on the Reddit group “r/trippyart” in 2025. This group invites submission of art which will awaken the senses and expand your mind.

Subjective analysis: The lower circular region of the Buddhabrot (surrounding Focus 0-2) is similar to a prominent round motif, while Focus 3 appears to be similar to three central oval forms. The eyes of the Buddhabrot (including the third eye, left eye, and right eye) seem to be positioned in a similar way to forms at the top. Focus 6 mirrors a circular element at the uppermost region.

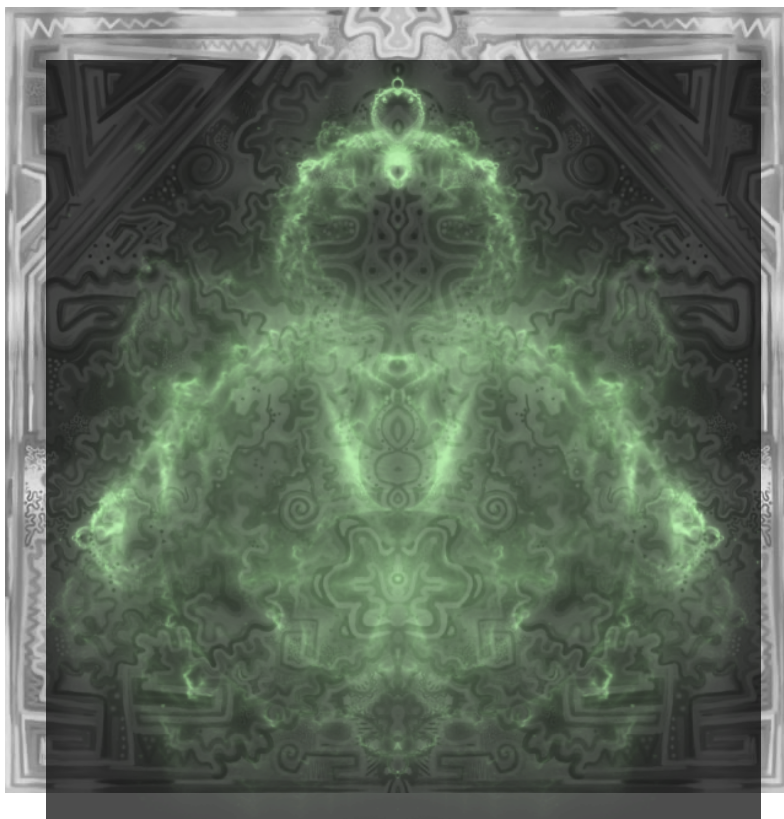


Figure 18. a modern art piece overlaid with Buddhabrot

4. Discussion

4.1 Image Overlays

While this study does not claim to establish objective proof of archetypal significance, it highlights the frequency with which the Buddhabrot's recursive forms subjectively appear to resonate with symbolic materials linked to the *Unus Mundus* or altered states of mind. These intriguing connections may warrant further investigation into the significance of the Buddhabrot.

Again, while this study does not offer objective proof that the Buddhabrot has archetypal significance, the subjective material brings various possible interpretations into focus for exploratory discussion. One possible explanation is that these purely subjective correspondences arise from perceptual biases inherent in human cognition. Research suggests that the brain is wired to detect symmetry, self-similarity, and hierarchical patterning, which are common characteristics of both fractals and traditional religious iconography (2004). This cognitive preference could account for the repeated association of fractal structures with archetypal imagery across cultures, particularly in depictions of divine beings, cosmic order, and spiritual transformation. From this perspective, the Buddhabrot may simply serve as a particularly striking stimulus for pattern recognition due to its complex, self-similar structure.

A second interpretation mirrors Jung's theory of the collective unconscious. The notion that archetypes manifest in both internal psychological states and external cultural expressions suggests that self-similar patterns such as fractals could be representations of deeper organizing principles within the psyche. Jung and Pauli speculated that numerical structures could act as a bridge between psyche and matter, offering a possible explanation for why fractal geometries may emerge both in natural systems and in symbolism. If numbers and

mathematical structures hold both logical and symbolic significance, as von Franz (1974) argued they might, then the Buddhabrot could represent a profound instance where mathematics reflects archetypal structuring principles.

