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CHISELLED EXPRESSION AND NOTIONS OF MOVEMENT IN INDIAN DANCE

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Abstract: Indian dance or any dance is a form of Art that generally involves a shift or change or a pattern created in the space by the body movement! Dance is a form of non-verbal communication. The Human brains like to hunt patterns, keeping this in mind the dancers use Symmetry and Geometry in still or motion for an aesthetic appealing. The human bodies, generally or particularly, have certain affordances and limitations. The Elbows, knees, hips, wrists and ankles, can bend only in certain directions and through certain angular arcs. The Limbs, feet, fingers are of a particular size that cannot be made bigger or smaller. The strength, weight, flexibility and energy can vary with training, but there are limitations on how fast a person can move, and how high one can jump and how far one can bend. Particularities in terms of special abilities or disabilities, age, height and so on create a range of human movement possibilities. The Indian dance was not a mere matter of articulating the different limbs of the physical body (human). It can be analysed with the concept of movement in Space and Time.

Aim: This study explored to elicit the significance of Mathematical and Geometrical concept involved in visualizing Indian dance movements.

Introduction:

Indian tradition from the point of view of the biological realities which determine Man's relationship to Space outside, and the psychical process which relate Man to Time Past and Future. This ideational background in turn determines concepts of 'movement', both in the cosmogony and with reference to the articulation of the limbs of the human body in space in all the Indian arts.



The Cosmic Creation and the Movement

The Vedic writer is fully conscious of the physical reality of biological man. Repeatedly his organs are described. Narayana, who is the author of *Purusa-sukta*, describes vividly the organs, limbs, and parts such as the skeleton, bones, muscles and veins and arteries of the body on the cosmological plane.

‘Thousand-headed is the Supreme being, thousand-eyed and thousand-footed enveloping the world all around. He yet exceeded it by a span. All this is the Supreme being, whatever is past and whatever is in the future. He is the Lord of immortality as well as of that which grows by food (i.e. mortal creatures). Such is His greatness, and greater than that too is this supreme being; a fourth of Him comprises all the beings; three-fourths of Him are immortal and abide in heaven. With his three-fourths, this Supreme Being stands above and his one-fourth comes here repeatedly; with that one fourth, He extends on all sides into the animate and the inanimate. From that the Cosmic Egg was born and within it this Supreme Being; having been born, He stretched Himself further (as gods, man, etc.); then He created the earth and the bodies.’ And again, ‘His face became the Brahman; from His arms arose the King; the Vaisya is His thighs; from His feet was the Sudra born. The moon was born from His mind, the sun from His eyes, from His mouth, Indra and fire, and from His breath was wind born. From His navel, these arose the sky, from His head, the heaven, the earth from His feet, the four quarters from His ear – thus they fashioned the worlds.’

This imagery is repeated in all the Vedas. Different versions occur in the *Krsna Yajurveda* and the *Atharvaveda*. The *TaittiriyaRanyaka* (III.13) speaks of the creator as moving within the womb (of the cosmos): and then the ‘unborn is born manifold’. Here the hear is compared to a lotus turned downward a span below the neck and above the navel and that heart is known as the great abode of the Universe. ‘Surrounded by nerves it hangs down like a lotus bud, and its end is a fine nerve, i.e the *susumnanadi*.

The seer Narayana attempts to understand how the cosmic creation, the coordination of the human limbs and sense perceptions, and diverse complicated movements and complex mental activities took place. The question asked is: ‘Who created in them the red fluid that flows like a river? Who put life into them? Who introduced Movement and Thought in men? What taught Man his first Notions of truth and falsehood of death and immortality? Who endowed him with



seed to perpetuate his line? The answer is ‘The *Brahman* manifesting itself as Man is the creator of men in the world and Man who is embodied *Brahman* has transformed himself into all this... The brain is called a reservoir of the *Brahman*, the human body is called the citadel of Man... Because the Brahman resides in this citadel of the human body, it is called *Purusa*(Man).’

Space, Time & Force:

All forms of dance and the creative movement should have the building blocks or elements - Body, Action, Space, Time and Energy.

From the *Rigveda* onwards there is a sustained reference to the Wheel, the Circumference, the hub or the nave of the wheel. This imagery of the circle with a center with supports and a hub or nave provides the basis for communicating ideas not only of space in the cosmos but also of Time.

