

NYASA

Thesis submitted by

SARANGAPANI BASHYAM

Towards the partial fulfillment of

DOCTOR OF PHILOSOPHY (YOGA)

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**SWAMI VIVEKANANDA YOGA ANUSANDHANA SAMSTHANA (S-VYASA) (Declared as
Deemed-to-be University under Section 3 of the UGC Act, 1956)**

19, EkanathBhavan, Gavipuram Circle, K.G. Nagar,

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By

SARANGAPANI BASHYAM

UNDER THE GUIDANCE OF
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H.R. NAGENDRA, Ph.D.

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DECLARATION

I, hereby declare that this study was conducted by me at Swami Vivekananda Yoga AnusandhanaSamsthana (S-VYASA), Bengaluru, under the guidance of Dr. T.M. Srinivasan and Dr.H. R. Nagendra, Chancellor S-VYASA University Bengaluru.

I also declare that the experimental content of the subject matter of my thesis entitled “NYASA” has not previously formed the basis of the award of any degree, diploma, associate-ship, fellowship or similar titles.

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C E R T I F I C A T E

This is to certify that Sarangapani Bashyam who was given Ph D. registration with effect from January 2006 by Swami Vivekananda Yoga Anusandhana Samsthana, Deemed University under the Division of Yoga and Physical Sciences has successfully completed the required training in acquiring the relevant background knowledge and has completed the required course of research for not less than two years to submit this thesis entitled 'NYASA' as per the regulations of the University. We also declare that the subject matter of the thesis has not previously formed the basis of the award of any degree, diploma, associateship, fellowship or similar titles.

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My association with Dr H R Nagendraji affectionately and reverentially addressed as Guruji began in late 80's. Guruji directed the first SMET programme in New Delhi for corporate managers. Having interacted with many corporate trainers in my career as HRD manager I can assert Guruji is a class apart and an ideal trainer. Guruji had been inviting me to join the then Vivekananda Kendra. My association took place in a different way when I registered for Ph D in 2006. The day in Oct 2006 when Guruji assigned the research topic of NYASA was indeed a golden one. For I was doing anganyasa/karanyasa aspart of my sandyopasana all along, frankly speaking mechanically. What was a mechanical procedure till then acquired a great significance; I am realizing, having had an opportunity to study a treasure of knowledge and concepts over these years. I acknowledge my gratitude to Guruji in full measure. Guruji, in spite of his very busy schedule of work always had time to guide me and advise on scientific study whenever I sought or found the path hazy.

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I wish all those who helped in my study all success in their vocations and pastimes.

STANDARD INTERNATIONAL TRANSLITERATION CODE USED TO TRANSLITERATE SANSKRIT WORDS

अ	=	a	च	=	ca	म	=	ma
आ	=	ā	छ	=	cha	य	=	ya
	=	i	ज	=	ja	र	=	ra
ई	=	ī	झ	=	jha	ल	=	la
उ	=	u	ञ	=	ña	व	=	va
ऊ	=	ū	ट	=	ṭa	श	=	śa
ऋ	=	ṛ	ठ	=	ṭha	ष	=	ṣa

ऋ	=	r̄	ड	=	ḍa	स	=	sa
ए	=	e	ढ	=	ḍha	ह	=	ha
ऐ	=	ai	ण	=	ṇa	क्ष	=	kṣa
ओ	=	o	त	=	ta	त्र	=	tra
औ	=	au	थ	=	tha	ज्ञ	=	jña
अं	=	aṁ	द	=	da			
अः	=	aḥ	ध	=	dha			
क	=	ka	न	=	na			
ख	=	kha	प	=	pa			
ग	=	ga	फ	=	pha			
घ	=	gha	ब	=	ba			
ङ	=	ṅa	भ	=	bha			

ABSTRACT

BACKGROUND.

As per sanatana dharma in the days of yore, man worshipped Godhead reciting Vedic chants considered as co-eval with God according to the time, the day and the season of the year. Quite often man worshipped God in the form of nature simply in ecstasy or in awe. Iconic worship either individual or congregational, came later with the advent of Agamasastra and Tantric form of divine worship. In the preface to a book on congregational worship, Leadbeater describes the thought-form generated when a group of persons perform congregational worship with Gayatri mantra which includes nyasa procedure, led by a priest. Agama sastra lays down elaborate procedures for worship and stipulate strict adherence by the priests with the ultimate aim of welfare of the whole mankind. One of the procedures is Nyasa which is ordained as mandatory prior to every mantrajapa. Nyasa means to place parts of mantra on parts of the body of the worshipper in a designated sequence. Both nigama and agama come from the root GAM (gachha) meaning to go and also to know. The more popular word for 'Nigama' is Veda which means 'to know'. Veda is considered as the fountainhead of all knowledge for all and for all time. It is held as anadi and apaurusheya (not composed by any person) and co-eval with God. Veda is also known as 'Sruti' - the one learnt by oral tradition and thereby maintaining the purity and correctness of chanting. Agamasastras on the other hand are regarded as instructions from Gods/Goddesses through Rsis for the performance of worship to the divine in a structured and systematic manner for the welfare of the society, the flora, the fauna and the ecosystem.

Aims

- 1 To understand the concept of nyasapractice
- 2 To explore the possibility of adapting nyasa to yoga therapy

Objectives

- 1 To study any changes in the physiology due to nyasa
- 2 To measure changes in chosen parameters due to nyasa

Methods

DESIGN

Self as control with cross over from control to experimental and vice versa was used as the design.

SUBJECTS

The subjects are students of an institution for the study of sastras, in the age group 16-20, with regular daily practice of Gayatri for periods ranging from one to three years. They were all initiated into nyasa for Gayatri mantra by a faculty of the institution. The subjects practiced nyasa for two days before measurements were made. All subjects are of good health and not taking any drugs for any health problems. They are all from similar socio-economic background and form a homogenous group.

SAMPLE

This research is the first of its kind. No guidance for sample size is available. Therefore it was decided to take all available student population in the institution as sample. Thus the study was made on 30 subjects. The separation between control and experimental groups was randomized. Every alternate subject who came into the laboratory for measurement was assigned to control or experimental group. Though the measurements were taken for all thirty subjects, the data is available for less number of subjects due to noisy data, improper finger placement and drop out of data around some fingers and hence these could not be included in the study.

Data on Integral Entropy and Integral Area 29 subjects (15 control and 14 experimental)

Data on Fractality 22 subjects (10 control and 12 experimental)

ASSESSMENT TOOLS

A device known as Electro Photonic Imaging [EPI] – also known as Gas Discharge Visualization – is used for the investigations reported in this thesis. The instrument consists of a high voltage, high frequency generator whose field is applied to the fingertips of subjects. The field draws out electrons and photons from the body through the finger tips. Since the electric field is applied through a glass plate, the current through the finger is in the low microamperes range and no discomfort is felt by the subjects. Thus, the measurement is entirely non-invasive and safe. Since the fingertips of all fingers represent organs according to acupuncture theory, subtle energy flow of chi or prana in the body is monitored through this method. For current research on the subtle effect of nyasa, EPI is thought to meet the requirement very well.

INTERVENTION

Anganyasa and karanyasa are used together as intervention in this study.

DATA EXTRACTION

Data on three parameters, viz., Integral Entropy, Integral Area and Fractality were extracted from the EPI grams generated by the Electro Photonic Imaging device.

DATA ANALYSIS

The data was primarily analysed qualitatively, being the first study of its kind. Quantitative analysis was limited to simple statistics and trend in changes in the parameters.

RESULTS

Decrease in Integral Entropy takes place when Gayatri mantrajapa is preceded by nyasa and relaxation as shown by 79% of subjects. Out of these, 45% of subjects show entropy decrease when Gayatri mantrajapa is preceded by nyasa as against 34% when preceded by relaxation.

In the case of Integral Area the changes observed could be due to practice of nyasa. In the case of Fractality no significant change is seen in both groups. In summary, the data on entropy decrease, which is a sign of better health, encourage further extended study.

CONCLUSION

The benefits of doing nyasa prior to any mantrajapa cited in almost all agama sastras are experiential and holistic. They are subjective in nature as vouchsafed by agama practitioners and swamijis of monastic order. In this limited scientific study, nyasa shows small noticeable changes for the better as evidenced by entropy decrease. Extended study on heterogenous large sample will throw more light on the usefulness for therapeutic applications.

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1.0 INTRODUCTION

As per sanatana dharma in the days of yore, man worshipped Godhead reciting vedic chants considered as co-eval with God according to the time, the day and the season of the year.

Quite often man worshipped God in the form of nature simply in ecstasy or in awe. Iconic worship either individual or congregational came later with the advent of Agamasastra and Tantric form of divine worship. In the preface to the book on congregational worship Rev

Leadbeater describes the thought-form generated when a group of persons perform congregational worship with Gayatri mantraincluding nyasa procedures, led by a priest (1).

19Agama sastra lays down elaborate procedures for worship and stipulates strict adherence by the priests with the ultimate aim of welfare for the whole mankind. One of the procedures is Nyasa which is ordained as mandatory prior to every mantrajapa.

Swami Mangalateertham (2) writes ‘the feature of systematic rotation of the different parts of the body originates from the tantric practice of nyasa’. Deep relaxation technique (DRT) is a salient feature of Integrated Approach to Yoga Therapy for Positive Health (3). Though the word ‘Nyasa’ is not explicitly stated in this therapeutic practice, reciting the syllables A, U and M and visualizing the three regions of the body is tantamount to nyasa practice. Further in the book titled ‘Cancer and Yoga’, Nagendra, Nagarathna and Telles (4) explain the expansion of awareness from the gross material body to the most subtle bliss body

stage by stage for total cure and pain management caused either by the disease or therapy induced. Read together, there is a promising area of research to use nyasa, an ancient lore from sastra in yoga therapy for cancer.