Similarly, Jung's concept of the psychoid archetype provides a useful framework for understanding the potential significance of the Buddhabrot's structural resonance with archetypal imagery. Unlike archetypal images, which manifest within the psyche, the psychoid aspect refers to a deeper level of archetypal reality that exists at the threshold between psyche and matter. Jung and Pauli speculated that certain meaningful patterns might not be confined to human perception but instead reflect an underlying order in nature itself. This idea mirrors the *Unus Mundus* hypothesis, which proposes a fundamental unity underlying both mind and matter. The spontaneous emergence of fractal structures in nature, and their possible similarity with known symbolic motifs across cultures, might invite the question of whether the Buddhabrot could represent a special instance of this psychoid dimension; a self-organizing mathematical pattern that visually and conceptually mirrors the archetypal domain. While this work does not suggest a direct causal relationship, it points to the possibility that archetypal structures are not merely cognitive artifacts but may correspond to deeper mathematical principles present in both psyche and cosmos.

Another striking feature of the Buddhabrot is its apparent similarity to art from altered states of mind. Psychedelic art and schizophrenia-related art are known to exhibit fractal-like structures, suggesting a potential link between recursive forms and states of altered perception. Research into psychedelic-induced states has shown that users commonly report visions of infinite, self-replicating geometries, sometimes described in explicitly archetypal terms (2019). Similarly, historical accounts of visionary experiences, from shamanic traditions to mystic revelations, often include descriptions of radiating, nested, or recursive

symbols. The emergence of fractal imagery in such contexts may indicate that self-similar patterns are not just external representations but fundamental cognitive and perceptual structures.

Psychiatric studies have also documented fractal and mandala-like imagery in the art of individuals experiencing schizophrenia (1922). The tendency for these individuals to produce highly structured, symmetrical, and recursive forms, often without explicit mathematical knowledge, suggests that fractal-like imagery can arise endogenously within the psyche. Jung (1959) noted that mandalas frequently appear in the visions and artwork of psychiatric patients, interpreting them as spontaneous expressions of an underlying order attempting to emerge during psychological fragmentation. The presence of fractal-like structures in both psychiatric and psychedelic states supports the idea that the psyche may be inherently attuned to recursive order.

The presence of fractal-like structures across historical, artistic, and visionary traditions could reflect cognitive pattern recognition, a symbolic reflection of archetypal order, or an indication that recursive mathematics may play a role in both mind and nature. While this study does not attempt to establish definitive causal relationships, it opens the door for further research into the potential connections between fractal geometry, symbolism, and psychology.

4.2 Exploring the Chakra System

Given the recurring structural similarities observed across diverse symbolic traditions and the humanoid appearance of the Buddhabrot, it is worth exploring whether its structure parallels systems that map symbolic meaning onto the human body. One such system is the Chakra tradition, which conceptualizes the body as a microcosm of cosmic order, with energy centres

aligned along a central axis. If the Buddhabrot's focus centres correspond to these established mappings, it may suggest that fractal structures offer a visual and conceptual model for organizing archetypal patterns. The following section examines these potential correspondences, considering both structural features and symbolic interpretations. It is important to note that the understanding of the chakra system is highly subjective, varying significantly across different texts, interpretations, translations, and spiritual traditions, each offering unique symbolic, energetic, and philosophical perspectives.

The Chakra System maps the human body as a microcosm of the universe, aligning spiritual, mental, and physical energies with cosmic principles. This mirrors the idea that inner and outer realities are part of a unified whole, perhaps reminding one of the *Unus Mundus*.

According to many descriptions, there are seven primary chakras aligned along the spine, each associated with specific physical, emotional, and spiritual aspects. Starting from the base of the spine, the chakras are: Muladhara (Root Chakra), associated with survival and grounding; Svadhisthana (Sacral Chakra), linked to creativity and sexuality; Manipura (Solar Plexus Chakra), connected to personal power and will; Anahata (Heart Chakra), representing love and compassion; Vishuddha (Throat Chakra), associated with communication and truth; Ajna (Third Eye Chakra), linked to intuition and insight; and Sahasrara (Crown Chakra), representing spiritual connection and enlightenment (1974).

