

## **Somaesthetics and Dance: The Convergence of Bharatanatyam and Yoga in *Kundalini Pattu***

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**Abstract:** *This paper is a Somaesthetic evaluation of Kundalini Pattu: A Dance-Yoga, a dance performance portraying the spirit of Kundalini as a creation of life and life forces after death. The discussion laid out in three sections uses Shusterman's philosophy of Analytic, Pragmatic and Practical somaesthetics to evaluate the two performances of this choreography, one featuring Guru Reshmi Narayanan and the other her students. The study attempts to establish the disciplining of the soma as a necessary condition for the attainment of aesthetic perfection in Bharatanatyam, the South Indian classical dance tradition.*

**Keywords:** *Somaesthetics, Dance, Bharatanatyam, Yoga, Kundalini*

### **1. Analytical Somaesthetics: Proposal for a Somaesthetic Examination of Bharatanatyam and Kundalini Yoga**

Somaesthetics, originally conceived by Richard Shusterman as being under the aegis of philosophy and aesthetics, is derived from the Greek words for 'body' (soma) and 'aesthetics'. Provisionally, in his essay, "Somaesthetics: A Disciplinary Proposal", this interdisciplinary endeavour is described as "the critical, meliorative study of the experience and use of one's body as a locus of sensory- aesthetic appreciation (aesthesia) and creative self-fashioning." (Shusterman, 1999, p. 299). At its core, Somaesthetics studies are grounded heavily in bodily perceptions, performances and presentations that heighten the individual's artistic appreciation and creation. It is "devoted to the knowledge, discourses, practices, and bodily disciplines that structure such somatic care or can improve it" (Shusterman, 1999, p. 299). This enhances somatic consciousness on the perceptual familiarity of meanings and human sentiments, ultimately elevating everyday experiences.

Three principal dimensions envelop the field of Somaesthetics: Analytic Somaesthetics which describes the basic "nature of somatic perceptions and comportment and their function in our knowledge, action, and construction of the world" (Shusterman, 2012, p. 42); Pragmatic Somaesthetics constituting the analytic dimension and as such proposes the "means to improve certain facts by remaking the body and the enviroing social habits and

frameworks that shape it” (Shusterman, 2012, p. 43); and Practical Somaesthetics focused on practising somatic care “through disciplined, reflective, corporeal practice aimed at somatic self-improvement” (Shusterman, 2012, p. 45). Practical Somaesthetics is about training the body with such care that the intelligently disciplined entity is moulded for somatic self-improvement in a performative mode. It is in this that Shusterman points out art like yoga and dance as embodying practices of somaesthetics that foster bodily care and excellence.

Originating in ancient India, ‘Yoga’ is derived from the Sanskrit root ‘Yuj’, which means ‘to unite’. It is commonly perceived to be a practice that unites the body, mind and breath. In its spiritual sense, yoga can be described as “the Divine Science which disentangles the Jiva from the phenomenal world of sense-objects and links him with the *Ananta Ananda* (Infinite Bliss), *Parama Shanti* (Supreme Peace)” (Sivananda, 1994, p. 3 ). The most popular yoga style is hatha yoga, with its three main goals being: “(1) the total purification of the body, (2) the complete balancing of the physical, mental, and energetic fields, and (3) the awakening of purer consciousness” (Stephens, 2010, p. 17). Therefore, Hatha Yoga practitioners avail both physical health benefits and improved mental health.

A section of the Yogis believe that Hatha Yoga builds up its philosophy around *Kundalini*, a dormant spiritual energy that lies at the base of the spine awakened by Yoga. Through the practice of Hatha Yoga, a yogi seeks to attain “a body which shall be as strong as steel, healthy, free from suffering and therefore, long-lived”, thereby making him the master of his own body and “the master of both life and death” (Sivananda, 1994, p. xxii). The rise of kundalini in the body would mean one has found the means to tap into the energy within them, embracing life (Eros) and escaping death (Thanatos). Through a *Kundalini* awakening, the practitioner can transcend physical limitations and conquer the fear of death. Yoga plays a dominant role in activating *Kundalini*, the inner energy. By embracing the spirit of *Kundalini*, yoga practitioners realise their true potential. It speeds up the process of being the finest by achieving steadiness in body, mind, emotions and energy.

Interestingly, Shusterman views the practice of yoga as sharing similarities with the art of dance. Both deploy the same focused body consciousness. Dance, like Yoga, requires the performer to adopt somatic practices that build bodily attributes such as flexibility, balance and physical strength. The bodily system of the practitioners permits them to embrace bodily sensations along with a deeper appreciation of the art form, as the “dancer’s body belongs as much to the ends as to the means of the dance work” (Shusterman, 2012, p. 45). Dance as an art form therefore becomes the “most paradigmatic of somatic arts” (Shusterman, 2012, p. 8), steering the way for the improvement of muscle memory and proprioception.

The sense of bodily motion, often referred to as the ‘sixth sense’ or proprioception, involves body position in space. This sense of space “does not directly depend on a specific sensory organ but is instead essentially the product of multisensory representations that build up a spatial map through a learning process, implicit or explicit” (Shusterman, 2012, p. 94). This attribute of the body is critical to dancers since they need to estimate where they are in space. It helps them monitor and adjust the positioning of their arms, feet, and legs accurately. Over time, these dance movements become unthinking and “philosophers recognize that such intelligent spontaneity is not mere uneducated reflex but rather the acquired product of somatically sedimented habit” (Shusterman, 2012, p. 94). These repetitive skills called muscle memory, become another important bodily attribute tied to dance. Thus, both proprioception and muscle memory eventually contribute to the understanding of bodily awareness in the

practice of traditional dances such as the Indian classical dance, Bharatanatyam.

