CRITICAL ANALYSIS OF HASTA MUDRĀS AND THEIR INTERPRETATIONS IN DANCE

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ABSTRACT:

The purpose of the paper is to critically analyse the term Hasta Mudrās in terms of its origin, evolution and its usage in various disciplines. It analyses the terminology "Ha<mark>sta Mudra" an</mark>d critically analyses their attributes in comparison with various texts and scholars. It explores on its objectives and significance in general and introspects into dance. This research paper tries to enlighten the various domains of Hasta Mudrās and highlights its benefits and usages in various disciplines like Dance, religious practices of Hinduism, Jainism and Buddhism etc. It tries to investigate the various types of Hasta Mudrās used in Dance that are explained by various scholars in various treatises on Dance and allied subjects. The research paper also analyses scientifically the various ways and means of holding the Hasta Mudrās and their positions (Articulations, Pronation and Supination). Finally, it concludes highlighting the various benefits and usages of Hasta Mudrās.

Keywords: Hasta Mudrās, Mudrās, Nātya Shāstra, Dance, Hinduism, Jainism, Buddhism, Asamyuta, Samyuta, Nritta Hastās, Nritta Ratnāvali, Sangētaratnākara, Sārangadeva, Balarāma Varma, Balarāmabharatam.

INTRODUCTION:

Communication through gestures of the hands is said to be one of the most ancient forms of communication in human evolution. The spoken language is developed much later, long after the use of gestural communication. Even after the invention of spoken language, the gestural language has never lost its importance and thus gesticulation is a universal feature. Speech without gesticulation is often incomplete. Signaling or sign is the first and foremost means of communication. It involves the hand signals, head movements, eye movements, body postures etc. An infant starts using signs and signals before he or she could speak to communicate. Besides children, the deaf and the dumb, the traffic police, crew in the flights, army, navy and air force, also use the hand gestures to communicate. In fact we all use the hand gestures often to communicate certain things in spite of speech. Thus using the hand gestures is the fastest way of communication added with speech. In *Bhāratēya* context from the Vedic times, the hand gestures have always been a part of sacred rituals like recitation of mantras and dance performances. These hand gestures used in rituals and performances are referred to as *Mudrās* or as *Hastās*.

OBJECTIVE OF THE STUDY:

Keeping in view of the abstract, the following are the objectives of the study.

- To give a brief overview on *Hasta Mudrās*.
- To explore into the terminology Hasta *Mudrā* and critically analyse their various attributes in various texts.
- To explicate the objectives and significance of *Hasta Mudrās* in various means and modes.
- To analyse various features and benefits of *Hasta Mudrās* that are used in various disciplines like Dance, religious practices of *Hinduism*, *Jainism* and *Buddhism* etc.
- To highlight the various types of *Hasta Mudrās* in Dance with brief analysis on various texts on *Hasta Mudrās*.
- To enlighten and educate the various modes and means of holding and positioning of the *Hasta Mudrās* with scientific approach.

RESEARCH METHODOLOGY:

This is a theoretical study which uses analytical and qualitative methods to analyze the ideas, opinions and theories presented in relation to *Hasta Mudrās* and its various benefits. Various ways and means are explored to study the *Hasta Mudrās* used in various disciplines to understand the benefits with an analytical approach to substantiate the objectives of the study. The study involves the critical analysis of *Hasta Mudrās* in Dance as explained in various texts. The analysis is drafted through the descriptive method.

DISCUSSION - BRIEF OVERVIEW OF HASTA MUDRĀS:

The origin of the word ' $Mudr\bar{a}$ ' is uncertain. It is derived from the Sanskrit words 'Mud' and ' $Dhr\bar{a}$ ', meaning 'bliss' and 'dissolving'. The word $Mudr\bar{a}$ in Sanskrit refers to a seal, sign, mark, gesture, imprint, passport, badge, mystery, code, language, signet-ring and lock¹. The origin of " $Mudr\bar{a}$ " can also be traced to the Persian word ' $muh\bar{a}ra$ ' meaning a 'sign'. Muddika, the Pali word for $Mudr\bar{a}$, is derived from the word " $mudd\bar{a}$ " which means authority². Thus, the word $Mudr\bar{a}$ indicates the seal of authenticity which involves the hands and fingers and sometimes the entire body. Its origin, according to the scholars, lies in the tantric text. In addition to these, $Mudr\bar{a}$ is a symbolic or a spiritual gesture used in the iconography and spiritual practices of Hinduism, Jainism and Buddhism³. In the post-Vedic literature, the term $Mudr\bar{a}$ referred to a seal or the imprint left by a seal and the later usage designated it as a ritual gesture; the way of holding the fingers.

Mudrās include Hasta Mudrās / Kara Mudrās (Hands), Kāya Mudrās (Body), Shira Mudrās (Head), Ādhāra Mudrās, Bandhā Mudrās (to unite / arrest), Chakshu Mudrās (Eyes), Swasa Mudrās (Breath), and Manō Mudrās (Mind)⁴. As mentioned above Mudrās are of eight types which are used spiritually and socially for various purposes like mantra, tantra, yantra, religious worships, sculptures, yoga, dance etc. Out of the eight mentioned Mudrās, Hasta Mudrās play a very major role and can be learned easily (or) held without much difficulty.

The term "Mudrā" which means a 'sign' or 'chinha' is not the terminology used for expression of gestures used in dance. In Bhāratēya Shāstrēya dance, the term "Hasta" "Abhinaya Hasta" "Abhinaya kāra" or "Hasta Mudrā" is used⁵. The hand gestures are referred as Mudrās in Yoga, Mantra and Tantra Shāstrās whereas in Bhāratēya Shāstrēya dance it is referred as Hastās. Hastās are hand gestures used to convey various feelings or expressions or meanings. The literal translation of Hasta Mudrā in Sanskrit is hand (Hasta) symbol (Mudrā), though Hasta Mudrā can be interpreted in English as hand gestures or sign language. Hence it would be more appropriate to use "Hasta Mudrās" for general reference of the hand gestures. The Hasta Mudrās are static in Yoga and spiritual practices, whereas they are dynamic in the dance practices.

ORIGIN OF HAND GESTURES – HASTA MUDRĀS

The origin of *Hasta Mudrās* is still shrouded in mystery. There is no proper evidence on the origin of the hand gestures but they have been in use for millenniums by people of all religions and sects throughout the world. The *Hasta Mudrās* are found in everyday life, in both *Mantra* and *Tantra*, in the religious rites and rituals of *Hinduism*, *Buddhism and Jainism*, *Yoga* and *Bhāratēya Shāstrēya* Dances. Hence the origin of *Hasta Mudrās* can be treated as Divine and Social origins. The *Hasta Mudrās* used in the religious practices are Divine in nature whereas the *Hasta Mudrās* used in *Yoga* and in *Bhāratēya Shāstrēya* Dance are regarded as Social.

¹ Kegan Paul & Co, *A Monograph on "Mudra*",1924 – Monier – William Sanskrit to English online dictionary, Sarvad Karand, RTL. 204; 406; Appa Rao PSR, *Nātya Shāstra*, *Nātya*mala Publications, 2000, p. 292. Appa Rao PSR, *Hastabhinayam*, Telugu University Publications, 1995, p. 11.