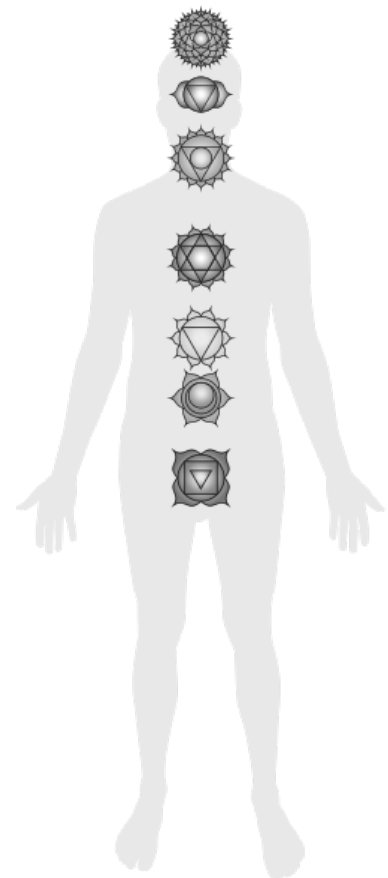


Figure 19. A highly simplified illustration of the chakra system along the spine

Focus 0 and The Root Chakra

Focus 0 in the Buddhabet exhibits an ovoid shape, which bears resemblance to the lingam traditionally depicted within the Root Chakra. In Tantric symbolism, the mandala for the Root Chakra is represented as a four-petaled lotus with a downward-pointing triangle, within which resides the Shiva Lingam. The lingam is often depicted as an ovoid-like structure, symbolizing latent creative energy and the unmanifested potential of existence.

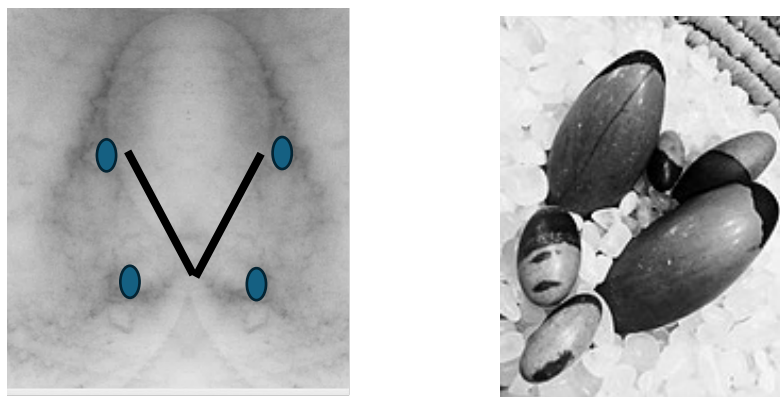


Figure 20. Left and middle: Focus 0 mapping and right: Swayambhu Lingams

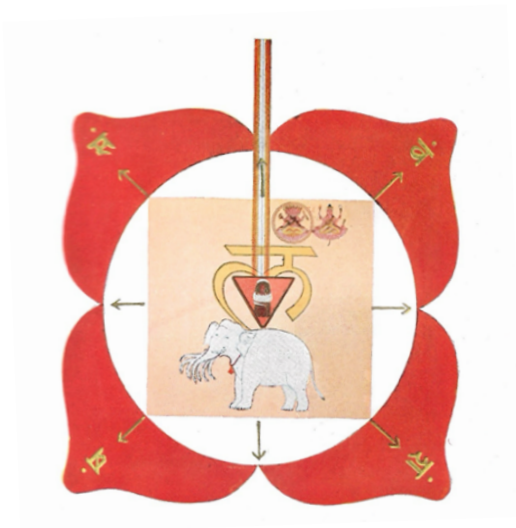


Figure 21. The Root Chakra mandala displaying a square within which is an inverted triangle, and within that is a Lingam bearing an ovoid-like shape.

Focus 1 and the Sacral Chakra

Moving upward from Focus 0, Focus 1 appears to structurally echo the Sacral Chakra.

