

# The Role of Sacred Geometry in Traditional Indian Art Forms

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## ABSTRACT

Sacred geometry has played a foundational role in shaping Indian artistic, architectural, and cultural traditions for several millennia. Deeply rooted in spiritual philosophies, metaphysical symbolism, and advanced mathematical reasoning, sacred geometry provides the structural and conceptual framework for a wide range of Indian art forms. It governs the design logic and proportional systems of Hindu temples, classical sculptures, Buddhist mandalas, Tantric yantras, Jain cosmographs, tribal artworks, kolam and rangoli designs, and even Indo-Islamic geometric ornamentation. This research paper examines the symbolic, mathematical, and cultural implications of sacred geometry by exploring how geometric patterns serve as visual expressions of cosmology, divine order, and universal harmony.

Through a historical and interdisciplinary analysis, it reveals how geometry operates as a spiritual language—encoding concepts such as the microcosm–macrocosm relationship, energy fields, ritual significance, and meditative consciousness. Furthermore, the study demonstrates that geometric systems in Indian art are not merely decorative; they function as tools for ritual practice, aesthetic balance, cognitive focus, and cultural continuity. By analyzing diverse art traditions across India, this paper highlights the underlying unifying logic that connects varied styles of geometric abstraction, showing how the Indian visual tradition consistently merges mathematics, spirituality, and artistic expression into a cohesive whole.

**Keywords:** Sacred Geometry; Indian Art; Temple Architecture; Mandala; Yantra; Vastu Purusha Mandala; Kolam; Rangoli; Jain Cosmography; Tribal Art; Tessellation; Fractals; Symmetry; Proportion; Geometric Abstraction; Hindu Iconography; Indo-Islamic Art; Cosmology; Traditional Design Systems.

## INTRODUCTION

Sacred geometry refers to a system of symbolic, mathematically precise, and spiritually meaningful geometric patterns that have been used across civilizations to represent cosmic order, divine principles, and the intrinsic harmony governing the universe. In India—one of the oldest cradles of mathematical knowledge—geometry has historically been inseparable from spirituality, ritual practice, and artistic expression. Rather than being viewed as a purely technical or architectural tool, geometry in the Indian tradition was understood as a sacred science (śāstra) capable of bridging the material and metaphysical realms. Ancient Indian texts such as the Śulba Sūtras, Vāstu Śāstra, and the Āgamas offer detailed instructions on the use of geometric forms in ritual altars, temple layouts, iconographic proportions, and sacred diagrams.

These treatises interpret geometry as an expression of cosmic truths, emphasizing proportionality, symmetry, orientation, and numerical harmony as essential principles for constructing spiritually potent spaces and artworks. For instance, the Śulba Sūtras, composed between 800–500 BCE, contain sophisticated rules for altar construction based on geometric transformations, illustrating an early integration of mathematics with ritual significance. Similarly, Vāstu Śāstra conceptualizes the temple and dwelling space as microcosmic representations of the universe, organized through mandala grids and directional alignments. Across diverse Indian artistic traditions, sacred geometry manifests through a wide range of visual forms—from the architectural layout of Hindu temples to the carefully calculated proportions of sculpted deities; from the symmetrical precision of yantras and mandalas to the iterative, fractal-like patterns of kolam and rangoli practiced in everyday households.

These geometric configurations are not merely ornamental; they symbolize deeper metaphysical concepts such as balance, cyclical time, interconnectedness, and the flow of spiritual energy (prāṇa). They serve as cognitive and meditative tools, helping practitioners engage with higher states of awareness and embodying philosophical ideas rooted in Hindu, Buddhist, Jain, and Tantric traditions. Given the breadth and depth of these applications, this research paper explores the multifaceted role of sacred geometry in traditional Indian art forms. It seeks to examine how geometric structures encode cosmological worldviews, guide ritual practices, and shape aesthetic frameworks. By investigating both monumental and everyday expressions of geometry—from grand temple complexes to domestic floor art—this study highlights the profound philosophical, cultural, and ritual relevance of geometry within the Indian visual tradition.