² Encyclopaedia Britannica -2010, Retrieved October 11, 2010;

³ Appa Rao PSR, *Hastabhinayam*, op.cit, p. 11.

⁴ Prakash Rao Dharanipragada, *Mudralu*, *Bandhālu*, p.3.

⁵ Appa Rao PSR, *Nātya Shāstra*, *op.cit*, p. 292.

According to divine origin theory, the hand gesture practice is prevalent all over the world. "Kalika Purāna has an elaborate description of various Hasta Mudrās of spiritual importance." Mudrās are extremely important in Hindu and Buddhist iconography. They also form a useful aid to identify *Buddhās*, *Bōdhisattvās* and deities"⁶. In Hindu rituals, we can find the *Hasta Mudrās* in prayers, Surya Namaskarams, Gayatri Mantram, Hōmam, sculptures of Gods and Goddesses etc. The sculptures of Gods in Hinduism, Buddhism and Jainism show various varieties of Hasta Mudrās. The rites and rituals in Hinduism, Buddhism and Jainism portray various Hasta Mudrā which are followed in *Bhārat*, Tibet, China, Japan Indonesia etc.

Yoga has abundant varieties of Hasta Mudrās which even explain about various benefits and therapeutic effects of practicing them. The science dealing with finger postures or the $Mudr\bar{a}$ *Vigyān* holds a significant position in ancient *Bhāratēya* Sciences. It is an independent and separate branch of Yoga.

Bhāratēya Shāstrēya Dance communicates expressions (Abhinaya) through the Hasta *Mudrās*. Most of the *Hasta Mudrās* have a scope of Therapeutic effects hidden in them as they are used for various purposes since ancient times. The Hasta Mudrās used in Bhāratēya Shāstrēya Dance along with their scope of therapeutic effects have been described in this chapter. The description of *Hasta Mudrās* used in *Yoga* and *Hindu* rituals and their scope of therapeutic effects is dealt in the third chapter.

Documentation of different gestural techniques and artistic practices has not been a priority until very recent times. Data materials from written texts, archeological findings, temple sculptures, paintings, and inscriptions have been the best sources to create a reasonable history. The paintings in the caves of *Ajanta* and sculptures in the *Ellora* caves dating back to 2nd and 1st centuries BC show innumerable *Hasta Mudrās*. *Hinduism* shows the earliest recorded knowledge and analysis of *Mudrās*.

The earliest documentations are found in *Mantra Shāstra* (the book of incantations), Upasana Shāstra (the book of worship and prayers) and the Nātva Shāstra (the book of Shāstrēya dramatology). The following verse from *Srimad Bhagwad Gita* mentions that Lord *Krishna* was in the posture of Gyān Mudrā when he bestowed the knowledge of Gita to Arjuna.

"Prapan<mark>napārijātāy</mark>a totravetre pānaye, gyān Mudrāya Krishnāya gētāmritā duhe namah⁷"

It says – Lord Krishna held the Gyān Mudrā and preached Gētāmrutam (Gita/ Gētōpadesham) to Arjuna.

However, in Bhāratēva context of dance, more than any other evidence, a written text, the Nātya Shāstra, holds invaluable information about the form, function, and technical details of dance and theatre in ancient *Bhārat*, thereby introducing us to the codification of *Hasta Mudrās*.

Bharata in Nātya Shāstra explains the birth of dance as divine as it is created by Lord Brahma. Based upon the origin of dance, we can trace the origin of *Hasta Mudrās* (gestures) from Yajur Veda, as Lord Brahma has extracted the abhinaya aspect (expressions) from Yajur Veda to create dance. In addition to Nātya Shāstra, Hindu Mythology regards, Lord Shiva as the Lord of Dance. He is described as using different hand gestures while performing Tāndavam – the Nrittāspect of dance. The Hasta Mudrās used by Lord Shiva, while performing the tāndava aspect could be the first usage and origin of *Hasta Mudrās* technically.

⁶ Rajender Menen, *The healing power of Mudras*, Pustak Mahal Publications, Delhi, 2007, p. 44.

⁷ Lokesh Chandra& Sharada Rani, *Mudras in Japan*, Vedam Books, p. 1.

Another important treatise on *Bhāratēya* Dance is *Abhinaya Darpanam*. Traced back to the medieval times, this text delineates in detail the communicative aspects through the *Hasta Mudrās*. In fact, the gestural language as given in Abhinaya Darpana, is followed more than in Nātya Shāstra by southern Bhāratēva dance forms.

"Kanthaenālambayaeth Gētam, Hastae na Ardham pradarshayeth I Chakshubhayām darshayaeth Bhāvam, Pādābhāyam Tālamācharaeth II Yatho Hasta thatho Drishti, Yatho Drishti thatho Manah I Yatho Manah thatho Bhāva, Yatho Bhāva thatho Rasā II⁸" (Ahinaya Darpanam – Slokas 56-57)

It says – The song is retained through the throat, the hands are used to express meaning, the $bh\bar{a}vam$ / expression can be seen through the eyes, the legs follow the rhythm of $t\bar{a}la$, where the hands (Hasta) are - the eyes follow (drishti); Where the eyes are - the mind (manah) follows; Where the mind goes, there is expression of inner feeling $(bh\bar{a}va)$ and where there is expression or bhāva, mood or sentiment (rasā) is evoked.

Thus, it can be said that hand gestures become a primary aspect of dance and plays a very important role in the final evocation of the rasā.

Let us look at various religious practices and the usage of Mudrās in them. In Jainism, Swāmi Mahāvir Jain and in Sikkhism, Guru Nanak Devji always shows the Gyān or Dhyān Mudrā. In Christianity, Jesus, John the Baptist and Virgin Mary are depicted holding various Mudrās⁹. Even today, the sign used by the priests of Catholic Churches while blessing the devotees, is the *Mahāgyān Mudrā*. Egyptian hieroglyphics are a virtual treasure house of *Mudrās*. The postures of their kings and queens and even the mummies show them holding Mudrās. The Babylonian sun God *Damuzi* shows certain *Mudrās* while descending into the underworld. In Islam, the mystical Whirling Dervishes used hand signs or *Mudrās* for various rites and rituals. Roman art is replete with Mudrās. Along with the spread of the Ramayana, the Shāstrēya performing arts and the Buddhist Tantras have spread Hasta Mudrās across Burma, Thailand, Cambodia, Srilanka, Indonesia, Nepal, Tibet, Mongolia, China, Korea and Japan¹⁰.

We eat, write with our hands, type with the fingers, rub our hands, press them in anxiety, wash them, and scratch with fingers and the list goes on. Knowingly or unknowingly we use our hands and we use the *Hasta Mudrās* for different purposes and most of us are not aware that these Mudrās have therapeutic effect in our daily life.

The above references of *Hasta Mudrās* shows that hand gesture is the universal phenomena and hence used by different gods which signify the hidden meaning and power seen through the hand gestures which are believed to have spiritual and healing powers. Hence *Hasta Mudrās* has both divine and social origin.

⁸ Nadikeshwara's Abhinaya Darpanam (980 – 1020 Century AD), Slokas 56-57.

⁹ J.S.M.Ward, *Pictures from the book "The sign Language of the Mysteries"*.