Tantric texts describe this chakra as being 6-petalled “shaped like the half-moon”, often associated with an upward-facing crescent moon (1974). Within Focus 1 of the Buddhabrot, a crescent-like structure might be observed, with lines radiating perpendicularly from it. A hexagonal radial pattern might also be imagined radiating from a central region, which might be similar to the 6-petals possessed by this chakra.

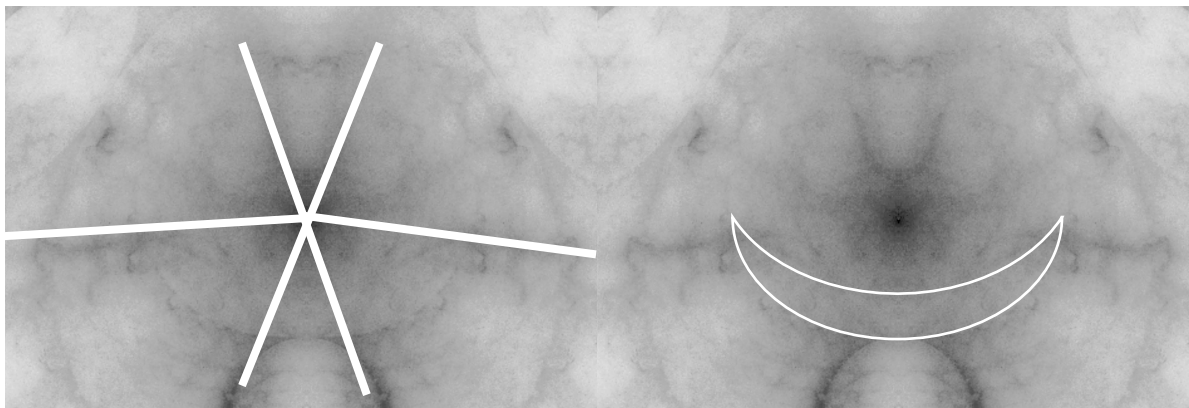


Figure 22. Mapping of Focus 1

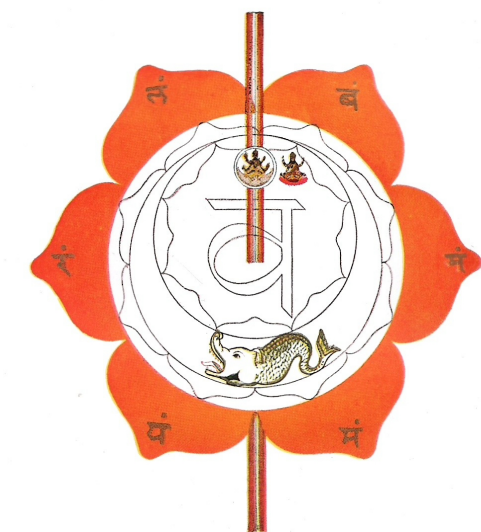


Figure 23. The Sacral Chakra mandala displaying an upwards facing crescent moon.

Focus 2 and the Solar Plexus Chakra

Focus 2 shares some notable similarities with traditional descriptions of the Solar Plexus Chakra in Tantric texts. This focus centre overlaps with the same region as Focus 1, but its defining characteristics include a central luminous motif with lines radiating upwards. Tantric sources describe the Solar Plexus Chakra as “triangular in form and shining like the rising sun”, and elsewhere as “radiant like the rising sun” (1974). Within Focus 2, an inverted triangle appears to emerge from a central circle, giving the impression of light radiating from within, a quality often attributed to this chakra.

Some descriptions of the chakra mention three svastika-like signs positioned on its three sides, symbols historically associated with the sun and dynamic energy. While not explicitly visible, there are three ambiguous shapes within Focus 2, two of which bear a partial resemblance to this motif (marked in green below). These resemblances remain open to interpretation.