## **2. Objectives of the Study**

1. To understand the historical significance of sacred geometry in Indian culture.
2. To analyze the application of geometry in major traditional Indian art forms.
3. To examine the mathematical principles underlying sacred designs.
4. To explore the symbolic and spiritual meanings embedded in geometric motifs.
5. To highlight the continuity of geometric art in contemporary Indian practices.

## **3. Research Methodology**

This study adopts a qualitative, descriptive, and historical-analytical research methodology to explore the role of sacred geometry in traditional Indian art forms. Given that sacred geometry is deeply embedded in ancient texts, architectural practices, ritual traditions, and visual symbolism, a qualitative method allows for a nuanced interpretation of meanings, patterns, and cultural contexts. The methodology integrates textual study, visual analysis, and comparative interpretation. The key components are described below:

### **3.1 Review of Ancient Texts**

A systematic textual analysis was conducted using primary sources such as:

- Śulba Sūtras – for early geometric knowledge in altar construction.
- Vāstu Śāstra – for architectural geometry, mandala grids, spatial design, and proportional systems.
- Tantric literature (Āgamas, Paddhatis, Yantra manuals) – for symbolic geometry in mandalas and yantras.

These texts were examined to identify mathematical principles, cosmological symbolism, and ritual guidelines underlying geometric practices.

### **3.2 Field Observations**

Field visits and observational studies were used to examine:

- Traditional Hindu temple architecture (floor plans, mandala layouts, shikhara geometry).
- Jain temple cosmographs and iconographic panels.
- Buddhist mandalas in monasteries and paintings.
- Folk art traditions such as kolam, rangoli, Warli designs, and tribal mural art.

Direct visual documentation—photographs, sketching of grid structures, and noting of spatial proportions—enabled a firsthand understanding of geometrical applications in living traditions and architectural spaces.

### **3.3 Comparative Iconographic Analysis**

A comparative framework was applied to analyze:

- Recurrent geometric motifs across Hindu, Buddhist, Jain, tribal, and Islamic art.
- Shared features such as symmetry, concentric forms, fractal patterns, and mandala-based layouts.
- Differences in symbolism, purpose, ritual function, and stylistic execution.

This approach helped identify the unifying principles as well as the diversity of geometric abstraction across Indian visual traditions.

### **3.4 Secondary Literature Review**

The study further incorporates insights from:

- Art history (temple architecture, sculpture, visual traditions).
- Anthropology (ritual symbolism, folk art practices, tribal geometry).
- Mathematics and geometry studies (fractal analysis, proportional systems, symmetry studies).
- Cultural and religious studies (cosmology, symbolism, mythology).

Scholarly articles, books, museum records, and research papers were critically reviewed to contextualize findings and support comparative interpretations.

### **3.5 Analytical Tools and Frameworks**

- Symbolic interpretation to decode metaphysical meaning.
- Geometric reconstruction of patterns (e.g., yantra structures, kolam designs).
- Historical contextualization to trace evolution across periods and regions.
- Cross-cultural comparison with global sacred geometry where appropriate.

### **3.6 Use of Tables and Structured Comparisons**

To enhance clarity, the study includes:

- Comparative tables of geometric motifs across art forms.
- Summaries of mathematical principles observed in architecture and diagrams.
- Structural comparisons of mandalas, yantras, and folk patterns.

These tools support systematic understanding and highlight thematic connections.

## **LITERATURE REVIEW**

### **4.1 Sacred Geometry and Cosmology**

Scholars examining the origins of Indian geometry consistently observe that the earliest forms emerged from ritualistic and cosmological needs rather than purely mathematical motivations. Works by Sen & Bag explain how Vedic ritual practices—especially the construction of fire altars—required precise geometric knowledge. The Śulba Sūtras, among the most significant early mathematical texts, provide detailed rules for altar construction involving complex operations such as symmetry arrangements, area equivalence, diagonal calculations, and square-to-circle transformations. These rules illustrate the deep interconnection between mathematics, ritual accuracy, and cosmological symbolism in ancient India. According to such scholars, geometry served not merely as a technical tool but as a method to align human actions with cosmic order, reinforcing the belief that correctly proportioned ritual spaces facilitated divine harmony.