¹⁰ Lokesh Chandra& Sharada Rani, *op.cit*, p. 1

HASTA MUDRĀS – OBJECTIVES AND SIGNIFICANCE

The hands are the bearers of important symbols, which are universally understood. A *Bhāratēya Shāstrēya* dancer expresses the whole universe through the language of gestures which has a greater influence on the mind than words could express. The gestures of the deities depicted in *Hindu* and *Buddhist* art symbolize and evoke specific mythological occurrences¹¹.

The main objective of the *Hasta Mudrās* is to communicate a particular meaning. Its importance is extended in *Hindu* rituals, daily adoration's, dance, *Yoga*, sculpture, painting and other fine arts. The *Hasta Mudrās* are described as devotional, emotional, aesthetic and psychic attitudes or gestures. Several kinds of hand gestures are brought in for varied uses. Research on hand gestures has revealed several benefits of practicing them. *Yogis* have reckoned *Mudrās* as postures of energy flow and associated them to *Prānic* force of individuals with the cosmic or universal force.

Bending and stretching the fingers of the hand and holding them in various positions form the *Hasta Mudrās* in *Bhāratēya Shāstrēya* Dance. These *Hasta Mudrās* are the vital source of communication in all the *Shāstrēya* dance forms of *Bhārat* like *Kuchipudi, BharataNātyam, Odissi, Kathak, Kathakali, Manipuri, Mohiniattam, Chhau, Sattriya, Gaudiya Nātyam, Vilasininātyam, Andhranātyam, Perini Shiva Tandavam, and Yakshaganam etc. An accomplished practitioner of dance would make the use of these <i>Hasta Mudrās* along with the accompanying facial expressions and body movements. A dancer could use any number of *Mudrās* to show a particular meaning but can judiciously choose one over the other with the understanding of subtle distinctions in their meaning. Each *Hasta Mudrā* has a name that is used to indicate the form as it is explained in the written texts. This name is usually indicative of the shape that the fingers create and/or the object represented by the shape.

HASTA MUDRĀS – BODY DISCIPLINE:

Scientifically the human body is divided into head, body and limbs. The limbs include the hands and legs. The hand is divided into the shoulder, upper arm, elbow, lower arm, wrist, palm and fingers. The human body comprises of muscles, bones, nerves, blood etc., and is systematized into different systems. The important systems of the body, which aid in effective functioning of the body include the skeletal system, muscular system, nervous system etc.

The human hand in general has 5 fingers Angustha - Thumb Finger, Tarjani - Fore Finger, $Madhyam\bar{a}$ - Middle Finger, $An\bar{a}mika$ - Ring Finger and Kanishtha - Little Finger¹². These five fingers represent Agni (fire), $V\bar{a}yu$ (air), $\bar{A}k\bar{a}sh$ (space), Prithvi (earth) and Jal (water) respectively according to Ayurvedic terminology¹³.

The *Yogic* studies say that the physical body is composed of five elements which are fused with each other in different proportions to form each human body.

¹¹ Gertrud Hirschi, *Mudras – Yoga in your Hands*, Samuel Weiser INC publications, Maine, p. 6.

¹² Rajender Menen, *The healing power of Mudras, op.cit*, p. 10.

¹³ Dhiren Gala, *Health at your Fingertips*, Navnēt Publications, Delhi, p. 12.

HASTA MUDRĀS IN DANCE

The usage of hand gestures -' $Mudr\bar{a}s$ ' used by the priest in prayers and holy rituals became the language of expression and communication for the dancer known as ' $Hast\bar{a}s$ '. This research encompasses a thorough analysis of the ancient art of hand symbols found in wide range of disciplines including performing and other fine arts, medicinal and other alternative therapies, ritual activities, Yoga etc.

The language of communicating a particular meaning through the *Hasta Mudrās* in dance is known as '*Sharirabhāsha*'¹⁴. The *Hasta Mudrās* are as important to a dancer as alphabets to a language. They are important to a dancer just as notes for music, words for literature, brush and colours for painting and hammer and chisel for sculpture. *Hasta Mudrās* play a very important role in communication. Before the invention of written languages, dance was one of the methods of passing stories down from generation to generation¹⁵. In the ancient times, the specific language to name the hand gestures (*Hasta Mudrās*) is known as '*Akshara Mustika*'¹⁶.

Hastābhinayam, the nonverbal language of communication through gestures is the central point in a course of research study on communication in dance. It offers an in-depth approach and understanding of dance especially in communication through the gestures. Abhinaya Darpanam — the mirror of gestures written by Nandikeshwara mentions abhinaya as fourfold namely Āngikābhinaya, Vāchikābhinaya, Āharyābhinaya and Sātwikābhinaya.

Sātwikābhinaya or expression (abhinaya) of the mind is performed by Āngikābhinaya through the usage of suitable body movement and limb gestures as it is the extension of psychological emotions expressed through the body movements. Aharyābhinaya is associated to the dressing, decor and deals with the costumes and make-up of an artist who performs various roles. A dancer translates the meaning of communicating the language between the writer and the audience through the gestures and body movements. Vāchikābhinaya especially in theatrical dance is associated with the use of verbal language and communicating it through a non verbal language which involves the tone, voice, accent and rhythm which brings out the lyrical characters of the play through enacting.

Angikābhinaya is the expression through the gestures of limbs and body and Hasta Mudrās occupy a very special place in it. The emotions and the thoughts of the mind are expressed effectively through various body parts, which involve different postures, movements, gaits and gestures of the limbs. The application of gestures in the daily routine is very much different from that of the artistic gestures and at times there is no correlation between the realistic and artistic gestures. The artistic gestures add aesthetic appeal to the dance.

Bharata explains that $\bar{A}ngik\bar{a}bhinaya$ which is an expression through body gestures is three fold containing $Ang\bar{a}s$, $Up\bar{a}ng\bar{a}s$ and $Pratyang\bar{a}s$. Hand is a major limb in his division of three fold that plays a very important role. $Ang\bar{a}s$ further divide the body into 6 parts – Siram, $Hast\bar{a}s$, vaksha, $p\bar{a}rsw\bar{a}s$, kati and $p\bar{a}das$. The $Hast\bar{a}s$ play a very vital role in dance independently as well as with facial expression and body gestures.

According to the available literature, *Hasta Mudrās* in dance are first conceived by *Bharata* in the first known treatise on dance "*Nātya Shāstra*". Most of the texts on dance divide the *Hasta Mudrās* into two categories

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¹⁴ Munukuntla Sambashiva, *Gateway to Koochipoodi*, Nishumbitha Publications, Hyderabad, 2010, p.21.

¹⁵ Nathalie Comte, "Europe, 1450 to 1789: Encyclopedia of the Early Modern World", Ed. Jonathan Dewald. Vol.2. New York: Charles Scribner's Sons, 2004. p. 94–108.

¹⁶ Munukuntla Sambashiva, *Gateway to Koochipoodi*, *op.cit*, p.21; Mrinalini Sarabhai, *Sacred Dances of Bhārat*, Darpana Publications, Ahmedabad, 1961.

Abhinaya Hastās - Asamyuta Hastās, Samyuta Hastās NrittaHastās - articulations

The difference between the first two varieties and the NrittaHastās is that while the Asamyuta and Samyuta Hastās belong mostly to the sphere of finger manipulation indicating their positions, the NrittaHastās indicate movements of the fingers for the most part and invariably suggest an arm movement also¹⁷.