A Bharatanatyam practitioner perceives the living body as the site of movement. Primarily a forte of devadasis, this art form does not just make use of space, time, and form. It also discloses the dancer's spatial and temporal aspects, such as rhythm, kinetic bodily logos, and movements. Bodily attributes differ from one individual to the other, and as such, the dancer's strength, size, shape, height, length of the legs, energy level, and muscularity are known to affect individual performances. For an expert Bharatanatyam dance performance, a heightened awareness of the proprioceptive factors is demanded, wherein the dancer rehearses with the body which becomes an outward gesture of the internal sensations:

*Superior stage performances demand from the dancer a compound consciousness: that of the movements and imagined feelings of the character he dances but also that of his own somaesthetic feelings. These feelings include his proprioceptive sense of posture and facial expression, his sense of contact with the floor and position on the stage, his kinesthetic sense of movement and gestural style, his sense of energy level and degree of fatigue. Total absorption in the illusory world of the performed role will make him blind to the real-world stage context and his own somatic conditions, awareness of which is crucial to successful performance. (Shusterman, 2019, p. 157)*

Thus, Bharatanatyam is an art form in which the body and mind are deeply co-dependent.

Each dance movement in Bharatanatyam is structured to follow the rhythmic patterns that are defined by music and narrative. The dancer's limbs and expressions convey a myriad of emotions embedded in the song amalgamating footwork, the vocalist's timbre, poses, the rhythm of the music, the body language, costumes designed for the performance, and the aesthetics. All blend to express and communicate the underlying text as a dancer's "actions are not merely means to create the work as an artistic object and aesthetic end; instead, those actions, with their expressive qualities, are essential parts of that object and end" (Shusterman, 2019, p. 145).

This paper focuses on situating dance, particularly the Bharatanatyam performance of *Kundalini Pattu* in Shusterman's somaesthetics. Shusterman asserts that if soma is our ultimate and necessary instrument for creating and appreciating art, then art would be an appropriate vehicle to train this instrument to perceive and perform more effectively (Banerjee & Fiala, 2020, p. 78). This is exemplified in Bharatanatyam as an art form that requires the disciplining of the body through training to enhance bodily awareness and performance. To study the vision of Bharatanatyam as far as bodily awareness is concerned and to ascertain the demands on the body for performance to reach perfection, this paper draws from two videos of Bharatanatyam performances under the production of Sree Shankara School of Dance, located in Kalady, Kerala.

The first video selected for study features Guru Reshmi Narayanan's tenth-year performance of her magnum opus, *Kundalini Pattu: A Dance-Yoga*, on the *Kundalini* song at Thrissur Nelluvai Sri. Dhanwadhari Temple on 4th January 2017. This was choreographed by Natyashastra Guru C P Unnikrishnan. Since 2007, this composition has been performed by Reshmi Narayanan as a solo and duet in over a hundred arenas across South India. Incidentally, one of the authors is a direct disciple of Guru Reshmi Narayanan. The wide

appeal of this production is attributed to its employment of marvellous lighting effects by C P Unnikrishnan and its captivating music. The second video taken for this study is of Sree Sankara School of Dance's special production performed by Guru Reshmi Narayan's students, as part of the International Yoga Day in 2021. It is selected for analysis to show how the seasoned Bharatanatyam dancer's performance demonstrates superior muscle memory, heightened proprioceptive sense, adequate velocity of movements, and cultivated balance.

The composition titled *Kundalini Pattu* (see Appendix for the transliteration and translation of the text) is a renowned mystic work of Sree Narayana Gurudeva, one of the greatest sages and social reformers of India, about *Kundalini Shakthi*. *Kundalini Pattu* is composed to evoke the divine spiritual power residing in every human being. It is a poem elucidating the mystic experience of the individual's personality in union with the universal, setting forth the six phases of the Yoga Sadhana of Patanjali. Also known as the 'Song of the Serpent Power', the concept of *Kundalini* envisages the serpent to have embodied and transformed into a figure that holds itself as an *atmeeya sakti*, meaning soul-force, and then goes on to explain how the six steps are esoteric stages in the ascent towards divine ecstasy. The music resembles *Pampatti Chindu*, a song sung in the demotic language of the common folk that elaborates on spiritual experiences. The dance movements incorporated into this music are seamlessly sewn together depending on the body structure of each performer. This helps them derive certain benefits from yoga postures and demands body-controlled breathing routines. The contributions of Bharatanatyam and Yoga intermingling in the performance lead to a vocabulary of body shapes inspired by yoga.

The union of Yoga and Bharatanatyam dance aids the practitioner in evoking the spirit of *Kundalini* via superior concentration, bestowing them with bodily strength and a calm mind. Moreover, a close somatic analysis of the choreography *Kundalini Pattu: A Dance-Yoga* incorporating Yoga postures is done to prove that both Yoga and Bharatanatyam draw from each other, creating a heightened somaesthetic field. The distinction between the varying executions of the same choreography, the teacher in comparison to her students, employs Shusterman's theory of somaesthetics in examining factors such as movement velocity, proprioception, muscle memory and bodily balance. It further tells us how Bharatanatyam as an art form demands a disciplined, reflective, and corporeal practice that will eventually contribute towards somatic self-improvement. In essence, this paper attempts to prove that the fusion of Yoga and Bharatanatyam in the performance *Kundalini Pattu: A Dance-Yoga* demonstrates the theory of somaesthetics in terms of an elevated somatic experience, facilitating the awakening of *Kundalini shakti* and sharpening various physical attributes through disciplined reflective training.