(A note on quotations, transliteration and translation: All Samskr̥tam slokas in ‘Select quotations from Agamasastras and Puranas’ on P 36 are transliterated and translated. A few quotations in text are only translated. Vedic mantras have in addition Swara notations. These notations are difficult to incorporate. Therefore these are not quoted. Vedic mantras are referred only in Table 9 ‘Vedic pramana for nyasa’).

2.0 LITERARY SEARCH ON NYASA

2.1 BACKGROUND AND SCOPE

It will be useful to understand the nuances of Samskr̥tam for an appreciation of the concept and practice of nyasa. We therefore highlight some of the characteristics in this section.

Swami Bhajanananda (5, p76) writes, ‘Language is not only a system of symbols and signs for communication, but forms the very foundation of human knowledge....the followers of all world religions claim that knowledge of transcendent reality can be gained only through language recorded in the scriptures’. The cognitive function of a language is well established in sastras of sanatana dharma. Much later this idea is developed greatly by western scholars, with Noam Chomsky in the limelight. He holds the view that language is generated from underlying deep structures in the brain through a series of transformations.

Letter in Samskr̥tam is called *akshara* meaning that which does not decay. Akshara is also one of the 1000 names of Vishnu. There are fifty aksharas in Samskr̥tam. All the fifty aksharas are believed to have evolved from the eight aspects of the primordial sound – the word AUM as shown in Appendix 1. All letters have eight characteristics as shown in Appendix 2. For the three aksharas A, U and M which form the primordial word ‘AUM’ the eight characteristics are shown in Appendix 3.

The science of phonetics called in Samskr̥tam as *siksha* is well developed, having six qualities, *varna* (alphabetical order), *svara* (accent), *matra* (a measure), *balam* (strength), *sama* (a metrical system) and *santana* (continuity). The effect a proper pronunciation of

aksharas will have on brain, with Samskrta slokas belonging to *sragdhara chhandas* (a metre characterised by 21 letters in one quarter of a sloka) has been studied by Prof Ernst Eppel, a neurologist in Germany. The training methodology known as ‘Neurolinguistic programming’ developed by educational psychologists may provide the connection between Samskrta aksharas and brain function.

Even single letter In Samskrtam can have meaning or can refer to a God/Goddess or a physical entity and so forth. Unlike English which has more than a lakh words, Samskrtam has around 3000 words only. Most of them are ‘root words’ (bijaksharas), meaning they can be modified and enlarged to form meaningful complex words under systematic rules of grammar. These fifty aksharas are believed to be in different parts of the human body, all *svaras* (vowels) in the head region and the rest in lower parts of the body, with a devata or a principle behind each. When the aksharas are pronounced properly the devata or the principle is activated contributing to the welfare of the body – mind – intellect of the person. This applies to padas (words, group of words) or vakhyas or the entire scriptural texts.

Among the languages of the globe, only two languages seem to be associated with divine powers, Samskrtam and Hebrew. According to Saraswati (6) all letters constitute the forms of goddess Saraswati who is *matrkavarnarupini*. Akshara refers to *aksharaparabrahmam*.

Particular letters/syllables are associated with the deities. Certain vibhutis or aspects of these deities are said to be inherent in the varnas or letters. Rutger, an Irish teacher who spent a year in India learning Samskrtam and Vedanta has strong views as to why everyone should learn, read and speak Samskrtam vide Appendix 4 for excerpts from his speech.

Samskrata aksharas are also known as *matrkas* meaning little mothers, because they protect us like mothers. Nyasa based on these *matrkas* is called *matrkanyasa*, an important subject of Tantrasaram, many agama sastras, SriLakshmihayagrivasahasranama and other scriptural texts.

2.2 SUMMARY OF EARLIER WORK ON NYASA

2.2.1 Nigama and agama – a distinction

Both nigama and agama come from the root GAM (gachha) meaning to go and also to know. Both mean two currents of religious thought. The more popular word for 'Nigama' is Veda which means 'to know'. Veda is considered as the fountainhead of all knowledge for all and for all time. It is held as anadi and apaurusheya (not composed by any person) and co-eval with God. Veda is also known as 'Sruti' - the one learnt by oral tradition and thereby maintaining the purity and correctness of chanting. (Refer to 'The Vedas' by Sri Chandrasekharendra Saraswati, a publication of Bharatiya Vidya Bhavan for an excellent and detailed elucidation of many aspects of Vedas, the relevance to modern age and practicability).

Agamasastras on the other hand are regarded as instructions from Gods/Goddesses through Rsis for the performance of worship to the Divine in a structured and systematic manner. Agama sastras also contain innumerable signposts for regulating our lives and the concern Rsis had for the welfare of mankind. The last point is seen from the anguish with which Rsis implore Gods/Goddesses for ways of solving the problems of mankind-physical, mental, intellectual and spiritual.

Conflicts between proponents of Nigama and Agama as to which is superior have been settled by scholars. It is now accepted that agamasastras are no less equal to vedas. Divine worship based on agamasastras is more prevalent in entire Bharat than the purely vedic form of worship. Agama sastras use vedic mantras profusely in individual or congregational worship. Agamasastras are also known as Tantric in some parts of Bharat with some minor differences. Vedic form of worship is non-iconic whereas agamic form is based on worship of idols at home or in temples. Agamasastras therefore elaborated construction of temples, installation of idols and conduct of festivals. Since the idea of worship is for individual or collective good, the sastras laid down strict procedures for the same. The ruler was held responsible for the strict conduct of worship in temples at the same time ensuring the livelihood of priests and their families. The series of books on Agamasastra by S K Ramchandra Rao (7) is a magnum opus for an exhaustive and authoritative treatment of the subject.

2.2.2 Classification of agama sastras

Agamasastras are of three kinds – Sakta, Saiva and Vaishnava depending on the deity worshipped.

According to Varadachary, Sakti plays a dominant role in the Sakta system, Brahma, Vishnu and Siva having a position secondary to that of Sakti. Ultimate reality is Parvati-Paramesvara in the Saiva agamas, Parvati playing the role of Sakti. The Vaishnava agamas are of two divisions - Vaikhanasa and Pancaratra. The former admits Sakti as Prakrti ever associated with Vishnu as Sri. Vedic mantras alone are used for every ritual. The Pancaratra admits Sakti as the consort of Vishnu and as part of Vishnu, the ultimate reality. The tantric mantras are used along with the vedic mantras (8). In Pancaratra system the diksha can be taken from an acarya by anyone including those belonging to the fourth varna and women whereas in Vaikhanasa system, the diksha is given only to children born in the same families and restricted to three varnas.

An important feature of agamasastras is the employment of mandala, mudra and nyasa (Satapathabrahmana 3.1.3.28 and Aitareyanyaka 3.2.1.2).

2.2.3 The structure of Pancaratra agama

The ideal Pancaratra samhita, like the Saiva Agama, is said to consist of four ‘quarters’ (padas) teaching respectively: 1. Jnana, knowledge; 2. Yoga, concentration; 3. Kriya, making; and 4. Caryā, doing. By ‘making’ is meant everything connected with the construction and consecration of temples and images, and by ‘doing’, the religious and social observances (daily rites, festivals, varnasramadharmā).

Varadachary (8) gives a detailed account of the four parts of a typical agama sastra.

Jnanapada

This section deals with the knowledge of reality, cosmology, means of attaining Brahman, and the material world. Jnanapada has similarities with jnanayoga of the fourfold system of Jnana, Bhakti, Karma and Rajayoga.

Yogapada

Yogic practice is given separate treatment in the agamas in devoting a separate chapter of Yogapada. It is the means of finding the supreme being within one's own self while others are initially concerned to treat God as externally knowable. Pancaratra system is also known as a system of yoga. Yogapada has similarities with Patanjali yoga system and Rajayoga.

Kriyapada

This section deals with big tasks of construction of temples, making idols and installing them. Kriyapada facilitates the conduct of other three padas.

Caryapada

This pada deals with procedures for worshipping the deity to be followed daily and on special occasions, the qualifications for the priests, the stringent requirements of priests in conforming to the procedures of worship and not the least, provisions for the maintenance of the priests. In terms of practice, caryapada has similarities with karmayoga and Bhakti yoga. Nyasa is one of the seven features of Caryapada, the other six being Mantra, Yantra, Mandala, Mudra, Adhwan and Sikha. Later sections deal with nyasa in detail and with mantra, yantra and mudra briefly.

2.2.4 Divine worship – individual and congregational

Examples of individual worship are the sandyopasana, ordained as a daily duty to be carried out at sunrise, noon and sunset, a large variety of meditative practices, some incorporating Patanjala yoga sutra and Salagrama worship at home. Congregational worship is in the form of bhajans, homas/yajnas and worship of idols installed in temples for the collective welfare of all- human beings, plants, animals and ecosystem. In 'A congregational pooja for the Hindus' unrevised notes of talks on the ritual by Krishnaji (the world renowned theosophist Sri J. Krishnamurti) and the preface to 'A temple thought form' by Leadbeater (1) bring forth in succinct details a simple congregational worship centering on Gayatri mantra with nyasa procedures. In congregational worship all participate in some form or the other with the priest leading from the altar.

2.2.5 Nyasa – a mandatory procedure for every mantrajapa

Anganyasam tatha dhyanam samyageva samacaret/

Nyasa haredayuh dhyane tu nishphalm//

TANTRA

SARASANGRAHA

(One should do anganyasam and dhyanam meticulously. If nyasa is ill done, it will affect life.

If dhyanam is ill done, no benefit will accrue.)

In the elaborate system of worship of the divine, nyasa is ordained as mandatory prior to every japa. This could be seen in the most popular Sri Lalitasahasranama parayana and Sri Vishnusahasranama parayana. The dhyanasloka is preceded by anganyasa and karanyasa. These two sahasranama recitations are done, often daily by common people. In a later section of this dissertation, select quotations from a few agamasastras are included to highlight the importance. Although nyasa occupies a small portion of time and space in the worship it is an important aspect the worshipper has to address. On the flip side, not doing nyasa is stated to attract the negative effect of reduced life span as the above quotation from Tantra Sarasangraha avers.