### **4.2 Geometry in Temple Architecture**

Stella Kramrisch, in her influential studies on Indian temple architecture, emphasizes that the Hindu temple is fundamentally a geometric manifestation of the cosmos. Her work, *The Hindu Temple*, argues that sacred geometry forms the conceptual blueprint through which metaphysical ideas are translated into tangible architectural form. Principles derived from Vāstu Śāstra, particularly the Vāstu Purusha Mandala, govern the spatial organization, orientation, and proportional logic of temple layouts. These mandala grids, typically square and subdivided into smaller modules, symbolize the universe and encode the relationship between the microcosm (human existence) and the macrocosm (cosmic reality). According to Kramrisch, every architectural element—from the garbhagriha (sanctum) to the shikhara (superstructure)—is guided by geometric principles meant to facilitate the devotee's spiritual ascent and communion with the divine.

### **4.3 Geometry in Mandalas and Yantras**

Khanna and Gopinath Rao provide detailed insights into the symbolic and geometric complexity of mandalas and yantras, central visual tools in Hindu, Buddhist, and Tantric traditions. Khanna describes yantras as “visual mantras,” structured through precise combinations of triangles, circles, lotus petals, lotus rings, and the bindu, which represents the point of cosmic origin. Gopinath Rao further explains the iconographic rules governing these sacred diagrams, noting that every geometric element—from the orientation of triangles to the number of petals—has ritual significance and metaphysical meaning. Mandalas, particularly in Buddhist practice, employ concentric arrangements and directional symbolism to depict the universe and guide meditative visualization. Together, these scholars highlight that sacred diagrams serve not only as ritual instruments but also as cognitive maps for spiritual transformation.

### **4.4 Folk and Indigenous Art**

Research by Asher and Venkatesan expands the understanding of sacred geometry beyond classical and religious contexts by exploring its presence in folk and indigenous art traditions. Studies on kolam, rangoli, and tribal motifs reveal a sophisticated use of geometric logic embedded within everyday cultural practices. Kolam designs, traditionally drawn by women in South India, employ dot grids, iterative loops, and self-similar patterns resembling modern fractal structures. These designs reflect notions of auspiciousness, cyclical renewal, and communal identity. Similarly, rangoli practices in various regions incorporate symmetrical motifs, radial patterns, and ritual symbolism. Tribal art forms such as Warli and Gond utilize basic geometric shapes—triangles, circles, and lines—to convey narratives, cosmologies, and social structures. Asher and Venkatesan emphasize that these vernacular art forms embody mathematical thinking that is intuitive, generationally transmitted, and culturally meaningful.

## **5. Analysis of Sacred Geometry Across Indian Art Forms**

Sacred geometry manifests across Indian art forms through diverse visual languages, yet all share a unifying principle: the use of mathematically ordered patterns to express spiritual, cosmic, and metaphysical concepts. The following analysis examines how different traditions employ geometric forms for symbolic, aesthetic, and ritual purposes.

### **5.1 Hindu Temple Architecture**

Hindu temple architecture is one of the most profound manifestations of sacred geometry in India. Temples are constructed according to highly codified architectural treatises, ensuring that every spatial division, structural element, and proportional ratio reflects cosmic order and divine harmony.



**Figure 1: Hindu Temple Architecture**

### **Key Geometric Components**

**Vāstu Purusha Mandala:** The foundational layout of the temple is derived from this mandala, typically structured as a  $8 \times 8$  (64) or  $9 \times 9$  (81) grid.