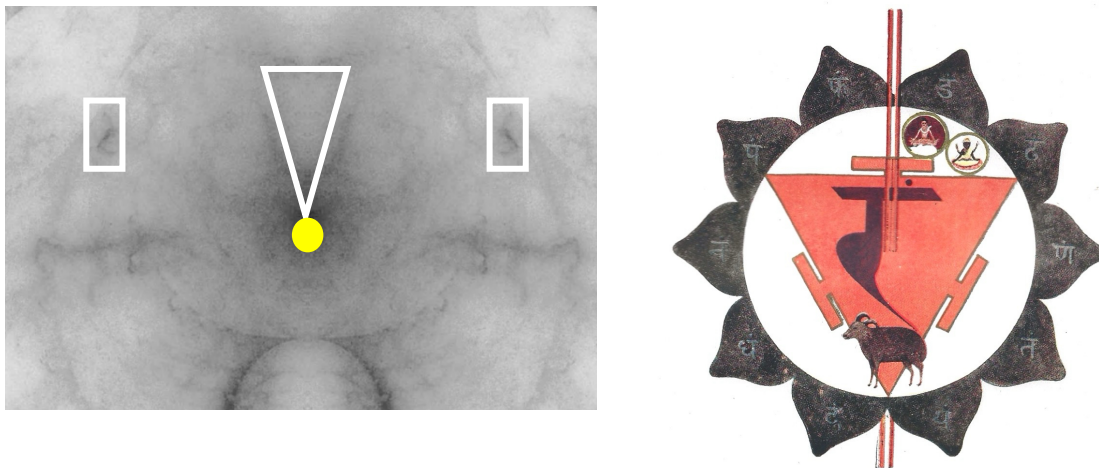


Figure 24. Mapping of Focus 2 and mandala for Solar Plexus

Focus 3 and the Heart Chakra

As we ascend further along the Buddhabrot, the fractal structure of Focus 3 bears a striking resemblance to traditional descriptions of the Heart Chakra. In Tantric depictions, this chakra is characterized by a hexagram, formed by an upward-pointing and downward-pointing triangle. The descriptions of this chakra found in the Tantras are particularly elaborate (1974).

A teardrop-like shape within Focus 3 can be compared to multiple **symbolic** references for the heart chakra:

- The Heart Chakra is described as being “like the celestial Kalpataru”, a mythical wishing tree often depicted with a teardrop-like silhouette.
- Another description states it is “like unto the steady tapering flame of a lamp in a windless place,” a visual echoed in the central tapering form of Focus 3.

The spiraling filaments surrounding the teardrop motif may be compared to further symbolic descriptions of the Heart Chakra:

- It is said to be “surrounded by masses of vapor” and “beautified by filaments which surround”, imagery that parallels the fractal branching found around Focus 3.
- The filaments are further described as being illuminated with “the rays of the sun,” an element reflected in the radiant character of Focus 3.

At the centre of the Heart Chakra, Tantric sources identify as the Vana-Linga, a which typically has an ovoid-like shape. Within Focus 3, the central ovoid echoes the Vana-Linga, reinforcing a potential symbolic resonance.

The juxtaposed orientations of the teardrop shape and spiraling filaments may also suggest a visual hexagram-like structure, reminiscent of the traditional mandala of the Heart Chakra.

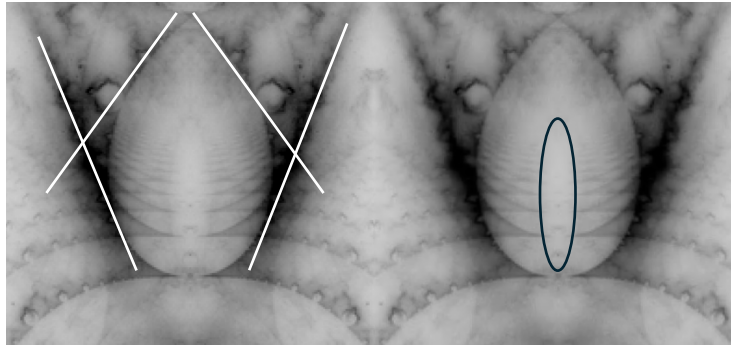


Figure 25. upper: mapping Focus 3, lower left: Kalpataru tree, lower right: mandala

Focus 4 and the Throat Chakra

Within the Tantric tradition, the Throat Chakra is described as having sixteen petals, with a central circular region that is “circular and white”. The mandala of this chakra is further characterized by an inverted triangle enclosing a circle, a structural motif that can be visually appreciated within Focus 4.