2.2.6 Nyasa- Definition and meaning

Nyasa means ‘to throw’. The word is formed out of the root AS (meaning to be) with the prefix NI. Together as per Samskrta vyakarana it means ‘to throw’ (NI plus AS KSHIPANE).

Samskrta-English dictionary by V. S. Apte (Revised and enlarged edition, Motilal Banarasidas Delhi 1980, p 953) gives the meaning of the word as “Assignment of the various parts of the body to different deities, which is usually accompanied with prayers and corresponding gesticulations”.

Swami Harshananda (9, P37) writes, ‘Transformation of thought is transformation of a being. If the various parts of the sadhaka’s body are touched by the fingers and the palms with the appropriate mantras, that will infuse the presence of the deity in him/her thereby transforming him/her and making him/her fit for the ritual’. Varadachary (8, P89) writes ‘Nyasa means placing applying or depositing. Mantra is placed on the particular part or applied there. The particular fingertip is conjoined with the palm of the same hand or the other hand and with the other fingers. This must be repeated with other fingers uttering the mantras as enjoined in the agamas. This is called karanyasa. When the parts of the body are touched with the finger tips along with the utterance of the mantras, it is called anganyasa. When the Nyasa is performed, the power of the letter of the mantra which is presided over by a particular deity passes into those parts of the body where it is done. “The body of the person doing this gets purified” (Jayakya samhita 6.61 -6-69).

Every mantra is usually split into six parts as per standard procedure and placed in six designated parts of the body in a sequential order. Exceptions to this rule are with respect to short mantras like AUM and long texts like Sri Vishnu Sahasranama or Sri Bhagavad Gita. Further this rule applies to only karanyasa and anganyasa explained in later sections.

2.2.7 Structure of mantra for nyasa procedure

A mantra can be the root of a word (bijakshara), an akshara, a word, string of words or a complete sentence.

For the two types of nyasa, karanyasa and anganyasa, the mantra is split into six parts, if the mantra is just long enough. For example the Gayatri mantra is split into six parts as shown below.

Aum bhuh, Aum bhuvah, Aum suvah, Aum tatsaviturvarenyam, Bhargo devasya dhimahi and dhiyoyona pracodayat.

When the mantra is short like AUM, it is split into three syllables A, U and M. This is repeated once over to make up for six parts.

Ha and Ra are the bijaksharas for moon and Sun. The combination of these two is used for nyasa while doing Suryanamaskara, HRAM, HRIM, HRUM, HRAIM, HRAUM and HRAH. Sri Bhagavad Gita, Vishnu Sahasranama and Lalita Sahasranama are long texts. For nyasa procedure for Sri Bhagavad Gita, three slokas are taken together (two from Adhyaya 2 and one from Adhyaya 11) and the six half slokas form the nyasa mantra. These slokas portray the eternal nature of man and the macrocosmic nature of the Supreme Being. The nyasa slokas are given below.

Nainam cindanti sastrani nainam dahati pavakah/

Nacainam kledayantyapo nasoshayati marutah//

(B.G. 2.23)

Acchechyoyamadahyoyam akledhyososhya eva ca/

Nityam sarvagatasthanuh acaleyam sanatanah//

(B. G.2.24)

Pasya me partha sarvani satasota sahasrasah/

Nanavidhani divyani nanavarnakrtini ca//

(B. G. 11.5)

Selection of nyasamantra for the two sahasranama is explained in later sections.

2.2.8 Parts of the body for placing the parts of the mantra

In this section we confine to only karanyasa and anganyasa. The protocol for kesavadinyasa and rsi/chhandas/devata nyasa will be dealt with in a later section.

NUMBER	KARANYASA	ANGANYASA
1	Thumbs	Heart
2	Forefingers	Forehead
3	Middle fingers	Crown of the head
4	Ring fingers	From ears to waist
5	Little fingers	Eyes
6	Palm and dorsam (taken as one unit)	Around the head (in eight directions)

2.2.9 Uniqueness of nyasa

A mantra may be recited a number of times (to be mentioned in samkalpa and acted upon). It may be 10, 24, 28, 108 or 1008. But nyasa is to be done only once. There is a nyaya for this rule. The nyaya says “If the number of times is not mentioned in prayoga (manual), it should be taken as one”. This brings home the power of nyasa in achieving the two benefits of bhutasuddhi and mantrasiddhi which are described later.

2.2.10 Different types of nyasa

The most commonly used types of nyasa are anganyasa and karanyasa. This classification is based on parts of the body for placing the mantra. The parts are listed in the Table above.

Based on the size of the nyasamantra, another classification is listed below.

Type of Nyasa	Examples
Bijaksharanyasa	Hram, Klim
Aksharanyasa	A, U, M, GAM
Padanyasa	Tatsavituh, Varenyam
Vakyanyasa	Nainam chhindanti sastrani nainam dahati pavakah

Srshtinyasa, sthityasa and samharanyasa is yet another classification. This scheme of nyasa is performed in iconic worship. This is done by the priest on his body and then on the idol.

The idol also gets purified in this process.

The most popular and universal Gayatri mantra has ten types of nyasa, two incorporating the deity Siva and Vishnu as the supreme reality. (Appendix5)

A mantra is credited to a rsi who by his/her power of concentration (Tapas) has captured the sound form (beyond normal human audible range) and given a word form to it. Rsis are called mantradrshitas (seers of mantra). A mantra is associated with a metre, called Chhandas in Samskrta. It refers to number of letters in a pada (quarter) of the sloka. The most popular chhandas is anushtup containing 8 letters in a pada. Lastly, every mantra addresses a particular devata. Combining these three aspects, we have a type of nyasa known as rsi/chhandas/devata nyasa.

All worship begin with acamana (sipping a small quantity of water taken in palm, three times reciting *Achuta, Ananta and Govinda*) followed by a nyasa called Kesavadinyasa. This comprises touching twelve parts of the body – eight in face, two shoulders, one each in navel and crown of the head and reciting twelve mantras beginning *Aum kesavaya namah*. This will be dealt with in a later section in detail. Kesavadinyasa is ubiquitous as it is done over sixty times in a day during nityakarmanustana which includes three sandyopasanas.

So far we have associated nyasa with placement of mantra on parts of the body.

Shodasanyasa (Appendix 6) is a part of Pancaratra agama worship envisaging placing objects from physical and phenomenological worlds on parts of the body. Astounding as it may seem to ordinary human beings, the priest in a congregational worship does this ritual to prepare himself for the divine worship. In shodasanyasa, sixteen sets of objects are placed in the body in a designated sequence. Some of the objects are the stars (nakshatranityasa), the

sources of water (toyanyasa), and the planets (grhanyasa). We can visualise how close such a priest comes in metaphysical terms to Krishna in *visvarupa* seeing which Arjuna was struck with wonder and simultaneously awe. As an example of one of the sixteen sets of objects in shodasanyasa, grha nyasa is illustrated in Appendix 7.

Mahanyasa is another elaborate procedure carried out prior to *ekadasa rudra abhishekam*. It should be no surprise that in the mahanyasa a mantra or a devata is visualised on private parts also. The essentials of mahanyasa are captured in another system of nyasa called

Laghunyasa. Appendix 8 gives elements of Mahanyasa and Laghunyasa.

As the terminology goes, bharyasa should be mentioned though it does not form part of worship in the normal sense. Bharyasa is the ultimate resort for one's release from the birth-death-birth cycle, more popular name being *Saranagati*. Bharyasa is the anchor of Sri Ramanuja's Visishtadvaita philosophy. The term signifies placing the burden of responsibility of release of the jivatma from birth-death-birth cycle at Lord's feet.

2.2.11 Source of literature for nyasa

All agama sastras, itihisas, puranas, Srimad Bhagavatam, Srimad Bhagavad Gita and writings of scholars on religion and theology – both oriental and occidental, provide vast resource for Nyasa. As it has happened with vedic literature, many agama literature are known but not available even in manuscript form/palm leaf. Of the many works mentioned as the authoritative scriptures of the three agama systems, 108 are on pancaratra agama, 28 on Saiva agama and 77 on Sakta agama.

2.2.11.1 Saiva agama literature

There are three well known divisions of Saiva Agama also known as Maheswara Agama. They are Pasupati School, Saivasiddhanta School and Pratyabhijna School of Kashmir. The Pasupati sutras and writings attributed to Haradattacarya and Lakulisa are considered as authoritative texts by the Pasupati School. 28 agamas mentioned above and Nilakanta's Bhashya on the Vedantasutras are the source for Saivasiddhanta School. Among the 28 Saiva agamas, the Kamika, Karana, Suprabhedha and Vathala are especially authoritative. Among

the works of the third school, the Sivasutras of Vasugupta, Spandakarika of Kallata, Sivadrsti of Somanandanatha and Pratyabhijnanasutra of Utpala are considered authoritative.

2.2.11.2 Sakta Agama literature

Sakti sutras are considered as foundational work of this school. Lalitasahasranama is a popular work recited by large followers as much as Sri Vishnusahasranama by followers of Vishnu as principal deity. Sir John Woodroffe (aka Arthur Avalone) has published a number of Tantras of this agama. Five Subhagamas, 64 Kaulagamas and eight Misra agamas fall under this school. Soundaryalahari attributed to Sri Samkaracharya, popular in use for daily devotion and upasana, belongs to this school.

2.2.11.3 Vaishnava agama literature

The emphasis of Vaikhanasa system is on veda and therefore veda is the source of literature – mostly the brahmana portion. Each of the four sages to whom this system was taught namely, Atri, Marici, Kasyapa and Bhrgu wrote a samhita of his own. These form the core of vaikhanasa agama literature.