The *Sukla-Yajurveda* and the *Atharvaveda* both use this image often.

The *Atharvaveda* (describes in X.8) the Supreme Being: ‘You are man and woman, boy and girl; you are the old man tottering about with a staff, and you are the child new born. You are of all forms. That in which gods and men are set, like spokes in the hub of the wheel, I ask you about that flower of the waters, where it has been placed’.

Time is equally sacred and is in constant movement like the wheel of the chariot. It is cyclic, repetitive, without beginning or end. The snake eating its own tail, interpreted variously, can also signify this idea of cosmic time, as does the unbroken line of eternity.

Here, The Man in space, with a relationship to the earth and sky, ether and fire; the next constant movement of time as the rhythm of the wheel of a chariot. These images continue in the *Upanisads* and the *Brahmanas*.

Physical Facts:

The first and foremost is the basic physical fact of its verticality determined by Gravitation. This verticality draws attention to the limitation of man on earth and also provides the basis of the relationships which it can establish in the space above and around her or him.

There are two eternal questions of Space and Time – The ‘Cosmology’ evolved by a culture and the picture of the cosmos cannot be dissociated from the fundamental patterns of movement through which interrelationships of diverse elements of life are established in space and time. Movement than is no longer a limited matter of certain locomotive actions of the human body but



acquires a more universal significance.

Principles of Motion:

The *Panchabuthas* or the five elements in continuous interaction and as elsewhere earth, water, fire, space and wind are the universal invariables. Water, earth and sky are inter connected through the vertical pole (the *stambha*) which unites the earth and sky principles. The centre or the *bindu* is the unmanifest, the state of rest, the centre which in turn creates the many, the manifest, which are in a constant state of flux though within the area of a circle. Thus emerge the all-important principles of motion or movement on the substratum of rest or stillness of the unchanging centre.

In *Natyasastra* – Chapters I and II (describing the erection of the theatre building and stage), lay the foundation of what is to follow through the analysis of the diverse media of expression, namely, Word, Sound, Movement of the human body and *Tala* (rhythm).

Mathematical & Design sense:

Indian Artists' concern is with 'Form' in the mathematical sense, as design imbued with consciousness of the totality. The imagery of the Upanisads and elaborate ritual of the Brahmanas is the ground plan for each of the arts, be it Architecture, Sculpture, Painting, Music, Dance and Drama. The artist repeats and chisels this imagery by giving it concrete shape through Stone, Sound, Line or Movement.

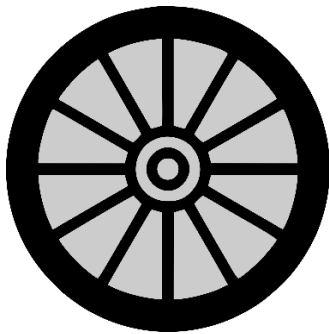


Fig.1

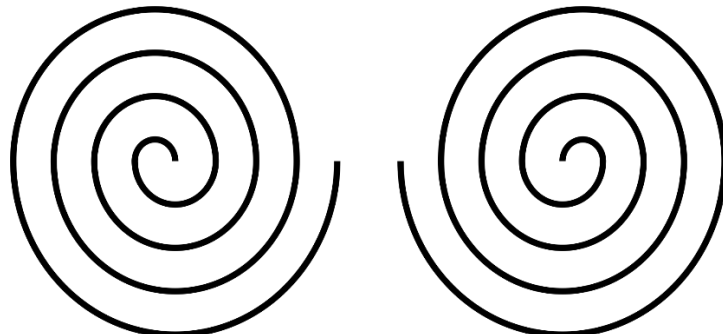


Fig.2

The fire principle is *Prajapati*, later equated with the cosmic rhythm which moves in a spiral (Fig.1). The imagery of the man-body with its implicit understanding of physical anatomy and the systems, especially the nervous and circulatory, logically give rise to a visual image of a Man-Body placed in a circle with the verticality of Man representing the *Stambha*, the earth-sky relationship;

the extended upper limbs represent the directions (disas) and the *gunas* and *bhutas* are located in different parts of this Cosmic-Man image. The centre of this circle is the restful stillness, and this point represents the unmanifest, corresponding to the navel of the human body. In terms of abstract design, it becomes the 'nave' or the 'hub' of the wheel, the Chakra, of which both the *vedas* and the *Upanisads* speak.