## **2. Pragmatic Somaesthetics: The Convergence of Bharatanatyam and Yoga in *Kundalini Pattu: A Dance-Yoga***

Both Yoga and Bharatanatyam are products of *Sanātana Dharma*, an endonym used to refer to Hinduism. Bharata Muni's *Natyashastra* contemplates not just the physical aspects of Bharatanatyam as a dance form but also its spiritual and stylistic dimensions. The Bharatanatyam legend, Balasaraswathi observes, "Bharatanatyam is an artistic Yoga (*Natya Yoga*), for revealing the spiritual through the corporeal" (Marchand, 2006, p. 178). Therefore, Somaesthetics is pragmatically effective for the analysis of classical dance forms such as

Bharatanatyam, which contributes towards the movement of individuals in terms of spiritual evolution from human to superhuman and ultimately to the Divine, akin to Yoga. Moreover, both Yoga and Bharatanatyam emphasise disciplined training methods making somaesthetics vital for analysing how these art forms build somatic awareness.

The aim of somaesthetics is "to correct the actual functioning performance of our senses by an improved direction of one's body since the senses belong to and are conditioned by the soma" (Mullis, 2006). In the performance of Bharatanatyam, various *Asanas* (postures) and *Pranayamas* (breathing routines) from Yoga are useful in creating a sense of lightness and improving the dexterity of the dancer. Yoga postures - spinal twists such as *Vakrasana*, back bending postures like *Chakrasana*, and forward bending postures such as *Paschimottanasana* – when incorporated into Bharatanatyam, ensure greater flexibility of the body.

This bond between Yoga and Bharatanatyam is reflected in Practical somaesthetics - "disciplined bodywork aimed at somatic self-improvement" (Shusterman, 2012, p. 307). Both disciplines demand from their trainees intense concentration and balance throughout the training period. This helps achieve perfection in performance by fostering the human body-mind connection:

*The perfectionist project of aesthetics...requires a systematic program of instruction that includes two branches. The first (askesis or exercitatio aesthetica) is a program of practical exercise or training. Here, through repetitive drills of certain kinds of actions, one learns to instil harmony of mind with respect to a given theme or thought. (Shusterman, 1999, p. 300)*

To enhance the body's somatic functioning through Bharatanatyam and Yoga, one must undergo assiduous training, which entails regular practice of the prescribed exercises. With the help of Yoga and Bharatanatyam, the body becomes a finely tuned instrument, allowing the dancer to perform any movement effortlessly and gracefully.

For this mastery, one must have a deeper knowledge of the foundational principles of Bharatanatyam - *Nritya*, *Nritta* and *Bhava*, that provide a framework for the dancer's expressive vocabulary. Furthermore, the vocabulary of body shapes inspired by Yoga in the performance of Bharatanatyam elevates the dancer's physical capabilities allowing them to fine-tune the technique involved. Delving deeper, this union of Yoga and Bharatanatyam in the choreography, *Kundalini Pattu: A Dance-Yoga*, aligns the dancer's body with spirituality. This enables pragmatic somaesthetics to trace the dancer's journey towards increased somaesthetic awareness and ultimately, *Kundalini* awakening.

## 2.1 The origin of *Nritya*, *Nritta* and *Bhava*

In India, most forms of art, including Bharatanatyam dance form, are traditional and have a religious origin. Indian classical dances evoke inner beauty or sacred godliness in humans, as in religion, primarily through the body as an instrument of communication. Bharatanatyam, a seamless meld of *Nritta* (the rhythm of dance also known as pure dance), *Nritya* (rhythmic elements along with expression which forms the interpretive aspect of dance) and *Natya* (the theatrical aspect of dance used to enact the narrative), began to take root in the Indian states of Tamil Nadu, Karnataka and Andhra Pradesh. Put together, they communicate to the audience both physical and emotional aspects of the dance's narrative.



*Nritta* in Bharatanatyam is structured to follow the rhythmic patterns that are defined by music and narrative. It is a “form of dance which is void of flavour (*rasa*) and mood (*bhava*)” (“The Mirror of Gesture, Being the Abhinaya Darpana of Nandikesvara,” 1917, p. 14). The dancer’s hands and facial gestures become the language to recite the legends or historical dramas, thereby conveying emotions. The footwork, body language, postures, musical notes, tones of the vocalist, aesthetics and costumes blend to portray and communicate the underlying text.

*Nritya*, on the other hand, is the “narrative theatrical element communicated through the dancer’s bodily features such as eyes, hands, and the face. It therefore possesses flavour, mood, and suggestion (*rasa*, *bhava*, *vyanjana* etc.), and the like” (“The Mirror of Gesture, Being the Abhinaya Darpana of Nandikesvara,” 1917, p. 14). Most dance forms are an amalgamation of *Nritta* and *Nritya*, both of which are highly dependent on the body.

*Abhinaya* (gestures), depicting *Rasa* (sentiment) and *Bhava* (mood), is a part of *Nritya*. *Abhinaya*, the patterned expression of *Bhava* and the narrative element, makes use of *Mudras* (hand gestures), *Bhanga* (body postures) and *Rasa* (facial expressions) to communicate with the audience. *Rasa* is thus evoked from the body of the dancer, which in turn creates a sentimental effect in the viewers. *Rasa* is further nuanced by *Abhinaya*, which is divided into *Aangika* (bodily), *Vachika* (vocal), and *Aahaarya* (ornamental).

*Angika abhinaya* is the “exposition employing the gestures of the body and limbs” (“The Mirror of Gesture, Being the Abhinaya Darpana of Nandikesvara,” 1917, p. 17). In Bharatanatyam, the three elements of bodily gestures originate from the limbs, parts of the body, and features (*anga*, *pratyanga*, and *upanga*). In *Angabhinaya*, “the head, hands, armpits, sides, waist, and feet, these six, and some say also the neck, are called the limbs” (“The Mirror of Gesture, Being the Abhinaya Darpana of Nandikesvara,” 1917, p. 17). In *Pratyangabhinaya* the “shoulders, shoulder-blades, arms, back, stomach, thighs and calves, some say also three others, the wrists, knees, and elbows, are the parts of the body” (“The Mirror of Gesture, Being the Abhinaya Darpana of Nandikesvara,” 1917, p. 18). In *Upangabhinaya*, the “eyes, eyelids, pupils, cheeks, nose, jaw, the lips, teeth, tongue, chin, face, these eleven are the features. Besides these are the accessories, such as the heel, ankle, fingers and toes, and palms” (“The Mirror of Gesture, Being the Abhinaya Darpana of Nandikesvara,” 1917, p. 18) that become accessories useful in describing the dance narrative. These movements and bodily gestures are intrinsic to *Rasa*. They play a pivotal role in the ability of the Bharatanatyam performer to convey the essence of dance.