As regards the literature of the pancaratra system, Otto Schraeder gives a synopsis of no less than 215 samhitas listed as works of this school (10)

2.2.12 Mahabharatam and nyasa

Most of the references to Nyasa are in agama sastras. Moksha dharma parva in Mahabharatam contains reference to nyasa, where Vyasa extols agama as superior to vedas.

2.2.13 Vedic pramana for nyasa

Traditional belief is that Veda contains all knowledge on all subjects for all and for all time. Whatever is not in Vedas will not be in any other scriptures. By the same token, whatever is available in other scriptures must have their origin in Veda. A search was made for pramana from vedas for nyasa at the express wish of one of the research guides. It has led to the pramana in Rkveda purusha suktam depicted in Appendix 10. Purusha suktam is a number of Rks (64 in Rk veda). Four Rks form one stanza. Thus the sixteen sets of Rks are placed in sixteen parts of the body in a sequence, reciting these rks. Purusha suktam describes the process in which the Supreme Being offers Himself in the homam as oblation and different

parts of the cosmic world came into being, for example the vedas themselves, the human beings, animals represented by horse, lamb and cow. Purusha suktam figures in all vedas and is considered as the quintessence of each veda. Thus, the vedic pramana for nyasais found in Purusha suktam.

In an article on ‘Satsantana praptaye purushasukta viniyogah’, Sri Subrahmanya Sarma writes about the practice of Rkveda purushasukta nyasa on 16 parts of the body by the person performing yajna for begetting progeny (11).

A personal communication from Prof P Ramanujan has brought to light that Kataka (Prasna 1- Pancati 16-22) of Yajurveda contains another vedic pramana for nyasa. This is illustrated by two examples below:

Vayurme prane srtah/ (Vayu, the God of wind is repositied in my prana)

Suryo me cakshushi srtah/ (Surya is repositied in my eye)

One of the meanings of the word ‘srtah’ is placement/repositing. The complete mantra can be referred in Taittiriya aranyaka- Kataka prasna quoted above.

2.2.14 Contribution of western scholars in nyasa research

Eastern religions and philosophies have drawn many western scholars for insightful research. A number of universities have started departments for the study of Indic languages, religious practices and philosophical moorings. The contribution of four western scholars in the field of nyasa research deserves mention. The scholars are Sir John Woodroffe (aka Arthur Avalone), Otto Schraeder, Fredrick M Smith and David Frawley (aka Pandit Vamadeva Sastri). A brief account of their work is placed below.

Sir John Woodroffe

The pride of place goes to Sir John Woodroffe. His translation of Tantrasara is exhaustive and authoritative. He lived in India for many years studying and researching tantric literature in original.

According to Woodroffe, bhutasuddhi an important Tantrik rite, means purification of the five elements of which the body is composed and not “removal of demons” as Professor Monier

Williamson's Dictionary has mentioned. Mantrmahodadhi (Taranga 1) speaks of it as a rite which is preliminary to the worship of a Deva.

Devarcayogyata praptyai bhutasuddhim samacaret/

(One should do bhutasuddhi to get the eligibility to worship the Gods)

Woodroffe holds nyasa as an important and powerful Tantrik rite. It has certain physical effects. The powerful state of meditation following nyasa is reflected in the body of the worshipper (12).

Otto Schrader

Only sketchy information is available about Otto Schrader. He was the director of Adayar Library and Research Centre of The Theosophical Society at Madras, India for seven years around the period of First World War. His book 'Introduction to the Pancaratra and the Ahirbudhnya Samhita' published in 1916 still remains the reference material and an excellent work on the subject. It is considered as an example of German scholarship of Indo Aryan literature by Kunjunni Raja, the Director of the Centre in 1973.

The Vaishnava practice of anganyasa, slightly different from Smarta practice invokes the six ideal gunas of God, namely, jnana, bala, isvarya, virya, sakti and teja. In Schrader's words, 'these gunas are aprakrta – not belonging to nature. The doctrine that God is necessarily free from the three gunas (Satva, rajas and tamas) does not exclude His possessing the six ideal gunas which on the contrary must be ascribed to Him, because without them there would be no pure creation. 'In their totality the gunas make up the body of Vasudeva'(10, P36); he also describes the evolution of all Samskrtam alphabets from nada resembling the sound of a deep bell and perceptible to yogins only. These alphabets called matrkas are also the subject of research study by Sir John Woodroffe and David Frawley.

Fredrick M Smith

Smith studied Samskrtam in Pune and elsewhere in India and is known for his work on Vedic ritual and translations of Vallabhacarya's works. In his book 'The Self Possessed: Deity and Spirit Possession in South Asian Literature and Civilization' (13). Smith distinguishes between demonising type of possession leading to harmful effects and positive forms of

possession - festival, initiatory, oracular and devotional. He describes nyasa as a step towards positive possession of divine qualities.

David Frawley

Frawley (also known as Vamadeva Shastri), author of several definitive texts on yoga, Ayurveda, vedic astrology and veda follows the tantric approach of Ganapati Muni, the chief disciple of Sri Ramana Maharshi. In his book 'Mantra Yoga and Primal Sound', Frawley terms the 16 vowels 'the prime vibrations of consciousness'; 9 semivowels and sibilants as 'powers of the elements and the pranas' and 25 consonants as 'the powers of manifestation' making the total of 50 Samskrta aksharas (14). In the basic form of Mantra Purusha, the 16 vowels relate to the sixteen main regions and faculties in the head including the senses, 25 consonants to the main joints in the arms and legs (five per arm and leg) and the five regions of the abdomen and the 9 semivowels and sibilants relate to the tissues and primary constituents of the body from the plasma to the mind (14, P 63).

2.2.15 Select quotations from agamasastras

In this section we give a selection of slokas from diverse sastras on nyasa practice. The sloka, its transliteration and the meaning are given in the same order. The source is given at the end of each sloka in English.

अङ्गन्यासंतथाध्यानंसम्यगेवसमाचरेत्।

न्यासहीनेहरेदायुःध्यानहीनेतुनिष्फलम्॥

āṅganyāsaṃ tathā dhyānaṃ samyageva samācaret ।

nyāsaḥīne haredāyuh dhyānahīne tu niṣphalam ॥

One should do anganyasa and dhyanam correctly. If nyasa is ill done, life gets reduced. If dhyanam is omitted, the worship will be fruitless.

Sloka 18

मन्त्रंमन्त्रमयंप्रोक्तंमन्त्रात्मादेवतैव ।

mantram mantramayaṃ proktaṃ mantrātmā devataiva ।

The soul of a mantra is the God/goddess.

-Sabdakalpadruma 1V P 13

आगमोक्तप्रकारेणन्यासान्नित्यं करोति यः ।

देवताभावमाप्नोतिमन्त्रसिद्धिश्चजायते ॥

āgamoktaprakāreṇa nyāsānnityaṃ karoti yaḥ ।

devatābhāvamāpnoti mantrasiddhiśca jāyate ॥

One who does nyasa as laid down in agamasastras will attain the state of the God

(worshipped). The mantrasiddhi will also happen.

-Tantrasara sangraha

अहंचभगवान्विष्णुःअहनारायणोहरिः ।

वासुदेवोऽहंव्यापीभूतावासो निरंजनः ॥

ahaṃ ca bhagavān viṣṇuḥ ahaṃ nārāyaṇo hariḥ ।

vāsudevo'haṃvyāpī bhūtāvāso niraṃjanaḥ ॥

I am Bhagawan Vishnu. I am Narayana and Hari. I am Vasudeva, the all encompassing one

residing in all lives.

-Jayakhya Samhita

अवर्गमूर्ध्निविन्यस्यकवर्गचमुखेन्यसेत् ।

चवर्गवक्षसिन्यस्त्वाकुक्षौचापिटवर्गकम् ।

तवर्गपवर्गचहस्तयोरुभयोन्यसेत् ।

यवर्गचशवर्गचपादयोरुभयोस्तथा ।

हवर्गपृष्ठदेशेषुविन्यस्यैवंमातृकाः ।

avargaṃ mūrdhnivinyasya kavargaṃ ca mukhe nyaset ।

cavargaṃ vakṣasi nyastvā kuṣsau cāpi ṭavargakam ।

tavargaṃ pavargaṃ ca hastayorubhayornyaset ।

yavargam ca śavargam ca pādayorubhayostathā |

havargam pr̥ṣṭhadeśeṣu vinyasyaivam māṭṛkāḥ |

One places vowels on head, guttarals on face, palatals on chest, cerebrals on stomach, dentals on right hand, labials on left hand, semi-vowels and sibilants on right and left legs, 'ha' and 'ksha' on the back.

-Ajitagama, Kriyapada 57th Patala

न्यासेनदेवमन्त्राणां देवतादात्म्यभावनात् ।

अप्राकृताङ्गकरणात्पूजामर्हति साधकः ॥

nyāsenā devamantrāṇāṃ devatādātmyabhāvanāt |

aprākṛtāṅgakaraṇāt pūjāmarhati sādhaḥ ||

By doing nyasa with the mantra for the devatas and attaining the same state of the devata, making the body timeless, the sadhaka deserves to do the worship.

-Sattvata Samhita

गणेशन्यासयोगेन विघ्नहर्ता स्वयं भवेत् ।

अन्तेशिवत्वमास्थाय शिवेन सह मोदते ॥

एवं न्यासकृते देवी साक्षात् शिवसमो भवेत् ।

मन्त्रीनचात्रसन्देहः निग्रहानुग्रहक्षमः ॥

gaṇeśanyāsayogena vighnahartā svayaṃ bhavet |

anteśivatvamāsthāya śivena saha modate ||

evaṃ nyāsakṛte devī sāksāt śivasamo bhavet |

mantrī na cātrasandehaḥ nigrāhānugrahakṣamaḥ ||

The sadhaka himself/herself becomes a remover of obstacles, by performing the yoga of Ganesanyasa. Establishing the quality of Siva, he/she enjoys with Siva. Devi, if one does nyasa as aforesaid, one becomes equal to Siva. There is no doubt on this.