A particularly notable element of the Throat Chakra’s symbolism is the presence of Airavata, the white elephant associated with divine energy. The Tantras describe this image as “on an

elephant white as snow is seated”. Within Focus 4 one might interpret a seated elephant-like shape, aligning with Airavata’s placement within the chakra’s mandala.

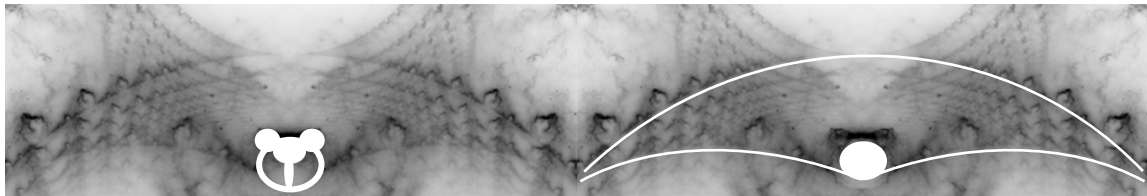


Figure 26. mapping Focus 4

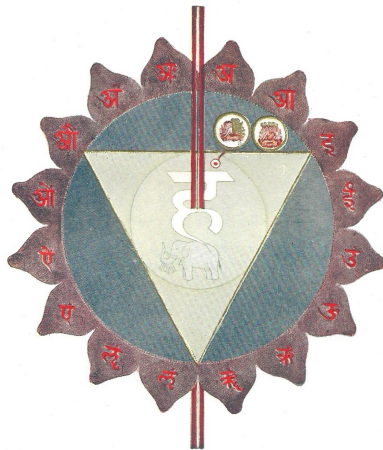


Figure 27. The mandala for the throat chakra with an inverted triangle within which is a circle, where a white elephant is positioned (1974).

Focus 5 and the Third Eye chakra

The Tantras (1974) describe the Third Eye Chakra as a luminous centre with two petals, frequently emphasizing its radiance and whiteness: “White and auspicious”, “...is like the moon, beautifully white”, “...its two petals are also white and enhance its beauty” and “Brightness of ten million suns”

In *Serpent Power*, Avalon translates a description of the Third Eye Chakra as “Inside the Yoni in the [centre] is the Shiva called Itara in His phallic form. He here shines like a chain of lightning flashes”. From this we may infer that the well-known linga-yoni motif may be

present around the centre of the chakra. Further, Avalon writes “within the triangle in the [centre] dwells Itara-shivapada” and further “Inside it is the Linga Itara, crystalline and with three eyes”. Here we may infer that the linga-yoni motif is enclosed by a triangle.

At the centre of the Third Eye Chakra within the triangle, Avalon describes the formation of Pranava (Om), the primordial sound of the universe. Avalon’s translation reads “resembles a flame in its radiance. Above it is the half-moon and above this again is Ma-kara shining in its form of Bindu. Above this is Nada.... diffuses the rays of the moon”.

In more simple terms one could interpret the Tantric texts to describe the chakra as having:

- Two petals
- A central point representing Om
- A triangle
- A Linga-Yoni structure (possibly an ovoid-like shape resting in a base)
- An especially radiant or flame-like form above the centre

In Figure 15, Focus 5 has been isolated and magnified to better assess its structural and symbolic characteristics. At the base, a cylindrical dome and solid foundation can be interpreted, resembling the Linga-Yoni motif. Within this structure, a small luminous figure can be perceived, echoing a form of Shiva within a linga.

Above the dome, we can imagine an inverted triangle enclosing a central circle, mirroring both the chakra’s traditional mandala and the position of Om in Tantric descriptions. Further upwards, two symmetrical petal-like shapes emerge, framing the central point, as described in classical representations. The brightest area within Focus 5 expands upwards like a radiant flame, reminiscent of descriptions of the chakra.

These are extremely subjective observations, and based mostly on single translations made by Avalon over 100 years ago, and are only meant to be explorative and intriguing.