Theorists hold varying opinions over the use of *rasa* in dance. Rudolf Arnheim argues that the perception of expression is much too immediate and compelling to be explainable merely as a product of learning. Therefore, he states that emotions such as sadness are inherent and are perceived by the viewer through the dancer’s movements: the “whole body may dramatically collapse, head and arms may droop, to create visible sadness for our eyes and feelings” (Arnheim, 1975, p. 263). This argument aligns with Shusterman’s understanding of the role of expression in the somatic comprehension of dance, wherein every movement is said to have originated from the soma. Therefore, in analyzing the act of dancing, *Rasa* and *Bhava* are seen to be drawn from somatic experiences. They originate from the human body and create a foundation for artistic meaning.

## 2.2 The vocabulary of body shapes in *Kundalini Pattu: A Dance-Yoga* inspired by Yoga

The Bharatanatyam dance production of *Kundalini Pattu* employs a vocabulary of body shapes inspired by Yoga, thereby contributing to the intermingling of Bharatanatyam and Yoga. A string of Yoga asanas are brought together in a sequence of movements in the performance, which include: *Balasana*, *Janu Sirsasana*, and *Trikonasana*. Each of these asanas is vital to meet the precision expected from a Bharatanatyam practitioner. As such, they provide varying benefits that enhance the classical dancer's physical conditioning and help them deliver an exceptional performance.

In this particular production by Sree Sankara School of Dance, movements were choreographed depending upon the body structure to derive some benefits from a few yoga postures and controlled breathing patterns. *Balasana* or the child's pose releases tension in the hands, chest and shoulder. It aids the dancer as it increases "the blood circulation to the head region, steps up the efficiency of the nervous system, sharpens the audio visual capacity and the power of concentration. It limbers spine, knees, legs, and strengthens the muscles on neck back, thighs and the abdomen" (Abraham, 2008, p. 113).

*Janushirsasana* calms the body and mind. It helps in "curing back pain, loosening the joints, reducing fat especially on the stomach region, maintain perfect body figure, digestion become easy, better relief from diabetes, gas trouble and low blood pressure. Stimulating blood circulation and strengthen the whole body" (Abraham, 2008, p. 109). Hence, it straightens the spine, liver, spleen, hamstrings, and shoulders of the dancer, providing better agility, reducing the pain in the waist and legs and helping get rid of excess fat in the belly.

*Trikonasana* elevates stability and activates the core muscles by "strengthening the legs, ribs and hands. It tones up the muscles of the legs, hands, shoulders, sides of the body and neck, eliminates the deposited fat from the waistline, expands the lungs, and chest, stretches the back, abdomen, shoulders, arms and legs" (Abraham, 2008, p. 125) which provides increased body flexibility by bringing down the stiffness in the individual's spine and the back.

Several asanas are seamlessly incorporated into the dance movements of *Kundalini Pattu: A Dance-Yoga* to help develop flexibility and strength. One such pose, The Reverse Prayer Yoga or Penguin Pose, also known as *Pashchima Namaskarasana*, with which the performance of *Kundalini Pattu: A Dance-Yoga* commences, is shown in Figure 1. The dancer, with precision, performs this on stage by joining both her hands to form a namaskar gesture behind her back (Narayanan, 2017, 00:24). There are several bodily benefits to this pose as it is an upper body posture that "brings stability to the body, removes stiffness in the neck, shoulders, elbows and wrist." (Kavya, 2016, p.62). This pose that strengthens the upper body helps one to breathe easily and maintain a high energy level. Additionally, the shoulder movement helps build up the strength of wrist tendons.



**Figure 1** Reshmi Narayanan in the Reverse Prayer Yoga Pose, 2017

The *Reverse Prayer Yoga* pose also massages and loosens any tight shoulder muscles and relaxes the shoulder blades. This means no shoulder or neck pain for those who practice it regularly. This pose prepares dancers for the intense physical demands during the several practice hours of the choreography. In his “Somaesthetics: A Disciplinary Proposal”, Shusterman notes, that cultivating the habit of regular practice through somaesthetics can “reveal and improve somatic malfunctioning that normally go undetected even though they impair our wellbeing and performance” (Shusterman, 1999, p. 302). A regular practice of *Pashchima Namaskarasana* can help the dancer avoid hip, back, shoulder, neck and knee-related problems that are seen pervading the modern dance world.

The performance of *Kundalini Pattu* also incorporates the *One-Legged King Pigeon Pose*, otherwise known as *Eka Pada Rajakapotasana*, as depicted in Figure 2. The performer does a half split with one leg stretched back so the top of the foot presses into the stage mat and the other leg is bent, resting on the ground. The torso is lifted, opening the chest, with a slight arch in the back and the hands above the head. A movement is composed out of this yoga posture wherein the dancer’s hand gestures are tuned to the rhythm of the *Pambatti chinthu* music, and she shifts sides performing the same sequence of movements (Narayanan, 2017, 01:01- 01:58). For many individuals, this pose acts as a deep hip opener.



**Figure 2** Reshmi Narayanan performing the One-Legged King Pigeon Pose, 2017



The hips are known to be the central hub of movement in one's body. When the hips are tight, it means that there is reduced movement in them, and the spine experiences physical inconvenience. Hip-opening yoga postures are important as they “increase the external, or outward, rotation of the femur bone in the hip socket” (Rizopoulos, 2021). The widening of this body part helps enhance the circulation to the lower extremities, thereby giving a better range of movement. This benefits the dancer. Yoga thus enhances somaesthetic awareness preparing the Bharatanatyam dancer's body to perform difficult sequences in the choreography.