-Maha shodasanyasa

पूजने सर्वदेवानां पीठे ताः परिपूजयेत् ।

न्यासस्थानानि चैतासां शरीरे बहिरर्चने ॥

pūjane sarvadevānāṃ pīṭhe tāḥ paripūjayet |

nyāsasthānāni caitāsāṃ śarīre bahirarcane ||

-Mantramahodadhi Prathamas Taranga Sloka 53

मन्त्राय तेऽमित्येवं योगेन स्वीकृतो ध्वनिः ।

गुप्ताशयः सदा यश्च मन्त्रं त्रायते भयात् ॥

mantrāyate'mityevaṃ yogena svīkṛto dhvaniḥ ।
guptāśayaḥ sadāyaśca mantrajñam trāyate bhayāt ॥

-Lakshmi Tantram 18.44

न्यासोऽयं दशमः प्रोक्तः वर्णमूलस्य सिद्धिदः ।
इत्थं दशविधं वर्णन्यासं कृत्वा दिने दिने ॥

nyāso'yam daśamaḥ proktaḥ varṇairmūlasyasiddhidaḥ ।
itthaṃ daśavidhaṃ varṇanyāsaṃ kṛtvādine dine ॥

देवताभावमाप्नोति येनास्युस्सर्वसिद्धिदः ।

मूलमन्त्राक्षरन्यासं कृत्वा दशविधं नृप ॥

devatābhāvamāpnoti yenāsyussarvasiddhidaḥ ।

mūlamantrākṣaranyāsaṃ kṛtvā daśavidhaṃ nṛpa ॥

-Srimad Uttara Brahmataṭṭwa Rahasya Dasaratiya
Tantram

Vedarthasangraha Ashtadasadhyaya Sloka 98-99

(Sage Rasyaringa tells Dasaratha, 'O king, this nyasa is of ten types. This can accord the siddhi through the varnas (aksharas). By doing the ten types of mantrakshara nyasa daily, one attains the state of a devata and also accomplishes all siddhis)

संहारक्रमन्यासं

1. ॐलांनमःपरायसर्वात्मनेनमःपादौ
2. ॐवांनमःपरायनिवृत्यात्मनेनमःगुह्ये
3. ॐरांनमःपरायविश्वात्मनेनमःहृदये
4. ॐयांनमःपरायपुरुषात्मनेनमःनासाग्रे
5. ॐषींनमःपरायपरमेष्ठ्यात्मनेनमःमूर्धसु

Samhārakramanyāsaṃ

- | | |
|--|------------------|
| 1. om lāṃ namaḥ parāya sarvātmane namaḥ | on feet |
| 2. om vāṃ namaḥ parāya nivṛtyātmane namaḥ | on private parts |
| 3. om rāṃ namaḥ parāya viśvātmane namaḥ | on heart |
| 4. om yāṃ namaḥ parāya puruṣātmane namaḥ | on tip of nose |
| 5. om ṣauṃ namaḥ parāya parameṣṭhyātmane namaḥ | on head |

सृष्टिक्रमन्यासं

1. ॐ षौंनमः परायपरमेष्ठ्यात्मनेनमः मूर्ध्नि
2. ॐ यांनमः परायपुरुषात्मनेनमः नासाग्रे
3. ॐ रांनमः परायविश्वात्मनेनमः हृदये
4. ॐ वांनमः परायनिवृत्यात्मनेनमः गुह्ये
5. ॐ लांनमः परायसर्वात्मनेनमः पादौ

Srṣṭikramanyāsaṃ

- | | |
|--|------------------|
| 1. om ṣauṃ namaḥ parāya parameṣṭhyātmane namaḥ | on head |
| 2. om yāṃ namaḥ parāya puruṣātmane namaḥ | on tip of nose |
| 3. om rāṃ namaḥ parāya viśvātmane namaḥ | on heart |
| 4. om vāṃnamaḥ parāya nivṛtyātmane namaḥ | on private parts |
| 5. om lāṃ namaḥ parāya sarvātmane namaḥ | on feet |

(Note: The last two nyasa procedures are steps in bhutasuddhi done in daily salagrama aradhana. They are cited from Sri Bhagavad Ramanuja's book titled 'Nityagrantham' published by Dr N R Sridharan, Sri Ramanuja Grantha Rathna Mala, Chennai 2009. The text being simple, no translation is given).

2.2.16 Rsi, chandas and devata nyasa

All mantras are believed to be in the cosmic space. They are beyond normal human audible range. Rsis by their austerities for long periods of time, quite often unmindful of their body needs have acquired the ability to grasp these sound forms of mantras and give them the word form. Rsis are called mantradrshitas – seers of the mantras. In general parlance our Rsis are known for their 'namelessness, facelessness and datelessness'. Only a few Rsis are known by their name for specific mantras. Even then their timeline and personal history are not known or shrouded in mystery. To those Rsis who are credited with particular mantra we owe our gratitude for their selfless service to humanity. We show our gratitude to the Rsis by keeping the right hand fingers on the forehead (indication of the brain) when mentioning the name of the Rsi.

Sanskrita slokas and vedic verses are all set to certain metre – Chhandas - which refers to the number of letters the sloka/verse contains per quarter. The most popular metre is Anushtup which contains eight letters to a quarter. Sri Vishnusahasranama, Sri Lalitasahasranama, Sri Bhagavad Gita and Gayatri mantra are all in anushtup metre (*Ashtakshara Gayatri*). More

than 100 forms of Chhandas are in use. We recognise this characteristic of a mantra/sloka by taking the right hand four fingers close to the mouth (being the organ of speech) but not touching the mouth for obvious reason.

Every mantra addresses a particular devata. All devatas are believed to reside in our hearts.

Therefore as we mention the name of the devata for a particular mantra, we touch the heart.

This procedure is called Rsi/Chhandas/Devata nyasa. Such a nyasa for Gayatrimantra is given below.

**RSI VISVAMITRA
CHHANDAS DEVIGAYATRI
DEVATA SAVITA**

It may be noted that although Gayatrimantra is in anushtup metre, it is referred as

Devigayatri chhandas because of the special significance of the mantra.

Dirgha Gayatri is a variant of Gayatri mantra, in which the Gayatri mantra is prefixed by the seven vyahrtimantras (discussed in next section) and followed by a vyapaka (expansiveness) mantra. Appendix (10) gives names of seven vyahrti mantras with associated Rsis, Chhandas and Devatas.

In sandyopasana, in addition to Gayatri mantra, several other mantras are recited for prokshana, prasana, aghrana, Gayatri avahana and Gayatri upasthana. All these mantras have their Rsi, Chhandas and devata. These are presented in Appendix (10).

There is also Rsi/Chhandas/Devata nyasa for plucking a neem tree stem or mango leaves for cleansing the teeth in the days when tooth paste and brush were unknown. The nyasa procedure is as follows.

Ayurityadi mantrasya Prajapati Rsi, anushtupchhandah, Vanaspati devata.

2.2.17 Kesavadinyasa

A brief description of five forms of the Supreme Being Narayana is necessary to understand the basis and genesis of kesavadinyasa. The Supreme Being is associated with five forms, viz., para, vyuha, vibhava, arca and hardya. In the first form, He is cognisable only by liberated souls in Srivaikuntam. Vyuha represents four emanations from Para. They are

known by the names, Vasudeva, Samkarshana, Pradumna and Aniruddha. Incidentally these four forms are associated with states of turiya, deep sleep, dream and wakefulness respectively. These four emanations evolve further, three from each totalling twelve. These vyuhantara emanations are called Kesava, Narayana, Madhava, Govinda, Vishnu, Madhusudana, Trivikrama, Vamana, Sridhara, Hrshikesa, Padmanabha and Damodara. In kesavadinyasa, one repositis these twelve forms in as many parts of the body with a mantra like Aum Kesavaya namah on right cheek.

Kesavadinyasa is performed immediately after each achamana in all worships- individual or congregational. The mantra is recited with simultaneous touch of twelve parts of the body in a sequence using a mudra. The scheme is presented in Appendix 11. Kesavadinyasa is common among all three sampradaya - smartha, vaishnava and madhwa though with minor differences in practice.

“These twelve are the Lords of the months, that is the tutelar deities (adhidevata-s) of the twelve months and the twelve suns and as such play an important part in diagrams (yantras). They are usually represented, for the purpose of meditation, of certain colour and with an ayudha to protect the devotee’s body.”(10, p48)

There is a variant of this nyasa practised by Rk vedis of Madhva sampradaya. Alongwith four vyuha forms and twelve vyuhantara forms as in Kesavadinyasa, eight more are added making it twenty four. These eight forms are: Purushottama, Janardana, Adhokshaja, Upendra, Nrsimha, Hari, Acyuta and Krishna. Caturvimsatimurti lakshanam(15), a publication from Saraswati Mahal Library gives more details on the subject. The parts of the body for placing the mantra also become 24. In this scheme each murti holds the four weapons, cakra, sankha, gada and padma in four hands in 24 permutations.

The search for answers to three questions on Kesavadinyasa has so far not yielded results.

The questions are:

- *Which precise points on the body parts are to be touched?
- *For how long?
- *How much pressure to be applied?

Answers to these questions may also lead us to the intended benefit to the body – mind – intellect complex. Another important issue remains. How these twelve/twenty four forms and the associated mantras got assigned to twelve/twenty four parts of the body is a matter for research. It is also quite conceivable that touching the twelve assigned parts of the body may have subtle beneficial effect on the nervous system. In an article titled ‘Kesavadinyasa – concept and practice’ Bashyam, Ramachandra Bhat and Ramanujan (16) state that the primacy of touch sense as quoted in Caraka Samhita may have its origin in nyasa in general and to kesavadinyasa in particular.