The Nātya Shāstra, Abhinaya Darpana and Nrittaratnāvali, as mentioned earlier, explains Hasta Mudrās in the form of verses. Bharata, Nandikeshwara, and Jayapasenāni pursued a common format and explained all the dance related movements pertaining to hands, feet, eyes, eyebrows, neck, head etc., in the form of verses. These texts also include which specific parts of the body should be used and exactly how to move or place them in relation to the rest of the parts. Further the authors proceed to explain, in which contexts this particular position, movement, or symbol could be used. It is important to note that many of the verses, after listing the possible contexts, end with the word etc., indicating that these are suggestions and guidelines but not exclusive uses. This explanation gives an enormous amount of depth into each element of the dance technique and its practice. These texts on *Hasta Mudrās* play a very important role in communicating various aspects in dance.

Scholars have explained the hand gestures (Single and double hand gestures) and have also mentioned their usage in different ways. The technique of holding the Hasta Mudrās, their placement, significance, other subsidiary *Hasta Mudrās* and many more details of *Hasta Mudrās* are explained in the dance treatises written by different scholars. Besides gestures some scholars have identified the positioning of the fingers besides holding it in a particular posture.

Sārangadeva, the author of Sangitaratnākara has explained the movement of the fingers¹⁸ which are seven in number which include IJCRI

Samyata – joined together

Viyukta – separated

Vakra – curved

Valita – moved

Patita – fallen

Kunchanmula – bent at the root

Prasarita – spread out.

He further explains the *Hasta Karanās* (the movement of the fingers to make a gesture) Āvestita, Udvestita, Parivartita and Vyāvartita; and 20 Hasta Karmās¹⁹ (characteristic usage of hand gestures) which are

Ahvāna – to invite

Utkarshana – to draw up

Chaedana – to cut

Tarjana – to threaten

Tādana – to strike

Tōdana − to push

Dhunana – to shake

Nigraha – to lower

Parigraha – to enfold

¹⁷ E. Easwaran Nampoothiry, *Balaramabharatam – a critique on dance and drama*, Keralasamskritam Publications, Trivandrum,

¹⁸ Sarangadeva, *Sangitaratnakara*, Rishi Publications, New Delhi, 1957, p.261. verse 412.

¹⁹ Ibid, p. 291. verse 441.

Bhaeda – to split *Mōksana* – to release *Mōtana* − to crush *Rakshana* – to protect *Vikarśana* – to remove *Vikshepa* – to throw *Viyōga* − to separate *Visarga* – to send forth *Vyākarśana* – to pull Samslaesha – to join *Spōtana* – to disengage.

He has also mentioned the *Hasta Ksetrā* (places or positions of holding the hand gestures) which are 14 in number that include *Pārsvadvayā*, *Purastat-Siras*, *Paschat-Siras*, *Urdhvah-Siras*, Adhah-Siras, Lalāta, Karna, Vakshas, Nābhi, Katisērsha, Urudvaya and Skandha²⁰.

Similarly, in order to explore into the details of the *Hasta Mudrās* and to create awareness on the hand gestures and their movements, the Hasta Mudrās can also be divided on the basis of the number of fingers extended, number of fingers bent, number of fingers curved partially or fully while holding them. Depending on the number of fingers extended, they can be classified as six types; single finger extended, double finger extended, three fingers extended, four fingers extended and five fingers extended. The single finger extended Hasta Mudrās include Shikhara, Sūchi, Hamsapaksha. The double fingers extended Hasta Mudrās include Katakāmukha, Chandrakala, Mrigashīrsha, Simhamukha. The three fingers extended Hasta Mudrās include Ardhapatāka, Kartarīmukha, Mayura, Shukatunda, Hamsāsya, Trishūla. The four fingers extended Hasta Mudrās include Tripatāka, Arāla, Kāngūla, Chatura, Bhramara. The five fingers extended Hasta Mudrās include Patāka, Ardhachandra, Alapadma, Samdamsha, Mukula. No fingers extended Hasta Mudrās include Musthi, Kapitta, Padmakosha, Sarpasīrsha, Tāmrachūda.

Scholars have explained various Hasta Mudrās with different finger positions which stimulate the acupressure points located in the fingers and palm. These scholars are well versed in various disciplines and hence have explored the significance and usage in various ways and means. Jayāpasēnāni in his book Nṛitta Ratnāvalī relates Hasta Mudrās to the nature in the below sloka.

Chatura makararāji, prollasat padmakosham bhramaralalitā lēlam, hamsapakshābhirāmam I pravichala dalapadmam karkatādyaryupaetam jaladhi jala mivedam brūmahae Hastalaksma II²¹

The characteristics of the *Hastās* are numerous and compared to the water in an ocean. It is like the talented crocodile, the lotus buds and petals, honey bees, beautiful swans etc.

Alike Abhinaya (expressions), the usage of Hasta Mudrās is also two types $-L\bar{o}ka$ Dharmi and Nātya Dharmi which is further divided in to two more types each depending on the Hasta Kshetrās and Hasta Karmās²².

²⁰ Ibid.

²¹ Jayapasenani, Nrutta Ratnavali, II, p.164.

²² Appa Rao PSR, Hastabhinayam, op.cit, p. 5.

The treatises that deal with the *Hasta Mudrās* include – *Nātya Shāstra* of *Bharatamuni*, *Abhinaya Darpanam* and *Bharatārnavam* of *Nandikeshwara* (3-4 Century AD), *Abhinava Bhārati* of *Abhinavagupta* (980 – 1020 Century AD), *Nṛutta Ratnāvali* of *Jāyapasēnāni* (1253-54 Century AD), *Nṛutya Ratnakōsham* of *Rājakumbakarnadēva* (1449 Century AD), *Srē Hastamuktāvali* of *Shubhankarā* (1500 Century AD), *Telugu Abhinayadarpanam* of *Mātrubhutaiah* (16-17 Century AD), *Hasta Lakshana Dēpika* of *Somanarya*, *Balarāmabaratam* of *Balarāmavarma Kartikatirunal* (1724-98).

Apart from these the *Hasta Mudrās* are also mentioned in the ancient literature of dance, drama and music which include Maheswara Mahapātra's Abhinaya Chandrika, Simhabhūpāla's Lāsyaranjanam, Vishnudharmottara puranam (500-600AD), Rāja Someshwara's Mānasōllāsam Bhāvaprakasham (1175-1250AD), (1131)AD). Shāradatanava's Sārangadeva's Sangētaratnākaram (1230 AD),Sudhakalasha's Sangētopanishat Sāram (1324-1354), Asokamalla's Nrutya Adyāyam, Pundarēka Vithala's Nartananirnayam, Subhankara's Sangēta Damodaram (1500AD), Vipra das's Sangētachandram (1450AD), Manavalli Ramakrishna Kavi's Bharatakosham (1951AD), Vedasuri's Sangētamakarandam (17th Century), Parshwadeva's Sangēta Samayasāram (13-15 Century AD), Utakae Govindachary's Nātya Shāstra sangraham Adigal's Silappādikaram, Someshwara's Abhilāsitārtha Chintamani, (1800AD), Ilango Srikantha's Rasakowmudhi (1575AD), Chandrashekara Pandita's Bharatasāram, Chillakuri Diwakarakavi's Bharatasāra Sangraham²³.