### 2.3 The Dancer's path to *Kundalini*

The practice of Yoga postures evokes superior concentration among dancers. This concentration, when intensified, leads us into the meditative state of *Dhyana* (Meditation). The different aspects of Bharatanatyam, such as *Nritta*, *Nritya* and *Natya*, must be seamlessly unified with great concentrative ability for the performance to peak in its intensity. Meenakshi Devi Bhavanani, a Yogini as well as a distinguished Bharatanatyam artist, comments on the Yogic psyche of this ancient Indian classical art form:

*Bharatanatyam is a Yoga, if Yoga means union. For surely this ancient art is one of the most beautiful and satisfying ways of expressing the human longing for union with the Divine. As an art form, Bharatanatyam demands conscious understanding of body, mind and emotions. The sincere dancer must understand the nature of Bhakti and Jnana and the innate longing in all living creatures for Samadhi or cosmic consciousness. (Bhavanani & Bhavanani, n.d.)*

This aids the performer to tap into the spirit of *Kundalini* and embrace its power thereby building a greater connection between the body and the divine.

The dancer who achieves intense concentration in performance evokes the spirit of *Kundalini* and “has both *Bhukti* (enjoyment) and *Mukti* (liberation) in the fullest and literal sense” (Sivananda, 1994, p. 4). It liberates the spirit of *Kundalini* in the dancer's body alongside artistic expression leading to somatic self-improvement. By elevating the performer to the state of *Kundalini*, the Bharatanatyam performance becomes a harmonious union of body, mind and spirit. The classical dancer thus attains a state of utmost concentration and heightened spiritual awareness during the performance of *Kundalini Pattu: A Dance-Yoga* due to the fusion of Bharatanatyam and Yoga-inspired postures.

### 3. Practical Somaesthetics: Somaesthetic execution of two versions of *Kundalini Pattu: A Dance-Yoga*

In this section, Smt. Reshmi Narayanan's tenth-year performance of her masterpiece composition *Kundalini Pattu: A Dance-Yoga* under the production of Sree Sankara School of Dance, Kalady is contrasted with the collective performance of the same choreography by her students as part of the International Yoga Day celebration. The two videos are compared based on the dancers' muscle memory, movement velocity, balance and finally, proprioceptive sense. Here, one will look at the distinction between the varying executions and try to examine them based on the above-mentioned factors and the demands on the body for the performance to reach perfection.

### 3.1 Muscle Memory

Muscle memory, procedural memory or motor memory makes it easy for a dancer to perform without conscious deliberation. Here, individuals do not have to explicitly think of the action, in order to perform it. They have internalized, through mindful iterations, a habit of performing for somaesthetic realization. Muscle memory aids the individual to perform:

*various motor procedures or skills in an automatic or spontaneous fashion, without conscious deliberation of how the procedure should be followed and without any explicit calculation how one identifies and achieves the various steps involved in the procedure and how one proceeds from step to step". (Shusterman, 2012, p.91))*

This type of memory results in the mastery of performances such as dancing, which becomes similar to the performance of sequential everyday tasks such as walking, eating, and running. In an art form such as Bharatanatyam, the skill of muscle memory is honed through years of practice and training.

**The Teacher's Performance.** It is evident in the performance of *Kundalini Pattu: A Dance-Yoga*, that the teacher possesses a superior muscle memory. Guru Reshmi Narayanan has been training in Bharatanatyam from the age of six under the guidance of her Guru, Sudha Peethambaran, who is also a well-known Mohiniyattam danseuse and the Director of Sree Sankara School of Dance, Kalady. Since she has been learning the art form since 1993, years of rigorous training have brought to her body heightened muscle memory and reaction time. Not once does Reshmi Narayanan forget the choreography or depart from the set array of steps. She executes her moves with ease, unthinking and instinctive since the "movement sequences become automated with practice" (Stevens et al., 2019, p. 18). Since she has performed in over a hundred stages across South India, it has become the habit of Merleau-Ponty. For her, the choreography has become second nature. Merleau Ponty's idea of the 'lived body' as "a vehicle of being in the world" through its "perpetual engagement therein" (Merleau-Ponty, 2014, p. 86) is evident here as the teacher's movements are not merely physical but a result of embodied consciousness.

**The Students' Performance.** Unlike the teacher, the students display inconsistencies in the execution of the choreography due to varying degrees of muscle memory. One reason for this lack of fluidity could be the fact that the degree of displacement "from the benchmark sequence may influence whether or not the dancer can continue to link the movements" and the other could be a less accurate recall of the sequences which might lead to "a relatively minor error of detail" disrupting the recall process (Stevens et al., 2019, p. 26). The students' muscle memory is clearly in the developing stage. They have had less rehearsal time as opposed to their Guru. Hence, they need improvement with a focus on quality.

**Strategies for Improvement.** To promote muscle memory, the students can choose a small part of the choreography and keep mindfully repeating until the steps and postures come naturally to their bodies. A practice session of one hour daily with a focused repetition of specific parts of the choreography is recommended to attain this. Regular practice, which "marks the beginning of phrases or sections within the dance, or significant moments of change in the form of the work might be expected to aid movement recall" (Stevens et al., 2019, p. 19). This aids the body to internalise the movement sequences. This gives way to motor intentionality, "characterised as conscious perception without explicit awareness" (Shusterman, 2008, p. 54), where repetition of movements places the dancer's motor skills deeper into their body's embodied consciousness.

Therefore, muscle memory gradually builds up if the individual regularly practices, correctly and mindfully.