2.2.18 Vyahrtinyasa

Puranas in sanatana dharma describe seven higher worlds and seven nether worlds. The higher worlds are Bhuh, Bhuvah, Suvah, Mahah, Janah, Tapah and Satyam. (Refer to Sri Vishnu puranam for a detailed description). These are called vyahrtis. The very same words are believed to be mantras credited to seven Rsis. The actual Gayatri mantra ‘Tatsavitur varenyam, bhargo devasya dhimahi, dhiyo yona pracodayat’ is prefixed by the three vyahrti mantra during japam.

The core Gayatrimantra prefixed by all vyahrtimantra called ‘dhirgagayatri’ is recited during pranayama. Of the seven worlds, the first three are deemed more important for us by the law of immediacy. Bhur loka corresponds to our world extending up to the milkyway, Bhuvarloka is the intermediate one –the world of forefathers (manes) and Suvarloka is the world of Gods. Bashyam and Ramachandra Bhat (17) discuss the significance of vyahrtimantra and its nyasa in an article titled ‘Vyahrtinyasa – Concept and practice’. This simple mantra is vested with power to purify places and people equivalent to more elaborate punyahavacanam (a purificatory rite).

There is another nyasa procedure linking all seven higher worlds with seven limbs of human body (23). As one recites the seven vyahrtimantras he/she mentally moves from feet representing the Bhur loka, to head representing the Satya loka. The worshipper gets a blissful feeling of expansiveness and oneness with the macrocosmic world.

The word 'vyahrti' is from the root 'hr' with prefixes 'aa' and 'vi' meaning expansion. When one performs the vyahrtinyasa there is an expansion of awareness from this world to worlds beyond. Expansion of awareness leads to inclusiveness -*Vasudaiva kutumbakam*(the world is verily a single family). Swami Vivekananda has therefore made the famous statement, 'Expansion is life and contraction is death'.

Cancer is a dreaded disease, however much one is informed about the likely causes, the treatment and post therapeutic care. In an incisive book, 'Cancer and its cure' by Nagendra, Nagarathna and Telles (4, p 18-28) explain the process of enlarging one's awareness from the first level of *annamaya sarira* to the fifth level of *anandamaya sarira*. (Readers are referred to the beautiful description of the five layers of our body in Sikshavalli of Taittiriya Upanishad). This process prepares the patient to be 'patient' and to face the reality boldly and calmly. It is the distilled wisdom of Taittiriya Upanishad brought to the aid of the cancer patient.

2.2.19 Mudra and nyasa

Mudra is a hand pose with which a person can convey his/her thoughts and feelings to another. In worship this is shown to the deity with the utterance of a mantra or when the individual sadhaka performs nyasa in his anushtana. The mudras are to be shown using both the palms and fingers of each hand. Namaskara mudra is a characteristic way of greeting one another, typical of eastern traditions and cultures. In performing arts like Bharanatyam, Kathak and Kathakali, a host of mudras are used elegantly and gracefully to convey to the audience the message of the dance.

Mudras are important means of communication between the worshipper and the deities. The word 'Mudra' is formed combining 'modayate' (pleases) and 'davayate' (makes one to run). The meaning is that the mudra pleases the deities and makes the demons run. In divine worship, more than 100 mudras are known though only a few are in common use and repeated. For a pictorial display of mudras used in pancaratra agama reference can be made to the book titled 'Pancaratra agama prayoga darsah' (18).

We have said that nyasa is placing a mantra or parts on parts of the body of the worshipper. While karanyasa involves movement of fingers on other fingers/palms/dorsams (elaborated in a later section) other forms of nyasa adopt hastamudras in conjunction. For example one of anganyasa involves placing the tips of right hand thumb, middle and ring fingers on the heart. It is inferred that mudras and nyasa work in tandem for the ultimate purpose of divine worship.

Gayatrimantra has twenty four letters, three pada and eight aksharasa in each pada. There is a protocol of twenty four mudras for the twenty four aksharas. They are sumukham, samputam etc. One system of Gayatrimatrajapa therefore involves the mudras also. The sequence is as given below

MUDRA.....NYASA.....DHYANAM.....JAPAM

The complete protocol of 24 mudras and 24 aksharanyasa for Gayatrimantra is given in Appendix (13). The mudras for 24 Gayatri aksharas are described in 'The world of mudras' by K Rangaraja Iyengar (19).

Both nyasa and mudra are described as features of caryapada in agama literature. They do not appear as substitutes for one another. In many procedures for worship of the divine, both are followed. They have overlapping elements. Both could be instrumental in receiving subtle energy from cosmos. Whereas it is clearly stated that nyasa is mandatory for every japa, failing which the worshipper will invite harm unto himself/herself, it is not so in the case of mudra. Showing the mudras to deities seems to be optional.

2.2.20 Acupressure and nyasa

A suggestion was made to inquire whether there is any common ground between acupressure and nyasa. The objective of acupressure is monitoring and restoring health whereas the primary objective of nyasa is bhutasuddhi. However a brief look was taken comparing the two systems. Acupressure [from Latin acus "needle" + pressure] is an alternative medicine technique similar in principle to acupuncture. It is based on the concept of life energy which flows through "meridians" in the body. In treatment, physical pressure is applied to acupuncture points with the aim of clearing blockages in these meridians. Pressure may be applied by hand, by elbow or with various devices. In Kesavadinyasa, pressure is applied to twelve points – eight in face, two points in the shoulders, one on naval and one on the crown of the head. Out of the eight points in face, some points come close to the numbered acupressure points. No precise matching is seen for one-to-one correspondence. Karanyasa involves movement of one finger along another from base to tip with some pressure. In this respect it differs from acupressure practice of exercising some pressure on various points in the body. With these differences in practice it appears that the two systems are different, both from the point of view of means and ends.

2.2.21 Mantra triad

The word 'Mantra' means that which protects the person who recites.

Mantaram trayate iti mantrah /Mananat trayate iti mantrah.

According to Swami Harshananda (9, p23), "Protection in the spiritual sense means protecting from samsara or transmigratory existence by giving moksha or liberation. A

mantra is not a just a letter of the alphabet or a combination of such letters into a word or a sentence signifying a particular object. It is the sound symbol embodying the form, the power and the consciousness of the supreme Brahman or its manifestations. Every mantra is an aspect of *sabdabrahman* and represents as its artha (meaning), a god or goddess. In other words the mantra contains in itself the form and the spirit of the deity. An elaborate procedure is followed for the initiation of a mantra by a guru, rousing of the power of a mantra by mukhasodhana etc and ritual purificatory process like dipani". For a detailed description of these processes reference may be made to the book on 'Mantra' by Swami Dharmakeerthi (20).

Every mantra is addressed to a devata. Mantra and devata are also held as synonymous (*Mantrameva devata*). Lastly mantra is to be taught by an acharya. The sadhakais exhorted to keep the mantra a secret, though he may reveal the teacher. The popular adage is:

Mantram yatnena gopayet. Acharyam prakasayet

(Mantra should be kept a secret with effort. The teacher should be made known).

While mantra, devata and acarya form one triad, there is another triad linking mantra, yantra and tantra, which comes into operation in agamic worship. Yantra is representation of the devata in the form of a diagram sometimes etched on a metallic plate or drawn on paper/wood that helps one to subdue his/her passions like lust, anger and gain concentration. Every deity of the Hindu pantheon has its own yantra. If the deity is the soul, the yantra is the body. The mantra is invoked into the yantra by a special procedure.

A tantra is a divinely revealed body of teachings, explaining what is necessary and what hinders the practice of the worship of God; and also describing the specialized initiation and purification ceremonies that are the necessary prerequisites of Tantric practice.

2.2.22 Power of mantra

The topic will be briefly discussed in this section. A proverbial statement is, *Amantram aksharam nasti* (There is no akshara in Samskrutam which is not a mantra). This does appear as an exaggeration. However a lot of literature is available on the power of mantra.

Scientific studies on the effect of mantra on body, mind and intellect have been made in laboratories and hospitals, which show promise. The credit for opening this area hitherto held sacrosanct and beyond the reach of science should go to Maharishi Mahesh Yogi for allowing Transcendental Meditation (TM) practitioners for scientific measurements of the effect of meditation.

A mantra becomes effective only when japa (repetition) is done. It should be repeated a number of times prescribed by the guru. It is usually recited 10, 12, 28, 32, 108 or 1008. The mantra can be recited in *vacika* (loud), *upamsu* (whisper) or *manasa* (mental) mode. Counting can be done with fingers or a rosary. Lastly the *purascarana* meaning perfecting the japa or the appearance of the deity before the *sadhaka* in person is the ultimate in *mantrajapa*. Saint Tyagaraja is said to have repeated *Rama nama* 96 crore (9.6 million) times when Lord Rama appeared before him in person and granted the boon of composing a large number of Carnatic songs (21).

2.2.23 Nyasa triad

In the practice of *nyasa*, the *nyasa mantra* (part of the Mantra), the part of the body and the act of placing the mantra form the triad. All three act in unison. Placing the mantra is done with all humility and respect to the *nyasamantra* which is synonymous with the deity and the part of the body.

2.2.24 The word 'Namah', its potency and synonyms in nyasa

The word 'Namah' has many meanings. It means obeisance. It is treated as a combination of 'Na' and 'Mama' together meaning 'Not mine'. *Anjali mudra* conveys the meaning as one person greets another and the other person also responds in the same way. It is an act of respecting the divine in the other person. If this is so with respect to human beings, it is needless to emphasise the importance of 'Namah' in divine worship. The word is used

frequently with the mudra and nyasa or verbally in other situations in divine worship. All Gods are pleased with this word/act.

Sri Vedantadesika, an acharya of Vishishtdvaita tradition has said in a poem on Sri Krishna that 'He is begging for Anjali- the namaskara mudra from us (human beings) '.

kame kachit karakamalayoh anjalim yachamanah

Gopala vimsati sloka 20

In karanyasa the term, 'Namah' is used at the end of all six nyasa placements. For example *Aum bhuh angushtabhyam namah* is the first line in Gayatri karanyasa. The meaning is 'Aum Bhuh Obeisance to thumbs'. The mantra 'Bhuh' is not only placed on thumbs, but also while placing, the person conveys his/her obeisance to thumbs. We infer that the recognition of the usefulness/essentiality of the part of the body to the survival of the whole organism is expressed through this act. Obviously this needs to be felt deep down and should not be a mere mechanical way of wordplay.