Bharata has explained certain basic Hasta Mudrās and some detailed Hasta Mudrās for different usages. However he says that the hand gestures should be devised for their form, movement, significance and class according to the personal judgment of an artist. This can be clearly observed from the following slokas²⁴.

"Ākrtyā chaeshtayā cihnaih jātyā vignyāya vast<mark>utah I</mark> Svayam vitarkya kartavyam Hastābhinayanam b<mark>udhaih II"</mark>

"Noktā ye ca mayā hyatra lokād grāhyastu te b<mark>udhaih I"</mark>

The similar idea is also explained by Sarangadeva in Sangeta $Ratn\bar{a}kara$ and is clearly evident from the below $sloka^{25}$.

"Loka<mark>vruttān</mark>us<mark>ārāttep</mark>pyuhyantam anayā dishā I Netrabhrumukharāgādyair upāngair upabrmhitāh II

From the enumeration and description of the *Hastās* explained, it may be observed that *Nātya Shāstra*, *Sangēta Ratnākara* and *Nṛitta Ratnāvali* belongs to one group as they are the basic source and *Abhinaya Darpana*, *Sangēta Samayasāram*, *Abhinava Bhārati* etc., belong to another group as they have been written by referring the basic sources. However *Sangētaratnākara* and *Nṛitta Ratnāvali* give additional information and additional *lōkadharmi besides* following *Nātya Shāstra*.

²⁵ Sarangadeva, *Sangēta Ratnākara*, VII, p. 287.

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²³ Appa Rao PSR, *Hastabhinayam*, *op.cit*, p. XV-XVI.

²⁴ Bharatamuni, *Nātya Shastra IX*, p 161.

Nātya Shāstra Sangraha, Bharatārnavam and few other texts are only the compilations of stanzas from these sources and therefore they have no independent value. Hastalakshana Dēpika which is popular in Kerala and used in Kutiyattam and Kathakali is different from other texts to some extent and so stands separate. The Balarāma Bharatam takes materials from all these and is intended for the use of *BharataNātyam* as well as *Kathakali*²⁶.

Nātya Shāstra comprises of the 36 chapters which detail all aspects of the performing arts including exhaustive elements of artistic experience (from the point of view of the creator), artistic content or states of being, and structure of the dramatic plot. Hasta Mudrās which is part of \bar{A} ngik \bar{a} bhinaya is dealt in the 9th chapter and are included in the artistic content. There are several other texts on the topic of dramatic performance and dance movements. One of the most important of these, with reference to Hasta Mudrās, is Nandikeshwara's Abhinaya Darpana (literally, Mirror of Gestures) written around 1000 AD. This compact text can be described as an abridged dancer's guide based on the Nātya Shāstra. The chapters which deal with Hasta Mudrās are from chapter 6 to 11 and partly in chapter 12 of Nātya Shāstra.

The Hasta Mudrās form an integral part of Āngikābhinaya or stylized body language, in which the goal is to create an image in the mind of the observer. Nātya Shāstra is the basic reference for the *Bhāratēya Shāstrēya* dance forms; however there are few other texts which are followed along with Nātya Shāstra. The Nātya Shāstra describes 24 Asamyuta Hastās, 13 Samyuta Hastās and 30 NṛittaHastās 67 varieties in all²⁷.

Sarangadeva accepts all these Hastas of Bharata and says that the NrittaHastas, though primarily intended for Nritta(pure dance) are allowed by the highest authorities like Bharata and by approved practice, in abhinaya also. He also states that the use of the Nritta Hastās is regulated by imaginative skill, approved traditional and the general practice²⁸. According to Sarangadeva, the total number of the *Hastās* of *Bharata* is 67. He splits the *Nritta Hastās*, *Alapadmōlbana* into two, namely Alapadma and Ulbana and thereby enumerates 30 Nritta Hastās. He also gives explanation on the 64 *Hastās* mentioned by *Bharata*²⁹.

Nritta Ratnāvali is another treatise on dance written by Jāyapasēnāni of Kākatēva dynasty during 1253 A.D. This treatise also deals with the *Hasta Mudrās* in the chapter 2. According to Jāyapasēnāni, the Hastās single and combined and the Nritta Hastās are just those given by Bharata in name and number which would give 66 in all. He gives a more satisfactory explanation for Bharata's statement of the number of Hastās as 64, by emphasizing on the word "Nāmatah" means by name. The Sūchasyam among the single hand gestures and Svastika among the combined hand gestures are included in the *Nritta Hastās* also. Therefore the names are 64 and the gestures are 66^{30} .

Bharatārnavam mentions 27 Asamyuta Hastās, 16 Samyuta Hastās and 22 Nritta Hastās. On the authority of *Brihaspati*, it further gives a list of 27 *Hastās*, many of which are included in the first $list^{31}$.

Hasta Lakshana Dēpika gives 24 Alphabetic hand gestures almost closely following the terminology given by *Bharata*, with some changes affected in their definitions and applications³².

²⁶ E. Easwaran Nampoothiry, *Balaramabharatam – a critique on dance and drama, op.cit*, p. 190.

²⁷ Appa Rao PSR, Hastabhinayam, op.cit, p. 3.

²⁸ Sarangadeva, *Sangētha Ratnakara*, *op.cit*, p. 90-92.

²⁹ Appa Rao PSR, *Hastabhinayam*, op.cit, p. 4.

³⁰ Jayapasenani, Nrutta Ratnavali, op.cit, p. 87-88.

³¹ Nandikeshwara, *Bharatarnava*, Thanjavur Maharaja Serfoji's Saraswathi Mahal Library Society, p. 1-92.

³² Somanarya, *Hasta Laksana Dēpika*, p. 1-89.

Balarāmabharata mentions 40 Asamyuta Hastās and 27 Samyuta Hastās totaling 67 in number. Among the 40 Asamyuta Hastās, the 24 names are from Bharata's Nātya Shāstram, 7 are based on Abhinaya Darpanam and the remaining nine are based on other sources. He does not enumerate all the Nritta Hastās of Bharata, but mentions that some of the Hastās can be used as Nritta Hastās also not in the context of Hasta, but in the context of Bahupracharas³³.

There are over 250 Hasta Mudrās in the Bhāratēva Shāstrēva dance forms especially Kuchipudi, Bharatanātyam, Odissi, Kathakali etc.

LINGABHAEDA (GENDER) OF HASTĀS

Bharatamuni, in his treatise mentions that he has explained the division of Hastās and their number along with the usages. Both the male and female performers have to implement the *Hastās* keeping in view of the region, time, implementation and the meaning of the *Hastās*.

However, there could be numerous other Loukika Hastās which can be identified and implemented based on the Rasa (sentiments) and Bhava (emotions)³⁴.