- Each cell represents a deity, energy field, or cosmic function.
- The central cell (Brahmasthanā) symbolizes the source of creation.
- Orientation is aligned with the cardinal directions, reflecting cosmic geography.

**Shikhara Geometry:** The shikhara (northern temples) or vimana (southern temples) uses curvilinear and pyramidal geometry.

- The shape approximates parabolic curves and harmonic progression, ascending toward a point.
- This vertical tapering symbolizes spiritual ascent and the axis connecting heaven and earth.

**Proportional Ratios (Tāla System):** Temple and sculpture proportions follow a modular system called tāla, where:

- One tāla is a basic unit.
- The temple or image is divided into fixed ratios to ensure symmetrical beauty and divine proportion.

### **Symbolic Meaning**

In Hindu thought, the temple is a microcosmic model of the universe. Its geometry symbolizes Mount Meru, the mythic cosmic axis, with every structural layer representing a different plane of existence. The devotee's movement through the temple replicates a spiritual journey from the earthly to the divine. Thus, geometry is not merely architectural—it acts as a ritual guide to transcendence.

### **5.2 Buddhist Mandalas**

Buddhist mandalas are highly codified geometric diagrams representing the universe, consciousness, and pathways to enlightenment.



**Figure 2: Buddhist Mandalas**

### Key Features

- **Concentric Circles:** Symbolizing cycles of existence, the layers depict worlds within worlds, guiding practitioners inward.
- **Four Cardinal Gateways (T-shaped):** Oriented to the north, south, east, and west, these gateways mark the entry points into sacred space and correspond to cosmic directions and guardians.
- **Lotus Petals Arranged Radially:** The lotus symbolizes purity emerging from the cosmic ocean. Radial petals indicate expansion from a central point (the dharmic center).

### Purpose

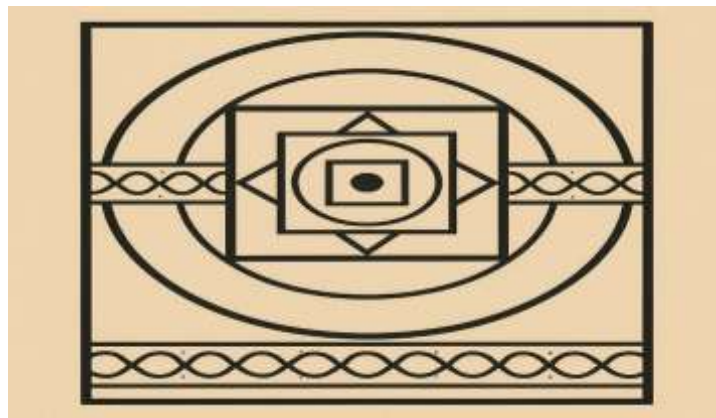
Mandalas serve multiple functions:

- Tools for meditation and visualization practices.
- Visual maps of the cosmos and mind.
- Symbols of impermanence (e.g., Tibetan sand mandalas).

Their geometry ensures mental focus, spiritual alignment, and cognitive clarity.

### 5.3 Jain Cosmographs

Jain art expresses the universe through elaborate cosmographs, the most famous being the Jambudvipa diagram.



**Figure 3: Jain Cosmographs**

### Key Features

- Constructed through circle–square geometric relationships.
- Jambudvipa (the central continent) is depicted as a circular region surrounded by concentric oceans and rings.
- Square boundaries indicate the structured universe governed by karma and order.

### Symbolic Significance

These diagrams are not decorative—they are didactic tools explaining Jain cosmology, metaphysics, and the moral structure of existence.

### 5.4 Yantras in Tantric Tradition

Yantras are symbolic geometric diagrams used for meditation, ritual worship, and invoking specific deities or energies.



**Figure 4: Yantras in Tantric Tradition**



### **Sacred Geometry in Yantras**

The Śrī Yantra is the most complex and revered yantra.