### 3.2 Movement Velocity

Movement velocity in dance indicates how fast and in what direction the dancer's body is moving. It is a feature of dance that is closely tied to musicality. The alignment of movements in the choreography of *Kundalini Pattu: A Dance-Yoga* with the rhythm of music is important for a seamless performance.

**The Teacher's Performance.** While the Guru exhibits impeccable synchronisation with the rhythm, her students are seen to exhibit inconsistent pacing. While building on the array of steps to create a movement, the teacher performs with precision as she lunges her back, bending forward, and moves her palms to the rhythm of the *kundalini* music (Narayanan, 2017, 5:37-5:43). Her effortless pacing of steps is a reflection of her sharp sense of timing. This is a display of her “purposive understanding and intelligent intentional action” (Shusterman, 2008, p. 54) built with years of practice.

**The Students' Performance.** In contrast, the students fall short of meeting the movement velocity demands of the choreography. While performing the sequence of steps starting from the *Anjanayasana* yoga posture, also known as the Crescent Moon Pose, or *Ashwa Sanchalanasana*, the students seem to move at different speeds (Sudha's Sree Sankara School of Dance, Kalady, 2021, 1:00-1:11). Some faster than the rest. This demonstrates a lack of synchronization of the dance movement to the music. It is the lesser technical abilities of the students in comparison to their teacher, that makes them unable to understand that the movement velocity should be slowly paced to match the musical notes of *Kundalini Pattu*. Furthermore, the difference in movement velocity exhibited by the students might be the result of the lack of familiarity with the movement cues from the music.

**Strategies for Improvement.** A metronome could be handy for cultivating the required movement velocity in dance. As a prescription, one should never try to learn or practice the entire choreography in one go, but practice with cues, which will lead to a better performance. A practice time of 30 minutes per day focusing on aligning movements with the music tempo is advised for the same. Regular and hard practice helps develop “a more conscious level of bodily perception” that can be “characterized as conscious perception without explicit awareness” (Shusterman, 2008, p. 54). This is a vital factor that contributes towards the sharpening of dance moves set against specific musical notes. So with time, the students will be able to synchronise their movements with the *Kundalini* music better and showcase fluidity like their teacher.

### 3.3 Balance

Balance “is the ability to maintain the centre of gravity of the body while minimizing the postural sway, which is “achieved through the coordination of multiple body systems- motor and sensory” (Penkar & Sadhale, 2020, p. 92). A Bharatanatyam dancer must continuously deal with changes in bodily stances during performances, thus increasing the chances of dance movements affecting their balance. For a dance performance to be perfect, a classical dancer's body demands high core strength and stability.

**The Teacher's Performance.** Guru Reshmi Narayanan exhibits exceptional bodily control, providing precise direction to her movements. On her part, the teacher executes a succession of movements right after the *Bhujangatrasita karana* pose effectively (Narayanan, 2017, 3:48-

3:56). This is a result of controlled practice with sincere and consistent efforts taken to engage core strength. Over time, the dance practice and exercises done to attain balance in which she habitually engages incorporate their "instruments into themselves and make them play a part in the original structure" (Merleau-Ponty, 2014, p.104) of her own body. Thus, the teacher remains poised and stable during the movement transitions.

**The Students' Performance.** Opposed to their teacher, the students are still on the learning curve to achieve her level of bodily control to maintain balance in their performance. As such, a student is seen losing balance while performing a movement right after the *Nataraja* or Dancing Shiva posture (Sudha's Sree Sankara School of Dance, Kalady, 2021, 2:06-2:08). Here, the student's insufficient core stability, as a result of lesser years of training in the dance form, makes her unable to meet the requirements of the intricate movement. With lower core engagement as a result of fewer practice hours devoted, they end up losing balance while performing.

**Strategies for Improvement.** The student's challenge in maintaining a balanced posture highlights the need for consistency and hard training that builds core strength. To hold the various posture and effortlessly perform the sequences that follow, a dancer requires high flexibility and mastery over bodily movement achieved by "practising and training" that "makes for better balance and ease of dance" (Penkar & Sadhale, 2020, p. 95). Thus, core-strengthening exercises that span 15-20 minutes should be introduced into the students' training regime. This must be followed by the practice of choreography for 30 minutes. By ensuring that this routine is followed, the students will begin to exhibit precise posture transitions, thereby improving their core strength and gaining balance in movements. Balance and stability thus become a habit. This can only be achieved through years of monitored training in the dance form because "it is the body which 'catches' (kapiert) and 'comprehends' movement. The acquisition of a habit is indeed the grasping of a significance, but it is the motor grasping of a motor significance" (Merleau-Ponty, 2014, p. 165).

### 3. 4 Proprioceptive Senses

In classical dance forms such as Bharatanatyam, the kinaesthetic sense or proprioceptive sense, terms often used interchangeably in the dance world, assume a salient and dominant role. It forms part of the motor performance and refers to how:

*we are somehow aware of our own movement, of the position of our bodies and the parts of our bodies by means other than the common five senses. Proprioception refers to neurological receptors located in the muscle fibres and the ligaments that sense load and tension on muscles and send that information to the spinal column or to the brain to let the brain know how things are going at the muscular and joint level. (Samanta et al., 2016, p.75)*

For Bharatanatyam dancers, the heightened awareness of their body in space is of utmost importance to align their movements with fellow dancers as well as situate themselves in the right positions on the stage. If they lack proprioception, they would have to be vigilant and continue in a state of alarm since it would require them to self-consciously determine whether a simple movement or sequence can be executed successfully. The countless sensations of movement that the dancer feels from performing Bharatanatyam help develop a kinaesthetic resonance which "should not only be seen as a form of somaesthesia but as a necessary element in the provision of an education in dance" (Arnold, 2005, p. 49). To reduce the gap between the seasoned and

the decent performer, increased attention must be paid to the individual's proprioceptive senses.