In anganyasa the usage is different. Among the six parts, 'namah' word is used only for the first part. We say, '*Aum Bhuh Hridayaya namah*'. The meaning is 'Aum Bhuh Obeisance to heart'. Other five placements end with different suffixes, namely *swaha, vashat, hum, vaushat and phat*. However we understand all these five words are synonyms for the word 'Namah' from Apte's Samskrtam- English dictionary. There must be a significance for using these synonyms in the place of the word 'Namah'. This needs deeper search.

It is interesting to note that mantras are categorised as masculine, feminine and neuter depending on the suffix. Those with 'Namah' are neuter, mantras with 'Svaha' and 'Vaushat' are feminine and the mantras with, 'Hum', 'Vashat' and 'Phat' are masculine. The significance of the gender of a mantra can also be a subject of research.

Taittiriya Upanishad extols the significance of the word 'Namah' eloquently. It says:
Tannama ityupasita I Namyantesmai kamah //

(Meditate on that supreme entity as NAMAHA. All desires will fall at your feet).

2.2.25 Consciousness and nyasa

Christoff Kochin his book 'The quest for consciousness – A neurobiological approach' (22) quotes a working definition of consciousness. "Consciousness consists of those states of sentience, or feeling or awareness which begin in the morning when we awake from a dreamless sleep and continue throughout the day until we fall into a coma or die or fall asleep again or otherwise become unconscious". This definition would suffice from a scientific standpoint. However, there is something more to be said for a complete picture particularly in a spiritual and philosophical sense.

In a seminar on 'Understanding Consciousness: Recent Advances' Swami Bhajanananda (5,p 53) says, "Modern science has known how consciousness manifests itself through body and mind (which represent the immanent mode). The transcendental mode of consciousness is addressed in Vedanta. The Vedantic standpoint is that the ultimate reality is consciousness".

Swami Mangalateertham (2) has traced the root of the cyclical awareness of the different body parts in yoga nidra to the agama practice of nyasa. There is a strong possibility nyasa and consciousness linked to each other in a fundamental way. This is a subject for controlled experiments in laboratories. A small beginning has been made in our experimental measurement of changes in three parameters when subjects practise nyasa before Gayatrijapa. This will be discussed in a later chapter.

2.2.26 Concepts in nyasa

Tasmat yat purusho manasabhigacchati / Tat vaca vadati / Tat karmana karoti//

-Yajurveda Aranyaka Pratama prasna 89 – 5, 6.7

(Therefore a person puts into words and does in action, what the person thinks deeply).

Every activity in physical and phenomenological worlds will have an underlying concept whether explicitly stated or known or implicit and hidden to be explored. The concept provides the basis for the 'why' of the activity. This logic applies to nyasa very much. We outline some of the concepts gleaned from various nyasa practices.

2.2.26.1 One – to – one correspondence between macrocosm and microcosm

The individual person is the microcosm and the far out is macrocosm.

Macrocosm/microcosm is a Greek compound of $\mu\alpha\kappa\rho\omicron$ - "Macro-" and $\mu\iota\kappa\rho\omicron$ - "Micro-", which are Greek respectively for "large" and "small", and the word $\kappa\acute{o}\sigma\mu\omicron\varsigma$ $\acute{k}\acute{o}\sigma\mu\omicron\varsigma$ which means "order" as well as "world" or "ordered world." Philosophers and scientists have entertained the notion of connection between microcosm and macrocosm. While these have remained at the intellectual level, nyasa seems to point out a practical way to experience the interconnection. Actually vyahrti nyasa bridges the two in a simple and fascinating way. The seven vyahrti (higher worlds) in the macrocosm are linked to seven parts of the body from feet to head in the microscopic human being in a sequence as shown in Figure 1 below (23).

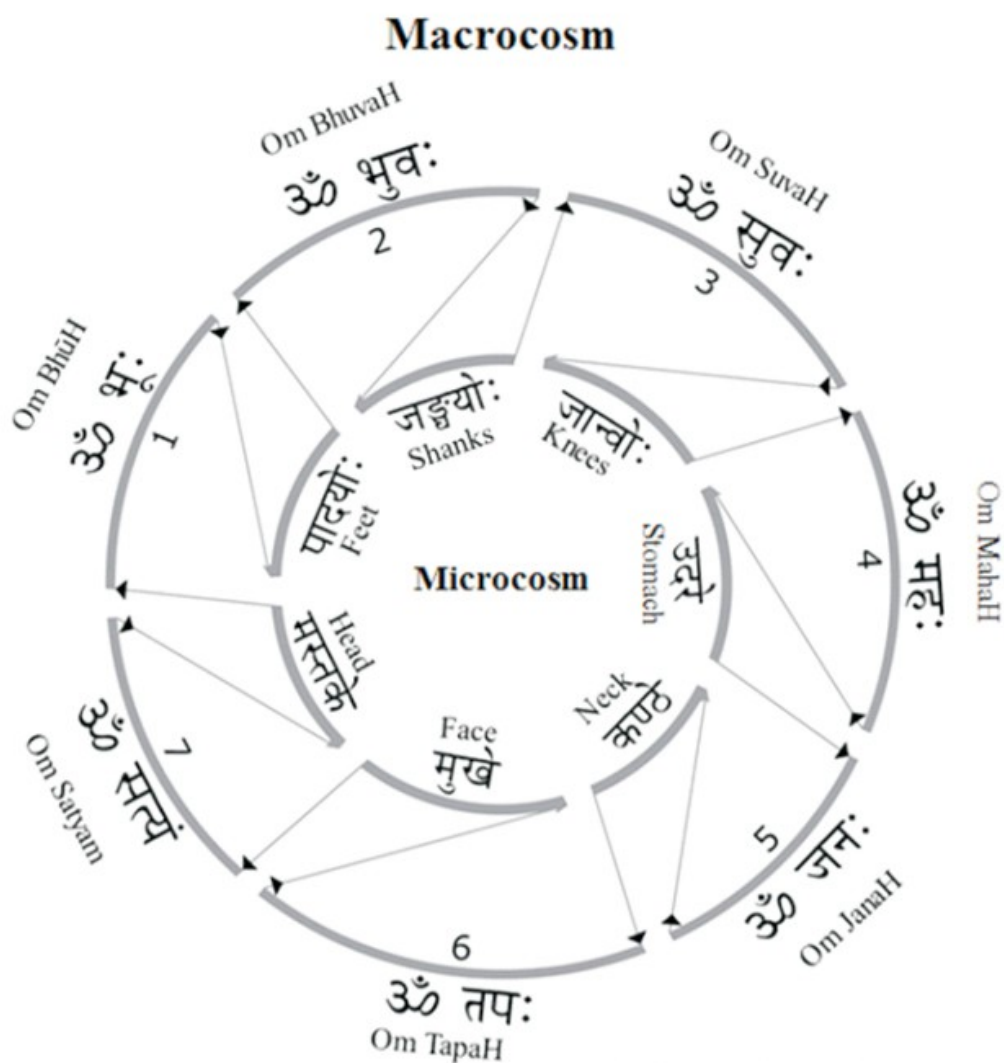


Figure 1
Vyahrti Nyasa – A metaphysical bridge between Macrocosm and Microcosm

2.2.26.2 Acknowledging the contribution of subsystems in the body

Each and every life form in this world is complex, the degree of complexity varying from low to high. Man is perched at the high end. Human body is a marvel with the highly coordinated and involuntary functioning of systems, organs, joints, tissues, nerves and cells which ensure survival, growth and decay of the organism. In a lighter vein, most of us do not even know that a part exists and functions till it malfunctions. In this context, a way of becoming aware of the body parts and acknowledging their roles is laid out in nyasa. This is done in a humble way of paying obeisance to the body part. A nyasamantra is prefixed to the act of obeisance. There can be no better way of acknowledging the contribution of smaller systems.

Examples: *Am angushtabhyam namah* (Am, Obeisance to thumbs)

Am hrdayaya namah(Am, Obeisance to heart)

It is pertinent to note that there may be a deeper significance to this understanding of the meaning. This remains to be researched further.

2.2.26.3 Superposition of macrocosm on microcosm

Shodasanyasa (18) is one of the nyasas used in Pancaratra agama. In this nyasa, sixteen sets of physical and phenomenological world are placed in body parts in a sequence and systematic manner. Taking one of the sets from physical world namely, stars for example the twentyseven stars are placed on twentyseven body parts. The star rohini is placed on the heart, mrgasirsa on the head and so on to kritika on the tips of left leg. As an example from phenomenological world of devatas, twenty nine devatas are placed on as many parts, Hiranyagarbha on head, anantas on left abdomen and so on. It is mandatory to prefix with Aum and suffix with Namah.

Examples: *Aum rohinyai namah/ Aum mrgasirsaya namah/*

Aum hiranyagarbhaya namah/ Aum anantadibhyo namah/

2.2.26.4 Purification of body, mind and intellect

Pancabhutas and the corresponding qualia (tanmatra) are ten of the twentyfour tatvas accepted by many darsanas in sanatana dharma. These bhutas are cosmic in nature and their micro aspects make up the body of human beings. Unlike the macrocosmic elements which

are held to be pure, by virtue of contact with prakrti, the pancabhutas in human beings get defiled to varying degrees. Other contributing factors are doshas and gunas description of which can be found in ayurvedic texts. Therefore the daily routine consists of purificatory steps over and over again. Over and above the daily bath as a cleaning process, the nityakarma of sandyopasana involves prokshana (sprinkling with water sanctified by mantra on the head) for external purification and prasana (partaking small quantity of water sanctified by mantra) for inner cleaning. Pranayama is for the purification of the mind and japa is for the intellect. This concept of purification of body, mind and intellect gets added impetus under the system of nyasa, discussed later.