#### **Mathematical Structure of the Śrī Yantra**

- 9 interlocking triangles:
  - 4 upward triangles (Śiva)
  - 5 downward triangles (Śakti)
- These intersect to form 43 subordinate triangles.
- Surrounded by lotus rings (energy circles), a square enclosure (bhupura), and an inner bindu (cosmic point).

#### **Geometric Complexity**

The perfect construction of the Śrī Yantra requires exceptional mathematical precision. Small misalignments lead to distortions, making it a classic example of applied geometry intertwined with metaphysical symbolism.

#### **Symbolic Meaning**

- Represents the union of masculine and feminine energies.
- Depicts the evolution of the cosmos from the bindu outward.
- Serves as a meditative tool for spiritual realization.

### **5.5 Rangoli, Kolam, and Alpana**

These folk geometric traditions demonstrate how sacred geometry permeates everyday life in India.



**Figure 5: Rangoli**

#### **Key Features**

- **Dot Grids (Pulli Kolam):** Patterns begin with a matrix of dots, providing a structured geometric foundation.
- **Fractal Generation:** Kolam often uses recursive loops and self-similar patterns, making them fractal in nature. These designs reflect principles of repetition, continuity, and cyclicity.
- **Symmetric Curves and Loops:** The geometric symmetry symbolizes balance, harmony, and the infinite nature of the universe.

#### **Cultural and Ritual Significance**

- **Drawn daily at thresholds to invite prosperity, ward off negativity, and maintain ritual purity.**
- Passed down matrilineally through generations.
- Represents the belief that beauty and mathematics enhance spiritual well-being.

### **5.6 Tribal Arts (Warli, Gond, Saura)**

Tribal art forms incorporate simple yet powerful geometric vocabularies.



**Figure 6: Tribal Arts**

#### **Warli Art**

- Uses triangles, circles, and lines to depict human figures, rituals, and nature.
- The circle symbolizes the sun and moon; the triangle represents mountains and trees.

#### **Gond Art**

- Employs dot-and-line geometry to create rhythmic patterns symbolizing natural energies.

#### **Saura Art**

- Utilizes rectangular frames and linear geometry to depict deities and cosmological events.

#### **Geometric Significance**

These tribal traditions reflect a deep connection with nature, community life, and ancestral spirits, using geometry as a storytelling medium.

### **5.7 Islamic Geometric Art in India**

Islamic art in India—especially during the Mughal period—introduced a distinctive style of geometric ornamentation.

#### **Key Features**

- **Eight-pointed Stars:** Symbolizing balance, harmony, and cosmic unity.
- **Tessellations:** Interlocking polygons forming continuous, non-repeating patterns, reflecting the infinite nature of creation.
- **Arabesques:** Curvilinear motifs that blend geometric precision with organic flow.

#### **Cultural Influence**

These Islamic geometric elements blended with Indian aesthetics in monuments such as the Taj Mahal, creating syncretic art forms that bridged mathematical elegance with spiritual contemplation.

### **6. Tables and Comparative Data**

The following tables present a structured, comparative view of the geometric foundations, symbolic interpretations, and mathematical elements found across major Indian art traditions. These tables help illustrate how diverse cultural practices are unified by shared geometric principles while maintaining distinct regional and spiritual identities.