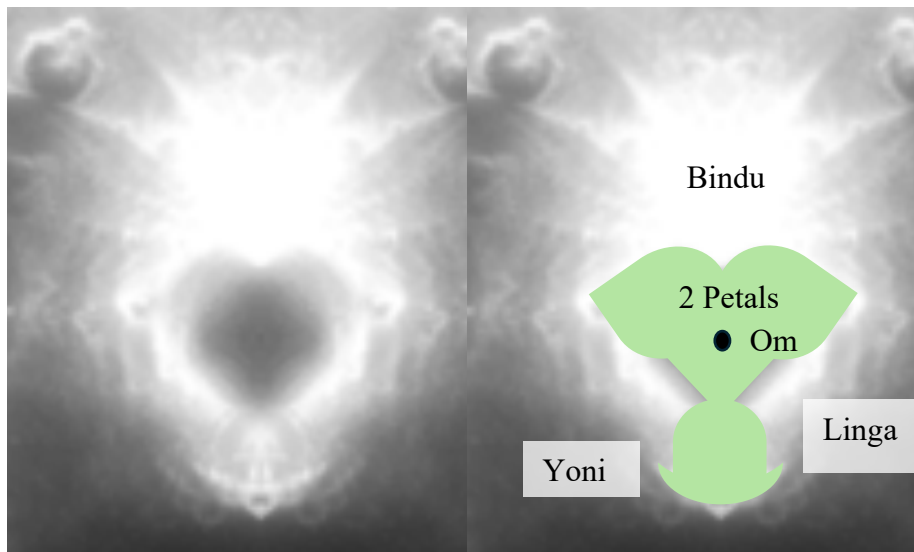


Figure 28. mapping Focus 5



Figure 29. Depictions of the Third Eye Chakra

Focus 6 and the Crown Chakra

The Crown Chakra is often described as luminous and intricate:

- It is known as the "lotus of a thousand petals," signifying its expansive and multifaceted form.

- Within this lotus, a full moon is often depicted, representing illumination and pure consciousness.

In Focus 6, we observe structural similarities that resonate with these descriptions. A circular motif is positioned at the highest point of the Buddhabrot, which may be likened to the full moon within the crown chakra. The overall structure of the Buddhabrot's uppermost fractal bulb presents a repetitive petal-like pattern, evocative of the thousand-petaled lotus often associated with this chakra.

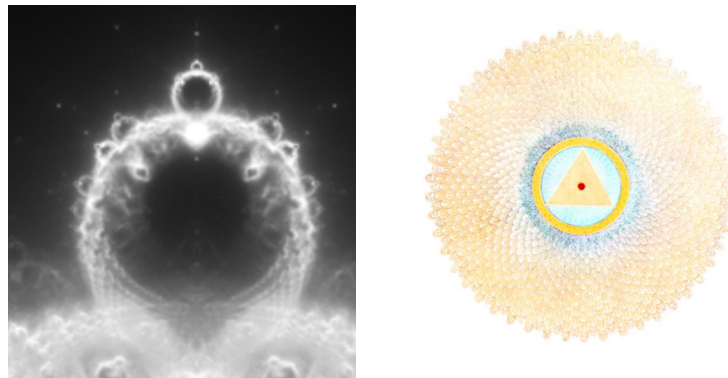


Figure 30. top: Focus 6 and representation of the crown chakra

The qualitative correspondences observed between the Buddhabrot and the Chakra system suggest that fractal structures may bear symbolic resonance with established representations of embodied spiritual order. While no causal relationship is asserted, these similarities invite reflection on the role of perception, cognitive pattern recognition, and the archetypal nature of number in shaping symbolic systems. The Chakra system, rooted in centuries of meditative and yogic traditions, is explicitly structured around a hierarchical model of energetic flow within the body, while the Buddhabrot, as a fractal, emerges from an entirely mathematical process. That such independent systems exhibit visual parallels suggests that self-organizing structures such as the Buddhabrot may hold deeper psychological and symbolic significance.

These findings align with Jung's broader exploration of the *Unus Mundus*, where meaningful structures emerge at the intersection of psyche and matter. Pauli's collaboration with Jung speculated that number and mathematical principles might provide a key to understanding this underlying unity. While the present analysis does not claim to resolve this question, it highlights how fractal geometry, as exemplified by the Buddhabrot, may offer a compelling framework for exploring the intersections of depth psychology, symbolic traditions, and mathematical order.