Fig.3. The Ceiling at Badami-2nd century AD- (It illustrates these principles through artistic design)

The wheel or the Chakra has 16 spokes -,Fig .3 -corresponding to the 16 digits (the *sodasa kala*) of the Man-Body mentioned by the *SvetasvetraUpanisad*. This Man-Body is placed in an eternal cosmic rhythm (*Rta*) of the universe. This rhythm is suggested by a spiral with a centre or through concentric circles which suggest the idea of cyclical time (the *kala-chakra*), without beginning or end (Fig.2). Naturally in visual terms these descriptions give rise to the snake eating its own tail, common to India and many other ancient civilizations, the two intertwined fish, the continuous line of eternity, and finally the two triangles of the *damarus* symbolizing past and present and future.

Physical & Psychological Terms:

Bharata proceeds to divide the human body and its limbs on the basis of the organs and their ability to articulate and function as the tools of expression of emotive psychic states, dominant or transitory. The system of analysis of the human body into *angas* and *upangas* follows principles which have validity both on the anatomical and on the psychic plane. The unit of measurement in this case is the head or the stretched hand, a principle which we shall come across in the context of sculpture.



The Man-body is conceived of as erect Man with his feet equibalanced on the ground and equidistant from a hypothetical vertical median (brahma-sutra) corresponding to the physical pull of gravity.

The central median is also suggestive visually of a diameter in a circle. The 2 extended arms are in horizontal dimension, and all action and movement take place from this moment of perfect equipoise which both in Physical and Psychical terms is capable of expressing the *samsvatof* of the *ChandogyaUpanisad* in an internalized, harmonized state of the perfect space in the heart.

Movements in dance observed by bending, pushing or pulling, rising or sinking, shaking, stretching, swinging, swaying, twisting, and turning.

Primary and Secondary movements in *Natyasastra* commence from this basic physical posture called *sama*.

It is the Physical and Psychical centre which is the beginning and the end. All dynamic actions return to this stillness. (A whole class of movements from the Feet to the Eyeballs are classified as *sama* and this is not exactly the 'at ease' position of modern drill but is one which symbolizes the play of energy form a Central Point (*bindu*) and finally a collecting together of these energies in a moment of perfect control and discipline.)

The concept of the *sama* with reference to Body movements, Musical Compositions, Metrical Cycles (*Tala*) and Sculptural Form (*Shilpa*) is central and pivotal in the Indian arts. Its validity is derived from the speculative thought which attributed value to the internalization and silent pause of all expression.

Visual and Aural Terms:

The *sama* has another concomitant in visual and aural terms. This is the continual awareness of the center. The center of the wheel (chakra) of the Vedic and Upanisadic image corresponds to the Naval of the Human Body. Thus, we have the pictorial image of Man set in a frame work of a circle with the navel at its center and a vertical median corresponding to one diameter of the Circle. (Fig. 4)

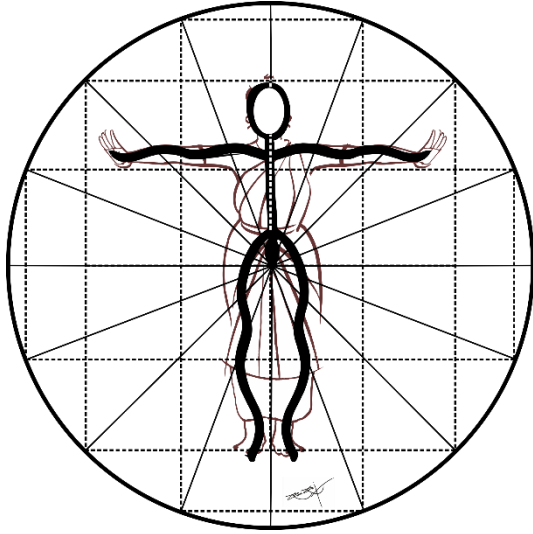


Fig. 4

Geometrical and Symbolic Significances:

In General Movements take place in any type of dance on three levels- high, middle, and low or deep level.