"Daesham kālam pray<mark>ōgam chāpya</mark>rdhayuktimavaekshyacha Hastāhyaetae prayōkt<mark>avyā nrōnām stēnām</mark> vishaeshataha"³⁵

"Anyaechāpradha sam<mark>yuktā</mark> loukikā <mark>yae kar</mark>āsty<mark>iha</mark> Chandatasthae prayōktavyā rasa bhāva vichaestitaihi"36

Balarāma Varma, the author of Balarāmabharatam divides Asamyuta and Samyuta Hastās into three groups namely pullinga, strilinga and napumsakalinga. Among the Asamyuta Hastās, the fifteen Hastās — the Patāka, shikhara, musthi, sūci, mrigasīrsha, hamsāsya, mukula, bāna, bhadra, arāla, apaveshtita, silimukha, tāmrachūda, mayūra and ardhapatāka are Pullinga Hastās. The twelve *Hastās* namely tripatāka, hamsapaksha, kartari, katakāmukha, trilinga, pūrnachandra, bālachandra, ardhachandra, udvestita, sarpasīra, kutila and bhramara are Strilinga Hastās. The remaining thirteen Hastās namely padmakōsha, sandamsa, urnanābha, alapallava, puronnata, chatura, kapittha, chaturunnata, simhānana, gāngula, shukatunda, nirēkshana and prālamba are the *Napumsakalinga Hastās*³⁷.

Among the Samyuta Hastās; anjali, garuda, dola, gajamukha, vistratapallava, kurparaswastika, tādanaPatāka, sankalpa, gajadanta, varadābhaya and kapota – these eleven Hastās are Pullinga Hastās. The nine Hastās namely puspaputa, bharati, Patākaswastika, utsanga, padmamukula, katakāvarta, subhashobhana, samyuktapallava and vardhamāna are Strilinga Hastās. The remaining seven namely makara, mallayuddha, kartariswastika, upachāra, kalaha, karkataka and avahittha are Napumsakalinga Hastās³⁸.

This kind of classification of *Hastās* on the basis of gender is not mentioned elsewhere except in Balaramabharatam. Abhinayadarpanam is one that goes into the details of Hastās indicate the Vedas, mountains (Parwatās), seasons (Rhitus), tenses (Kālas), numbers (Sankhya), tastes (Shatrasās), musical notes (Sapta-swarās), melodies (Rāgas), stars (Nakshatrās), sentiments

³³ Karthika Thirunal Bala Rama Varma - Maharajah of Travancor, *Balaramabharatam*, p. 249.

³⁴ Appa Rao PSR, *Nātya Shāstram, op.cit*, p. 308.

³⁵ Sriramachandrudu Pullela, *Bharatamuni pranētam NātyaShāstram(andhrabhashavyakhya balanandini toh)* 2014, p.360, Sloka No. 165.

³⁶ Ibid. Sloka No. 164.

³⁷ Karthika Thirunal Bala Rama Varma, *op.cit*, p. 90 st. 619 – 624.

 $^{^{38}}$ Ibid., p. 90 st. 625 - 630.

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($navaras\bar{a}s$), parts of the body ($Sarwa\ Ang\bar{a}s$), week days ($Sapta\ V\bar{a}ras$), nine gems ($Navaratn\bar{a}s$), metals ($L\bar{o}h\bar{a}s$), zodiac signs ($R\bar{a}sis$), sage (rishi), race (vamsha), colour (varna), flower arrows of $Manmatha\ (Pancha\ B\bar{a}nas)$ and the guardian deity (daevata) etc., of the $Hast\bar{a}s$ and in a way gives a religious and cultural touch of the $Hasta\ Mudr\bar{a}s$ besides practitioner oriented.

Keeping in view of the division of the *Hastās* in *Abhinayadarpanam*, the author of *Balarāmabharatam* brings in another element to *Hastās* namely the *Linga bhaeda Hastās*.

Apart from the *Asamyuta* and *Samyuta Hasta Mudrās* there are few extra *Hasta Mudrās* known as *Grandhāntara Hastās* brought out by *Nandikeshwara*³⁹. The *Asamyuta* and *Samyuta Hastās* play a very major role in *Bhāratēya Shāstrēya* dance forms for expressing varied meanings and emotions. These two *Hastās* are the base and they become the major sources in reproducing the various other *Hasta Mudrās*.

Both Asamyuta and Samyuta Hasta Mudrās are used to represent various other Hasta Mudrās with the combination of one or both these Hasta Mudrās. The examples of such Hasta Mudrās are Nṛitta Hastās, Bāndhavya Hastās, Navagraha Hastās, Dashāvatāra Hastās, Devata Hastās, Navaratna Hastās, Sapta samudra Hastās, the seven upper worlds and the even lower worlds, hands that represent different rivers, trees, animals, aquatic beings, emperors etc., the Nātya Shāstra and Abhinaya Darpana also lists Hasta Mudrās for the 27 stars, the different rāsis (moon signs and sun signs), the seven musical notes, different ragas and the four classes of Nāyikas such as Padmini etc.

HASTĀBHINAYA (GESTURES OF THE HANDS)

Hasta Mudrās or the hand gestures play a very important role in Bhāratēya Shāstrēya dances. They represent a particular object, person, animal, mood, emotions etc. The two most important varieties are:

- Asamyuta Hastās or single hand gestures
- Samyuta Hastās or double hand gestures

Asamyuta Hastās

Asamyuta Hastās are single hand gestures or uncombined Hastās. According to Abhinaya Darpanam there are 28 Asamyuta Hastās apart from 6 additional Hastās totaling to 34 and according to Nātya Shāstra there are 24 in number.

'Nātya Shāstra describes 24 Asamyuta Hastās namely patāka, tripatāka, kartarīmukha, ardhachandra, arāla, shukatunda, musti, shikhara, kapittha, katakāmukha, suchasya, padmakosha, sarpashīrsha, mrigashīrsha, kāngūla, alapadma, chatura, bhramara, hamsāsya, hamsapaksha, samdamsha, mukula, ūrnanābha and tāmrachuda '40.

Abhinaya Darpanam mentions all these Hastās except ūrnanabha and adds seven more namely ardhapatāka, mayūra, trishūla, chandrakalā, vyāghra, simhamukha and ardhasūchika⁴¹.

Sangēta Samayasāram mentions all the above mentioned Hastās except the trishūla, chandrakalā and ardhasūchi and adds udvaestita, apavaestita, parivrutta, damaruvadaka and

⁴¹ Nandikeshwara, *Abhinaya Darpanam*, *op.cit*, p. 93-167

³⁹ Appa Rao PSR, Abhinaya Darpanam, op.cited, p.281.

⁴⁰ Bharatamuni, *Nātya Shastra*, *op.cit*, p 18-126.

vartana⁴².

 $Sang\bar{e}ta\ Ratn\bar{a}kara^{43}$ and $NrittaRatn\bar{a}vali^{44}$ closely follow the $N\bar{a}tya\ Sh\bar{a}stra$ and mention only the 24 $Hast\bar{a}s$ of Bharata.

Bharatarnavam includes the 23 Hastās of Bharata except ūrnanabha along with ardhaPatāka, mayura, bana and hamsasya from Abhinaya Darpanam⁴⁵.

Nātya Shāstra Sangraham which is the compilation of different sources mentions Bharata's 24 Hastās and adds ardhapatāka, mayūra, chadrakala, trishūla and hamsāsya of Abhinaya Darpanam⁴⁶.

The Hasta Lakshana Dēpika which is used for Kudiyāttam and Kathakali in Kerala does not make the divisions of Asamyuta and Samyuta; but it prescribes that certain Hasta Mudrās are used with both the hands. The terminology of the hand gestures is almost the same as that found in Bharata's Nātya Shāstra. It is in their definition, application and number that the Hasta Lakshana Dēpika differs from the other texts. It does not mention the single hand Hasta padmakōsha, kāngula, alapadma, chatura, samdamsha and tāmrachūda of Bharata; but adds six other varieties namely Mudrākhya, kataka, anjali, mukula, pallava, vardhamanaka, many of which are differently defined.