5. Conclusion

This study has examined qualitative structural correspondences between the Buddhabrot fractal and symbolic representations related to the *Unus Mundus* across diverse historical and cultural contexts. The findings reveal a series of apparent parallels between the Buddhabrot and images associated with cosmic order, transformation, the microcosm-macrocosm relationship and altered states of mind. These possible correspondences, observed in religious iconography, sacred architecture, alchemical emblems, and visionary art may warrant future investigation.

While it is acknowledged that these apparent similarities could arise from perceptual tendencies, cognitive heuristics, or cultural transmission, they also resonate deeply with the Jung-Pauli hypothesis that numbers and mathematical structures serve as mediators between psyche and matter. The Buddhabrot's fractal geometry, which emerges from simple recursive processes yet exhibits infinite complexity, bears a compelling resemblance to the self-organizing principles that Jung and Pauli speculated might underlie the *Unus Mundus*. Further, its resemblance to artistic representations from altered states of consciousness

suggests a potential link between fractal perception, psychological states, and archetypal imagery.

Although no causal relationship is proposed, this study raises the possibility that the Buddhabrot visually expresses fundamental structuring principles of mind and nature. As a fractal emerging from mathematical logic, it may serve as a bridge between symbolic thought and objective mathematical reality, embodying the deep unity that Jung and Pauli sought to articulate. By continuing to investigate the relationship between mathematical order, depth psychology, and symbolic expression, we may gain further insight into the profound connections between psyche and cosmos.

Fractal-like geometries appear with striking regularity in religious, spiritual, psychedelic (2016), and schizophrenic experiences (1922), suggesting an underexplored connection between self-similar patterns and psychologically relevant images. While their prevalence does not indicate causation, it raises an important question: why do these geometries emerge in altered states of consciousness and within traditions that seek to express the numinous? The recurrence of fractals in mandalas, sacred architecture, visionary art, and spontaneous imagery from the unconscious suggests that they could reflect a fundamental structuring principle within the psyche.

The Buddhabrot stands out as a particularly compelling fractal, not only because of its unusual method of generation, which emphasizes the trajectories of points escaping to infinity rather than static boundaries, but also because of its seemingly organic and numinous appearance. Most fractals reveal rigid, static structures or highly repetitive symmetries. In contrast, the Buddhabrot unfolds dynamically, producing a layered, almost spectral form that appears to emerge rather than simply exist. For Jung, the spontaneous emergence of order from chaos was central to individuation. Unlike other fractals, the Buddhabrot does not

merely expose a mathematical boundary; it arguably reveals an evocative image immediately reminiscent of ancient symbols related to the archetype of the Self (e.g. Egyptian Pharaohs, Buddha or Ganesha). Pauli speculated that number itself might possess an archetypal quality, serving as a bridge between the material world and the organizing structures of the psyche. It is difficult to imagine that Jung and Pauli would not have been drawn to the Buddhabet as a mathematical phenomenon that might enact the principles they were exploring. If Jung and Pauli were correct in proposing that number acts as a bridge between psyche and matter, then the Buddhabet might represent a rare case where this bridge is made visible. These considerations alone, regardless of the subjective analyses presented in this work, place the Buddhabet in conversation with Jung and Pauli's concept of the *Unus Mundus*.

Ongoing research is exploring the Buddhabet in relation to the Self and as a way for exploring individual and collective individuation, drawing inspiration from Neumann's (1954) model of consciousness development. Additionally, preliminary studies are investigating anecdotal reports of the observation of fractal forms in dreams and visions.

As a final note, Pauli's dream of "The World Clock," as described in *Psychology and Alchemy*, reveals an unconscious bound to mathematics (1968). An excerpt is below:

"[I see] a vertical and horizontal circle, having a common centre. There is the world clock...The vertical circle is a blue disc with a white border divided into $4 \times 8 = 32$ partitions. A pointer rotates upon it."

The dream's mathematical precision suggests that the unconscious is bound to a mathematical framework. The shared centre echoes the symmetrical origin of the Mandelbrot set, while the divisions into 4, 8, and 32 and the rotating pointer resonate with the recursive

and rotational processes inherent in its generation. Perhaps, Pauli's dream hints at the fractal characteristics of the *Unus Mundus*.

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