Bharata explores all movement (*Angikabhinaya*) from the position of *sama*, whether it is the smaller movements of the face – (eyebrows, eyeballs, cheeks, mouth) or the movements on a larger scale of the head, torso, hips and legs. The Physico-Psychical possibilities are investigated in acting (*abhinaya*) and an abstraction of Geometrical Form in a static position is achieved in space. The arms and legs are used in such a manner that certain Geometrical Motifs emerge. The geometrical figures have symbolic significance.

The first position amongst the *sthanas* is the *samapada* where the weight of the body is equally divided and the 2 feet are equidistant. The space between the 2 feet is clearly indicated as one tala (the measure equal to the length of the palm from the tip of the middle finger to the wrist). This evenly spaced and balanced first standing position is basic to all units of movement discussed in the *Natyasastra*.

The body is depersonalized to the point of geometrical abstraction. The continuities of this approach and the consequent methodology of ‘form’ are consistently apparent in the various dance styles of India.

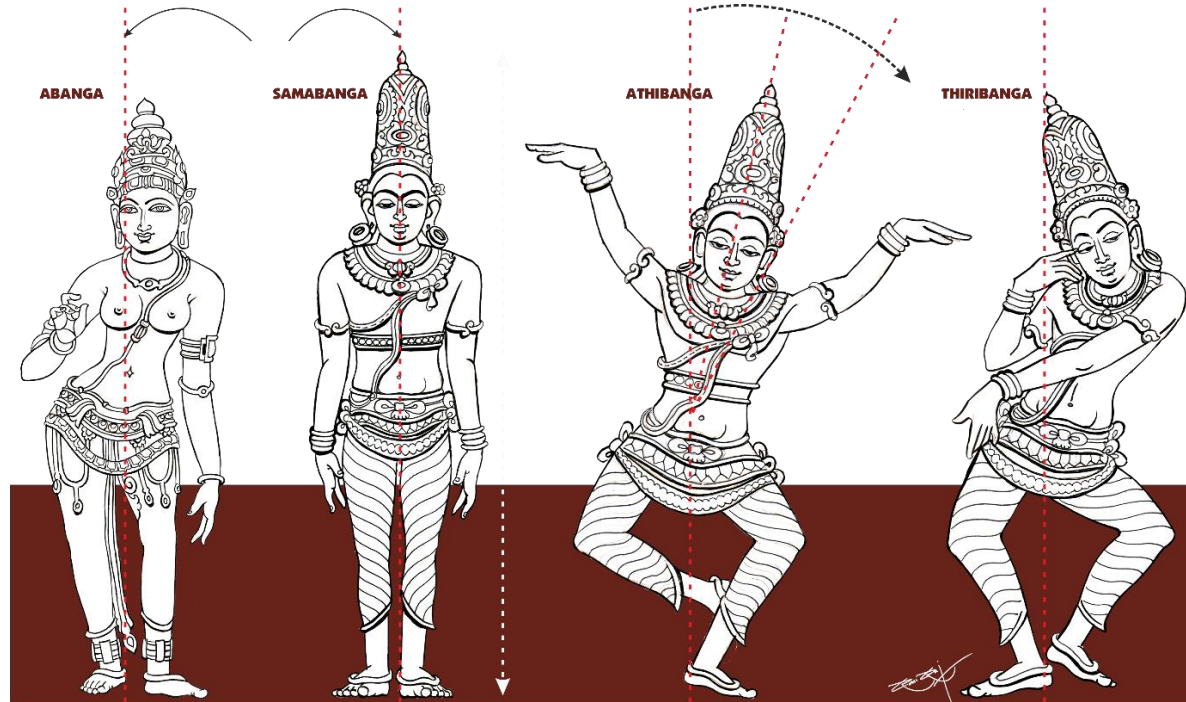


Fig. 5

The above postures show, the division and bends of the body create angles juxtaposed with curves and position- the body perpendicularly to the ground which showed in dotted lines.

A single part of the body coordinates to create angular, square, linear, or circular patterns on or above the ground depending on the sequence of steps chosen.

Bharathanatyam is a series of **Triangles** in space; **Kathakali** a **Square**; **Manipuri** a **Spiral** or an Intertwined serpent; and **Kathak** an **Axis**; **Odissi** evolves its distinctive basic motif of the **tribhanga** which is also a symmetrical geometrical figure from the *vaisakhasthana*.

The movement and action replace more passive forms of learning, such as listening to a lecture, and helps students grasp concepts with more clarity and creativity.

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