**Table 1: Geometric Motifs in Major Indian Art Forms (Elaborated)**

Art Form	Key Geometry Used	Symbolic Meaning	Elaboration
<b>Hindu Temple Architecture</b>	Mandala grids, symmetry, golden ratio, axial alignments	Cosmic order, divinity, microcosm–macrocosm unity	Temple plans follow Vāstu Purusha Mandala grids, establishing spatial harmony; proportions express universal balance.
<b>Buddhist Mandalas</b>	Concentric circles, nested squares, radial symmetry	Universe, meditation, path to enlightenment	Mandalas reflect the layered structure of reality and serve as tools for visualization in spiritual practice.
<b>Jain Cosmography</b>	Circle–square diagrams, concentric regions	Structure of the cosmos, karmic cycles	Jain cosmographs like Jambudvīpa visually represent the world’s geography and spiritual hierarchy.
<b>Yantras</b>	Interlocking triangles, lotus rings, bindu	Energy, spiritual focus, divine manifestation	Yantras encode metaphysical concepts; geometry channels cosmic energies for meditation and ritual.
<b>Rangoli/Kolam</b>	Dot grids, fractals, bilaterally symmetric loops	Auspiciousness, protection, renewal	Daily geometric drawings symbolize cyclical time, domestic harmony, and the welcoming of prosperity.
<b>Tribal Art (Warli, Gond, Saura)</b>	Triangles, circles, lines, repetitive motifs	Community, nature, ancestral connection	Tribal geometry narrates stories of life and nature, using simple shapes to express cosmological ideas.
<b>Islamic Art in India</b>	Tessellations, eight-pointed stars, interlacing patterns	Unity, infinity, divine transcendence	Mughal art uses endless geometric repetition to reflect the infinite nature of God.

These comparisons show that while geometry varies across traditions, its symbolic power remains central to Indian aesthetics.

**Table 2: Mathematical Elements in Sacred Geometry (Elaborated)**

Element	Description	Example in Indian Art	Elaboration
<b>Symmetry</b>	Balanced repetition of forms around an axis or center	Mandalas, kolam, temple plans	Symmetry reflects cosmic balance, order, and the harmonious structure of creation.
<b>Proportion</b>	Mathematical ratios governing spatial or visual relationships	Idol proportions, shikhara design	Ideal proportions ensure spiritual resonance and aesthetic perfection.
<b>Fractals</b>	Self-similar, repeating patterns at multiple scales	Kolam, Warli art, nature-inspired motifs	Fractals convey cyclicity, renewal, and infinite continuity.
<b>Tessellation</b>	Geometric tiling with repeated shapes, without gaps	Mughal inlay, jali screens	Tessellations create infinite visual fields symbolizing divine unity.
<b>Radial Geometry</b>	Patterns emerging from a central point outward	Śrī Yantra, Buddhist mandala	Represents emanation from the cosmic source and spiritual expansion.

These elements demonstrate that sacred geometry is not solely about aesthetics; it embodies mathematical precision interwoven with philosophical meanings.

## DISCUSSION

Sacred geometry serves as a powerful interdisciplinary connector that bridges art, spirituality, mathematics, architecture, and cultural anthropology. It functions both as a practical design system and as a symbolic language expressing India’s understanding of the universe. In temple architecture, geometric rules govern spatial harmony, structural stability, and ritual pathways. Mandala grids, proportionate iconography, and directional alignments ensure the temple acts as a physical and metaphysical center of devotion. In Tantric traditions, yantras use geometry as a tool for meditation, focusing consciousness through triangular patterns, concentric circles, and the bindu, which symbolizes the primordial point of creation. In folk traditions, such as kolam and rangoli, geometry becomes democratized. Women create fractal-like patterns daily, showing how mathematical thinking is embedded in domestic culture. These



motifs encode protective symbolism, mark auspiciousness, and reinforce community identity. This also highlights the aspect of gendered knowledge, where women preserve and transmit geometric traditions across generations. Tribal art uses simple geometric shapes to convey cosmology, ecology, and cultural memory, bridging the aesthetic with socio-spiritual life. Islamic geometry in India further enriches the tradition with tessellations and star polygons, representing infinite creation and divine perfection, demonstrating how sacred geometry transcends religious boundaries. Across these traditions, geometry acts as:

- a visual language of spiritual principles,
- a map of cosmological order,
- a carrier of heritage and identity,
- a medium of mathematical reasoning,
- a symbol of cultural continuity.

Thus, sacred geometry is both an aesthetic system and a cultural philosophy, harmonizing the physical and metaphysical worlds.