The Balarāmabharatam describes 40 Asamyuta Hastās⁴⁷ from Nātya Shāstra, ardhapatāka, mayūra, bāna, hamsāsya, udhvestita and apavestita from Sangēta Samayasāram and ten other varieties namely trishula, kutila, balachandra, nērkshana, prālamba, puronnata, caturunnata, puronnata, caturunnata, silimukha and bhadra based on oral and other sources.

Apart from these, there are few more *Hastās* mentioned by the libertarians. Some of them are *Ūrnanābha*, *Ardha-Suchi Hasta* (Half needle), *Bāna Hasta* (Arrow), *Ūrnanābha Hasta* (spider), *Vyagra Hasta*, *Kataka Hasta*, *Valli Hasta*.

Below are the *Asamyuta Hastās* (single hand gestures) along with the pictorial representation according to *Nandikeshwara's Abhinaya Darpanam*⁴⁸.

⁴² Parshwadeva, *Sangēta Samayasāram*, p. 2-4.

⁴³ Sarangadeva, Sangētha Ratnakara, VII, St. 102 – 184.

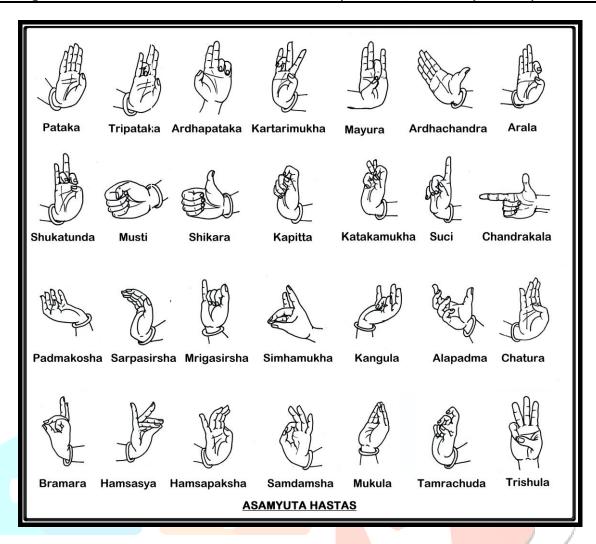
⁴⁴ Jayapasenani, *Nrutta Ratnavali*, *op.cit*, p. 97-171.

⁴⁵ Nandikeshwara, *Bharatarnava I*, *op.cit*, p. 5-61.

⁴⁶ Govindacharya Utake, K. Vasudeva shasty, A. Krishnaswamy Matik, G. Nagaraja Rao, *Nātya Shastra Sangraham*, Sarasvati Mahal Library, 1979, p. 99-184.

⁴⁷ Nandikeshwara, *Bharatarnava*, *op.cit*, p. 40 st. 5 – p. 74 st. 433.

⁴⁸ Appa Rao PSR, *Abhinaya Darpanam op.cit*, p. 155 - 255

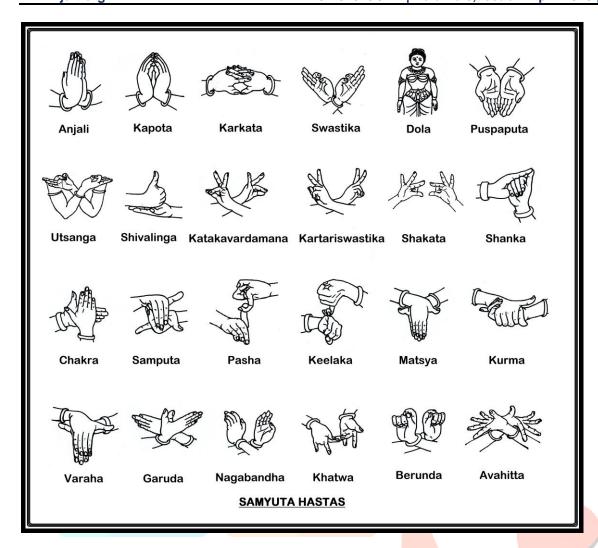


Asamyuta Hastās

Samy<mark>uta Hastās⁴⁹</mark>

Samyuta Hastās are double hand gestures or combined Hastās. According to Abhinaya Darpanam there are 24 Asamyuta Hastās and according to Nātya Shāstra there are 13 in number. The Asamyuta Hasta include Anjali, Kapōta, Karkata, Swastika, Dōla, Puspaputa, Swastika, Shivalinga, Katakavardamāna, Kartarīswastika, Shakata, Shanka, Chakra, Samputa, Pāsha, Kēlaka, Matsya, Kūrma, Varāha, Garuda, Nagabandha, Khatva, Berunda and Avahitta. Below are the Samyuta Hastās (single hand gestures) along with the pictorial representation and some major usages.

⁴⁹ Ibid, p. 256 – 287.



Samyuta Has<mark>tās</mark>

Adhika Hastās:

Apart from the Asamyuta and Samyuta Hasta there are some extra hand gestures (Adhika Hastās) which have been mentioned by the scholars. Nandikeshwara in his Abhinaya Darpanam has mentioned about 52 Adhika Hastās and few of them are Nishādha, Gajadanta, Avahitta, Vardhamāna, Viprakērna (Loose), Ārāla-Katakāmukha (giving pieces of betel leaf), Suchāsya (Needle-face), Ardha Raechita (invitation), Kaesha-Bandha (Tying the hair), Mushthi-Swastika, Nalini-Padmakōsha (cluster of flowers), Urdhestitālapadma (indicating desires), Ulbana (Abundance), *Lalita* (mountain), *Garudapaksha* (wings of eagle), *Nishaedha* (prohibit) etc⁵⁰.

Hasta Prānas:

In dance, the way *Hasta Mudrās* are held is divided into 12 different ways which are known as 'Hasta prānas' or 'prāna lakshanās' in dance terminology⁵¹. Below is the list of the twelve Hasta pranas and the process of its usage.

Prakarana Hasta – The fingers are stretched.

Kunchita Hasta – The fingers are folded.

Raechita Hasta – The fingers are given movement.

Punchita Hasta – The fingers are folded or moved or stretched.

Apavaeshtita Hasta – The fingers are bent down.

Prerita Hasta – The fingers are bent back or moved or stretched.

⁵⁰ Ibid, p. 155 - 255

⁵¹ Appa Rao PSR, *Hastābhinayam*, op.cit, p. 273

Udveshtita Hasta – The fingers and hand are held upwards while dancing.

Vyavrutta Hasta – The hands are held up to the sides.

Parivrutta Hasta – The hands are brought together from sides.

Sanketa Hasta – The hands used to convey implied meanings.

Chihna Hasta – The hands used to convey certain things which are visible and invisible.

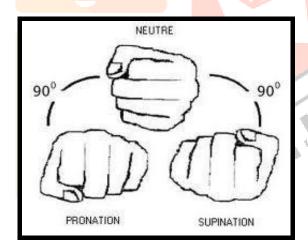
Padārthatēka – The hands used to confirm the meaning of certain words.