**The Teacher's Performance.** It is evident in the teacher's performance that her increased sense of proprioception, honed by years of training and practice, enables her to know where to position her arms even with her eyes closed. The awareness of movements helps her execute them smoothly and accurately by standing, gliding, and pivoting, positioning herself rightly on stage, without moving out of the audience's vision. In her performance, it is noticeable that she has mastery over her proprioceptive senses as she demonstrates "the perfect synthesis between technique, artistic skills and athleticism to give the best performance" (Ljubojevic et al., 2020, p. 109). Here, Reshmi Narayanan is seen to be well aware of the sensations of her dance motion. This indicates the presence of somaesthetic perceptions par excellence "because they are not only somaesthetic by invoking mindful aesthesis or discriminating, thematized perception, but also by relying essentially on the somaesthetic sensory system rather than our teleceptors" (Shusterman, 2008, p. 53). There are no signs of spatial disorientation in her execution of the choreography. She maintains her place throughout the performance, never loses balance and can execute movements gracefully.

**The Students' Performance.** However, in the performance of *Kundalini Pattu: A Dance-Yoga*, the students are seen to exhibit spatial disorientation via compromised balancing of poses. This is because their proprioception mechanisms, which "play essential roles in regulating balance by way of neuromuscular control", seem down (Ljubojevic et al., 2020, p. 109). Their proprioceptive awareness is still in the development stage. This sheds light on the need for more training.

**Strategies for Improvement.** Hard training and regular practice of the dance choreography are what aid the performer in increasing awareness of their body and thus establish the required body posture. That being said, "dance technique classes alone are not sufficient for the development of certain motor skills such as dynamic balance and that proprioceptive training can be very effective in improving the balance performance of modern dancers" (Tekin et al., 2018). They can also resort to engaging in activities that increase awareness of body movement and position like Yoga and minor balancing exercises. Hence, a continuous and rigorous proprioceptive training session for 15-20 minutes along with the practice of the choreography for 30 minutes is suggested. In time, this increases spatial awareness and confident dance movements thereby helping deliver a performance with greater precision.

## 4. Conclusion

The philosophy embedded in Somaesthetics becomes an effective tool to engage with the fusion of Yoga and Bharatanatyam as a part of a domain studying the living body. While Analytical Somaesthetics lays down the necessary tools to engage with the dancing body, Pragmatic Somaesthetics examines the bodily benefits acquired by incorporating a vocabulary of body shapes inspired from various Yoga Asanas into the choreography of Shree Sankara School of Dance's *Kundalini Pattu: A Dance-Yoga*. Somaesthetics thus becomes a bridging philosophy between theory and practice, a pragmatist discipline that "studies 'the living, feeling, sentient body' *theoretically*, while also advancing methods to implement *practical* approaches to 'improving specific somatic skills of performance' through 'somatic understanding and awareness'" (Mani, 2020, p.82).

Furthermore, it is Practical Somaesthetics that demonstrates through a comparative study of the two versions of the choreography, performed by both the teacher and her students, that



a dancer's superior muscle memory, movement velocity, body balance and proprioception are not just dependent on knowing how to do it. It is cultivated through rigorous practice over years of training and exposure to the dance form. This habit formation has helped the teacher develop an expanded attentiveness in which she can gauge her body's needs at a vascular level. The comparison between the videos elucidates that the teacher exhibits the required movement velocity, perfect balancing of the poses, better recall of movement sequences and a greater degree of excellence in proprioception when compared to her students. By investigating these factors, this paper provides an account of all the demands on the body for the Bharatanatyam performance to reach its classical plenitude.

From a pragmatic and somaesthetic examination of the convergence of Yoga and Bharatanatyam in the choreography, it is perceptible that both blend seamlessly to create a union awakening the spirit of *Kundalini*. The elements of Yoga incorporated into the dance choreography, along with Bharatanatyam in itself, awaken *Kundalini* (Mother God) "by practising the Mudras, then *Prana* moves through the *Sushumna*, and having aroused all the Chakras" (Gherwal, 1930, p.73). This proves that the performance of *Kundalini Pattu: A Dance-Yoga* is a beautiful amalgamation of the dancer's ability to portray the spirit of *Kundalini* as a summation of the creation of life and life forces after death through divine union.

The theoretical application of Somaesthetics thus helps shed light on bodily awareness and the need for refinement of dance movements for the performance to reach perfection. With the incorporation of Yoga Asanas into Bharatanatyam, a meditative approach is brought in which later maps out the dancer's journey towards Kundalini awakening. The comparative study of the teacher's and students' performances of the same choreography highlights the importance of consistent somatic practice and training. In closing, *Kundalini Pattu: A Dance-Yoga* serves as a testament to the interweaving of Yoga and Bharatanatyam as a means to awaken the spirit of Kundalini and for a somaesthetic understanding of the dancer's body to achieve mastery of the choreography through habitual and persistent training.

## Appendix

Transliteration and Translation of *Kundalini Pattu* by Sree Narayana Guru from Malayalam

α:ʈpa:mpe:ʔ punə <sup>n</sup> ʈe:ʈu pa:mpe:ʔ jəru...	Dance, cobra, dance!
ʈa:nəndəkku:ʈtu kəŋʈa:ʈpa:mpe:ʔ	Thy burrow seeks and witness
ʈiŋkəʈu <sup>n</sup> knnəju <sup>n</sup> cu:ʈumi:ʈənpəḍə-	The bliss of grace in wild display.
pəŋkəʈə <sup>n</sup> ce:rnnuninna:ʈpa:mpe:	Dance, cobra, dance!
	Keep close the foot so lotus red
	Sacred of the Lord who dons
	The crescent moon and cassia bloom, and
	(repeat refrain) Dance, cobra, dance! . . .