## CONCLUSION

Sacred geometry in Indian art embodies a profound and enduring synthesis of mathematics, spirituality, artistic expression, and cultural philosophy. Whether manifested in the monumental precision of temple architecture, the meditative symmetry of mandalas and yantras, or the everyday creativity of kolam, geometric patterns serve as windows into India's understanding of divine order and universal harmony. This research demonstrates that sacred geometry is far more than a decorative device—it is the foundational framework through which Indian art interprets the cosmos. Through precise ratios, symmetrical forms, radial patterns, fractal sequences, and tessellations, artists and practitioners express ideas of creation, balance, duality, energy, and interconnectedness. Moreover, the continuity of these geometric traditions across millennia highlights their adaptability and relevance. In contemporary times, sacred geometry continues to influence modern architecture, digital design, visual art, meditation practices, and cultural identity. Its principles remain timeless, offering a bridge between ancient wisdom and modern creativity. Ultimately, sacred geometry stands as a testament to India's unique ability to merge scientific knowledge, spiritual insight, and artistic vision into a unified and enduring cultural heritage.

## REFERENCES

- [1]. Acharya, P. K. (1934). *Architecture of Manasara: Translated from Original Sanskrit*. Oxford University Press.
- [2]. Anand, M. (1996). *The Hindu Temple: Its Meaning and Significance*. Motilal Banarsidass.
- [3]. Apte, V. (2002). *The Arts of India*. Arnold-Heinemann.
- [4]. Asher, C. B. (1980). *The Art of Eastern India, 300–800*. University of Minnesota Press.
- [5]. Chandra, P. (2005). *Indian Art: A History*. Oxford University Press.
- [6]. Daniélou, A. (1964). *The Hindu Temple*. Thames & Hudson.
- [7]. Gopinatha Rao, T. A. (1967). *Elements of Hindu Iconography* (Vols. 1–2). Motilal Banarsidass.
- [8]. Huyler, S. (1992). *Painted Prayers: Women's Art in Village India*. Rizzoli.
- [9]. Jain, J. (1998). *India: Tribal Rituals and Sacred Art*. MAPIN Publishing.
- [10]. Kramrisch, S. (1946). *The Hindu Temple* (Vols. 1–2). Motilal Banarsidass.
- [11]. Khanna, M. (1979). *Yantra: The Tantric Symbol of Cosmic Unity*. Thames & Hudson.
- [12]. Khanna, M. (2004). *The Mandala: Sacred Geometry of the East*. Inner Traditions.
- [13]. Michell, G. (1988). *The Hindu Temple: An Introduction to Its Meaning and Forms*. University of Chicago Press.
- [14]. Michell, G. (1995). *Architecture and Art of Southern India*. Cambridge University Press.
- [15]. Nagar, S. (1994). *Foundations of Indian Culture and Art*. New Age International.
- [16]. Nene, S., & Vaidya, S. (2013). Mathematical reasoning in traditional Indian rangoli designs. *Journal of Indian Mathematics*, 45(2), 180–195.
- [17]. Parimoo, R. (1982). *Life of Forms in Indian Art*. National Museum, New Delhi.
- [18]. Ramaswamy, V. (2011). *Walking Naked: Women, Society, Spirituality in South India*. Yoda Press.
- [19]. Rao, S. S. (2001). *Jaina Iconography*. Bharatiya Vidya Bhavan.
- [20]. Sen, S. N., & Bag, A. K. (1983). *The Śulba Sūtras*. Indian National Science Academy.
- [21]. Soundara Rajan, K. V. (1981). *Indian Temple Styles: The Personality of Hindu Architecture*. Aryan Books.
- [22]. Stella, M. (1990). *Indian Art and Culture*. Clarion Books.
- [23]. Subramuniaswami, S. (2001). *Loving Ganesha: Hinduism's Endearing Elephant-Faced God*. Himalayan Academy.
- [24]. Vatsyayan, K. (1997). *The Square and the Circle of Indian Arts*. Abhinav Publications.
- [25]. Zimmer, H. (1955). *Myths and Symbols in Indian Art and Civilization*. Princeton University Press.