The $Hasta\ Mudr\bar{a}s$ are static in Yoga and spiritual practices, whereas they are dynamic in the dance practices.

As we have explored the various types of *Hasta Mudras* according to various texts and their benefits and usages, now, let us explore the holding and positioning of these *Hasta Mudras* correlating them with scientific approach.

PRONATION – SUPINATION OF HAND

The *Hasta Mudrās* are held in a prescribed shape and angle according to the requirement. Few of the *Hasta Mudrās* are held facing the fingers towards the ground, few facing the sky and few facing different directions or angles. The hand is rotated in different angles and directions either from the wrist or forearm. The science of hand, describes the rotation of the hand in different angles.



Pronation and Supination

In simple terms Pronation of the hand is facing the knuckles outwards / upwards from the neutral position and Supination of the hand is facing the knuckles inwards / downwards from the neutral position. It can be clearly understood from the above picture. The keen observation of the wrist, forearm, and hand gives the clearest understanding of the mechanism of pronation/supination. At the end of the arms, we find the supinator, a short muscle whose fibres run from the ulna (long forearm bone) and the lateral end of the humerus (upper arm bone) to the radius (short forearm bone). It assists the biceps brachii in rotating the forearm laterally (supination). Whereas, the pronator terse is a short muscle connecting the ends of the humerus (upper arm bone) and ulna to the radius (forearm bones). It functions to rotate the arm towards inside, as when the hand is turned so the palm is facing downward (pronation). The pronator

quadratus, which runs from the far end of the ulna (longest forearm bone) to the far end of the radius (shortest forearm bone) helps in this activity.⁵²

Supination and Pronation (rotation from the axis of the forearm) are added to the two axes of movements of the wrist while holding the *Hasta Mudrās* individually or while performing the Nritta Hastās. Pronation and Supination are a paired set of joint manipulations though not unique to humans, gives us a greater degree of dexterity and flexibility. This ability is found in both the hands, feet and to a lesser extent in other joints. Neither set of muscles could accomplish the task separately, nor could they do so without a special joint that allows the radius and ulna to cross each other within the arm. Yet together they make the process of pronation or supination possible to rotate the arms outwards and turn the palms upward and downward.

The Hasta Mudrās in Bhāratēya Shāstrēya dance are held in different postures and in different angles depending on the necessity. The pronation and supination play a major role in turning the hand to a particular angle from the base of the wrist and is very much useful in holding the Hasta Mudrās in different postures and angles in Bhāratēya Shāstrēya dance. The Bhāratēya Shāstrēya dance either uses pronation or supination to hold the Hasta Mudrās with ease and perfection either individually or in Nritta Hastās. The Hasta Mudrās, which involves pronation include kapitta, katakāmuk<mark>ha, sūchi, sarpashērsha, mrigashērsha, simhamukha, bhramara,</mark> hamsapaksha, samdamsha, dola, matsya, varāha etc. The Hasta Mudrās, which involve supination, include padmakosha, kangula, chatura, mukula, puspaputa, khatva, avahitta etc. The Hasta Mudrās, which involve both pronation and supination, include samputa, pasha, kēlaka, kurma, etc. However, while performing the Nritta Hastās, each both pronation and supination might be used to show each Nritta Hasta.

ARTICULATIONS OF HAND

The Hasta Mudrās are held either by stretching the fingers or by bending them. The stretching of the fingers may involve all or few of the fingers. Similarly, the bending of the fingers may involve all or few of them. Hence, the holding of the *Hasta Mudrās* individually or while performing the Nritta Hastās, involve different joints of the bone in the hand to bend the fingers.

The different joints in the hand include the wrist, the carpel joints, the metacarpal joints, the proximal phalanges, the middle phalanges and the distal phalanges. The joints in the hand are identified as articulations in the language of science. The articulations are⁵³:

- Interphalangeal articulations of hand (the hinge joints between the bones of the finger)
- Metacarpophalangeal joints (the place, where the fingers meet the palm)
- Intercarpal articulations (the portion, where the palm meets the wrist)
- Wrist (that may also be considered as a part of the forearm)

There are numerous sesamoid bones in the hand that differ in number, from person to person. A pair of sesamoid bones is found virtually in metacarpophalangeal joints and interphalangeal joint of the thumb (72.9% chances), the metacarpophalangeal joints of the little finger (82.5% chances) and the index finger (48% chances). In rare cases, the sesamoid bones can be seen in all the metacarpophalangeal joints and all distal interphalangeal joints except that of the longest finger⁵⁴.

The articulations play a very important role in holding the *Hasta Mudrā* in a particular pose, particular level, in a particular angle and importantly in a particular posture. All the above

⁵² Schmidt & Lanz, *Human Physiology*, op.cit, p.107.

⁵³ Ibid, p.107.

⁵⁴ Ibid.

mentioned four articulations are involved in holding the $Hasta~Mudr\bar{a}s$ depending upon the $Hasta~Mudr\bar{a}$, its positioning and the angle of holding it ($Hasta~Pranas~-~Nritta~Hast\bar{a}s$). The interphalangeal and metaphalangeal joints or articulations are involved in holding the $Hasta~Mudr\bar{a}$, whereas the intercarpal articulation and the wrist is involved in positioning of the $Hasta~Mudr\bar{a}s$ in different angles while performing the $Nritta~Hast\bar{a}s$.

CONCLUSION:

From the above discussion, we have explored into the terminology of *Hasta Mudra*, their origin, evolution, its attributes and usages in various disciplines like Dance and religious practices of *Hinduism, Jainism* and *Buddhism*. The objectives, significance and principles of the *Hasta Mudras* are also investigated in brief. A detailed critical analysis of the *Hasta Mudras* used in Dance are analysed in detail as enumerated by various scholars and disciplines. The various attributes like place, movement, holding and positioning of the *Hasta Mudras*, their genders, classifications, types etc are all dealt in detail as explained by various scholars. The positioning and holding of the *Hasta Mudras* are compared and analysed with scientific approach. The above analysis has to be promoted, propagated and educated to understand the concept of *Hasta Mudras* in detail for effective implementation in Dance and religious practices.

REFERENCES:

- PSR Appa Rao, Natya Shastram, Natyamaala Publications, 2000.
- Prema Nair, Dance your way out of ailments, Times of India article, May 6, 2002.
- Tripura Kashyap, My Body, My Wisdom a hand book of creative Dance Therapy, Penguin Publications, 2005.
- Payne. Helen, Dance Movement Therapy: Theory, Research and Practice (2nd edn). Tavistock / Routledge Publications, 2006.
- Halprin, Anna. Dance as a Healing Art: Returning to Health through Movement and Imagery. Mendocino, CA: LifeRhythm, 2000.
- Dr. Ambika Kameshwar, Theatre Arts for Holistic Development, Ramana Sunritya Aalaya Trust Publications, 2006.
- Dance, Baby, Dance, Times of India article, TNN, December 16, 2010.
- Mallika Mulherkar, Dance Therapy, Times of India article, October 20, 2010.
- Mona Ramavat, So you think you can't Dance, Times of India, June 30, 2012.
- Dance to boost your confidence, PTI, Times of India article, June 18, 2005.
- URMC online Health Encyclopedia, https://www.urmc.rochester.edu/encyclopedia.