vṇi:ṇijṇu viṇṇu<sup>n</sup> t̥irume:ni  
 kəṇṇi:r̥ukəkkəṇṇa:tu pa:mpe:!  
 a:jirə<sup>n</sup> ko:t̥i ənəṇṇəni ni: a:nəṇḍə-  
 ma:jirəvu<sup>n</sup> t̥urnna:tu pa:mpe:!

o:mnn t̥t̥ru ko:t̥i məṇṭrəppruḷ  
 na:mnnəriṇṇukṇa:tu pa:mpe:!  
 puḷḷippuḷḷito:l̥ puṭəj̥kku<sup>n</sup> pu:me:nij-  
 nnuḷḷil̥ kəḷikkumnnā:tu pa:mpe:!

pe:ju<sup>n</sup> piṇəvu<sup>n</sup> pirkku<sup>n</sup> cuṭuka:t̥  
 me:ju<sup>n</sup> pəṇṇm̥puḷa:tu pa:mpe:!  
 pu:məṇəkkku<sup>n</sup> kuḷa:l̥kə<sup>n</sup>pu:kuma:-  
 ko:məḷme:ni kəṇṇa:tu pa:mpe:!

na:ḍəṭṭil̥ṇa:ṇ̥ nəməḍḍiva:jəppru-  
 ḷa:ḍija:juḷḷṭ̥nna:tu pa:mpe:!  
 pu:məḷəro:nu<sup>n</sup> t̥iruma:luma:ru<sup>n</sup> p̥n-  
 pu:me:ni kəṇṇill̥nna:tu pa:mpe:!

ka:məṇccuṭṭə kəṇṇuḷḷ̥ ka:l̥a:ri t̥ən  
 na:mə<sup>n</sup> nukəṇnnuninna:tu pa:mpe:!  
 vḷḷiməḷajil̥ viṇṇu<sup>n</sup> ve:ḍəppru-  
 ḷuḷḷik̥k̥kumnnā:tu pa:mpe:!

Besmeared with ash and bright His holy form  
 shines.

Thy tears for Him in streams do shed,  
 And thus steadily  
 (repeat refrain) Dance, cobra, dance! ...  
 Upon this burning ground  
 Where ghost and corpse are born  
 United well with what subsists, its counterpart  
 supreme

(repeat refrain) Dance, cobra, dance! . . .

The tresses of hair so fragrant  
 Excelling flowers of sweet aroma  
 In shade they lie within you  
 Beside this beauteous form, which view, and  
 (repeat refrain) Dance, cobra, dance! . . .

A spotted leopard skin surround  
 His form of tender bloom.  
 'Within the Self he dances' say, and  
 (repeat refrain) Dance, cobra, dance! ...

Upon the silver hill what gleams  
 As Vedic wisdom's quintessence,  
 Say 'That in me is dancing too', and  
 (repeat refrain) Dance, cobra, dance! ...  
 He for whom a sportive snake  
 An ornament becomes  
 His home it is in us; so  
 (repeat refrain) Dance, cobra, dance! ...

No one has seen, not he of blossom's bloom  
 Nor even that holy garlanded one,  
 This flower-form of thine, so  
 (repeat refrain) Dance, cobra, dance! ...  
 Aum and all the rest that form  
 The essence of ten million charms  
 We now do know and so keep on, and  
 (repeat refrain) Dance, cobra, dance! . .

To the One who conjures down  
 Who all things here bring out  
 To His leaf-tender foot adhere, and  
 (repeat refrain) Dance, cobra, dance! ...  
 From lettered charm of Shiva-praise  
 To every formula of truth -  
 Even from sound do they come out, so  
 (repeat refrain) Dance, cobra, dance! . .

ella:mirkkijtukkume:kən pəðə-  
 pəlləvə<sup>n</sup> pərri ninna:tu pa:mpe:!  
 ella:jərivu<sup>n</sup> rvi:ruŋŋi vru<sup>n</sup> v|i-  
 jlləjile:ri ninna:tu pa:mpe:!  
 ella:<sup>n</sup> vi:ruŋŋijtirərr:runnru  
 clŋŋumunʈu ninna:tu pa:mpe:!  
 clllla:munʈ cutəra:jru<sup>n</sup> pru-  
 lləjile:r ninna:tu pa:mpe:!  
 də:fə<sup>n</sup> niyəməllə də:hijruvəni:  
 də:fəttilunʈəriŋŋi:tu pa:mpe:!  
 na:tu<sup>n</sup> nəgəɾəvumnna:j na:vilni-  
 nna:tu nin na:məmo:ti:tu pa:mpe:!

de:həvu<sup>n</sup> de:hijumna:j vi:uŋɲi:tu-  
me:kənumuŋtəɾiɲɲi:tu pa:mpe:!  
pe:riŋkəlɲinnu pe:ruvliɲnəllə  
pa:ra:di to:nnijna:tu pa:mpe:!  
ce:rnnunilkkumpruvlla:<sup>n</sup> cŋtə:rɪtu  
ne:rnnupo:mma:ru ninno:tu pa:mpe:!

Ten thousand million  
Of that Ananta snake art, Thou.  
Thy million hoods then open out, and  
(repeat refrain) Dance, cobra, dance! ...  
This body here no truth it has.  
Owner another in it resides.  
Such wisdom does thou gain, and thus  
(repeat refrain) Dance, cobra, dance! .  
Uniting body and owner too,  
Radiant, who abides as one,  
Such there is to know, as well, so  
(repeat refrain) Dance, cobra, dance! . . .  
What swallows all, with rival none  
Such is the omnipresent Word  
Which swallow thou, and steadily  
(repeat refrain) Dance, cobra, dance! . .  
Consuming all the words there are  
As the supporting wall for all  
Even on such do take thy stand, and  
(repeat refrain) Dance, cobra, dance! . . .  
From very name this great expanse  
And even earth as well did come  
As a presentiment in thought, so  
(repeat refrain) Dance, cobra, dance! . .

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