Among the many systems of alternative therapeutics that make use of the hands are acupressure, shiatsu, chakra healing, Reiki, Rosicrucian contact healing, marma and various forms of massage work. Chinese doctors have been diagnosing a patient's state of vitality through sensing the strength of the energy radiating from the hands, from the phalanges of the fingers and the pulse at the wrist. The physician's 'healing touch' is a proverbial phrase which should not be dismissed lightly.

When a vedic mantra is used to bless people, it is customary to keep the left hand up with outstretched fingers and right hand closed with yellow rice (*akshata*). Then the *akshata* will be put on the head of the person. The idea is that the divine energy is received through left hand from cosmos and discharged through right hand.

In a series of eight Rks in *viraja mantra* in Taittiriya Upanishad, one prays for purification of various parts, tissues, pranas, cosmic elements and their *tanmatras* in the body to become free of *rajas* and sin. Nyasa involves touching parts of one's own body extensively while reciting a mantra. The divine aspect apart (which would be subtle), the gross effect on the body may mean better health. The researcher is of the view that nyasa would augment touch sense. This would be particularly of great help to those for whom loss of touch sense impairs their health. A study can be made on the effect of nyasa on strength and dexterity of fingers and palms using simple devices like dynamometer.

2.2.27 Power of mantra

A scholarly and at the same time a practical guide to the world of mantras – from the origin to the highest level of mantrayoga is David Frawley’s book (14) titled ‘Mantra Yoga and Primal Sound- Secrets of Seed (Bija) mantras’. Aurobindo’s epic poem ‘Savitri’ is quoted as a mantra for the transformation of the world as it is the essence of the cosmic response and the invocation of the eternity. Mantra through its positive and constructive vibration integrates the mind into the vastness of truth and inspiration.

In Vaishnava tradition, Lakshmihayagriva is regarded as the God of knowledge. Sri Lakshmihayagriva sahasranama stotram is a dialogue between Rsi Kasyapa and Brahma, describing the mantramaya sarira aspect. Sri Vedantadesika in his Hayagriva stotram has described that Hayagriva has the mantramaya sariram.

Agnou samiddharchhishi saptatantoh/

Atastivan mantramayam sariram//

Hayagriva Stotram-Sloka 10

(During yajna, you receive the oblations, taking the sarira of the mantra recited and give to the respective devatas).

Of the world languages, Samskrta and Hebrew are attributed with divine powers for letters. The fifty Samskrta aksharas are believed to have their origin in the primordial sound OM (more precisely pronounced AUM) as shown in Appendix (1). These are also known as matrkakshara (matrka means little mother, the underlying belief being that the aksharas protect us as mother). In Matrkaksharanyasa, these aksharas representing fifty deities are placed in as many parts of the body. Tantrasaram, Sri Lakshmihayagrivasahasranama and Frawley’s book elaborate this concept and practice (14, p 63-86). We note differences in the parts assigned to the aksharas among the three sources.

Frawley recommends aksharanyasa for therapeutic purpose and wellness. Two examples are given below:

Aum Am Namahto stabilize the energy at the top of the head.

Aum Im Namahto stabilize the energy in the eyes.

2.2.27 Gods, Goddesses or active principles

Vaishnava Agama sastras describe the Supreme Being in five modes, namely para, vyuha, vibhava, arca and hardya. Sivagama sastra prescribes worship predominantly to Siva.

Saktagama places Sakti as the dominant deity to be worshipped. Krishna says in Bhagavad Gita, 'Whichever a person worships, their prayers reach me'. In a number of books on our scriptures written by Kashyap, the notion of a principle behind each God/Goddess is discussed along with scientific aspects. For example, Kashyap (24) portrays the principle of all indriyas (karmendriya and jnanendriya) and mind in Indra. Though the Gods and Goddesses cannot be seen with our eyes or any instruments however sophisticated they may be, the effect of the principles behind each can be experienced in physical, physiological, emotional, intellectual and spiritual realms as brought out by Kashyap.

2.2.28 Anganyasa and karanyasa – detailed procedure

Anganyasa and karanyasa are the two forms mostly used in individual worship like sandyopasana or salagrama aradhana at home or congregational worship in temples like yajnas and festivals like Dusserah. Detailed procedures of these two forms follow.

Anganyasa is mostly done on six parts in the body, the heart, the forehead, the crown, shoulders to hips in a vertical movement, the eyes and around the head. In Vaishnava and Madhva sampradayas, the two eyes are touched whereas in smarta sampradaya, three points (two eyes and the center of eyebrows representing the third eye) are touched. This is called *shadanganyasa*. The heart is touched with tips of right hand thumb, middle and ring fingers. The forehead is touched with tips of four fingers with thumb folded across the palm. The crown is touched with tip of right hand thumb and four fingers folded and pointing upwards. Next touch involves crossing hands over the shoulders with palms open and moving the hands from shoulders to waist. The touch on eyes is made with right hand index and middle fingers or three fingers, index, middle and ring (the middle finger resting on the middle of the eyebrows). The sixth touch is a combination of a resounding click using right hand index and middle fingers on the left palm and making the click around the head in eight directions (East, Southeast, South, Southwest, West, Northwest, North and Northeast) clockwise. In the

recitation of anganyasa mantra there is a difference between vaishnava and smarta practice which will be brought up in the protocol.

Karanyasa centres around the fingers and palm/dorsam. The five fingers and palm/dorsam (considered as one unit) make up the six parts. Both hands are used in karanyasa. The movement is along the fingers one after the other from base to tip of each. Movement on four fingers is made by the tip of the thumb. The movement on thumb is made by index finger. Each palm/dorsam is swiped by the other palm from base of the palm to the tip of the fingers. In the human body, palms and fingers together account for a high concentration of nerve endings; thus karanyasa covers this area completely.

2.2.29 Nyasa in sandyopasana

Sandyopasana is a *nityakarma* (daily duty). It is ordained to be performed three times a day, at sunrise, noon and sunset. Three nyasa procedures are used in sandyopasana – Kesavadinyasa, Rsi, Chhandas and devata nyasa and mantranyasa for Gayatri. Appendix (10) details the nyasa procedures to be done during morning sandyopasana. The protocol for nyasa for Gayatri mantra is given in the section below.

2.2.30 Nyasa protocols for AUM, Gayatri and Suryanamaskara.

The protocol for AUM is given in Table 1 below.

TABLE 1: KARANYASA AND ANGANYASA FOR AUM

PART OF MANTRA	KARANYASA	ANGANYASA
am	Anguṣṭhābhyām namaḥ	(Jñānāya) hṛdayāya namaḥ
um	Tarjanībhyām namaḥ	(Aśvarya) śirase svāhā
mam	Madhyamābhyām namaḥ	(śaktyai) śikhāyai vaṣaṭ
am	Anāmikābhyām namaḥ	(balāya) kavacāya hum
um	Kaniṣṭhikābhyām namaḥ	(tejase)netrābhyām vaṣaṭ/ netratrayāya vaṣaṭ
mam	Karatala karapṛṣṭhābhyām namaḥ	(vīryāya) astrāya phaṭ

The universality of Gayatri mantra is too well known to be recounted here. The importance of nyasa for Gayatri can be gauged from the fact that Gayatri mantra has ten types of nyasa, Appendix (5). Two of these nyasa types address Vishnu and Siva as the supreme reality.

TABLE 2: GAYATRI NYASA FOR VAISNAVA SAMPRADAYA

PART OF THE MANTRA	KARANYASA	ANGANYASA
Aum bhūḥ	Aṅguṣṭhābhyām namaḥ	(Jñānāya) hṛdayāya namaḥ
Aum bhuvah	Tarjanībhyām namaḥ	(Aśvarya) śirase svāhā
Aum suvah	Madhyamābhyām namaḥ	(śaktyai) śikhāyai vaṣaṭ
Aum tatsavitur vareṇyam	Anāmikābhyām namaḥ	(balāya) kavacāya hum
Bhargo devasya dhīmahi	Kaniṣṭhikābhyām namaḥ	(tejase)netrābhyām vaṣaṭ/ netratrayāya vaṣaṭ
Dhi yo yonaḥ pracodayāt	Karatala karapṛṣṭhābhyām namaḥ	(vīryāya) astrāya phaṭ

TABLE 3: GAYATRI NYASA AS PER SMARHTHA SAMPRADAYA

PART OF THE MANTRA	KARANYASA	ANGANYASA
Tatsavituh	Aṅguṣṭhābhyām namaḥ	Hṛdayāya
Vareṇyam	Tarjanībhyām namaḥ	Śirase
Bhargo devasya	Madhyamābhyām namaḥ	Śikhāyai
Dhīmahi	Anāmikābhyām namaḥ	Kavace
Dhiyo yo naḥ	Kaniṣṭhikābhyām namaḥ	Netratrayāya
Pracodayāt	Karatala karapṛṣṭhābhyām namaḥ	Astrāya

The most common is the gayatri padanyasa. In Vaishnava sampradaya the Gayatri mantra is prefixed by three vyahrtimantras thereby making the count to six padas. This is the format in which Gayatri is recited. The protocol for Gayatri padanyasa practiced in

vaishnavasampradaya is given in Table 2. As per Smartha sampradaya, the Gayatri mantra is split into six parts. This method is given in the Table 3.

Most yoga teachers recommend suryanamaskara as it blends many asanas, pranayama and dhyana on Surya known as pratyaksha devata (God seen with our own eyes). Before starting suryanamaskara, the nyasamantra can be recited to bring to bear the benefits of nyasa.

Nyasamantra is composed of a combination of 'ha' and 'ra' which personify the moon and the sun respectively. Incidentally 'ra' is the bija mantra for agni. What is agni at night Is surya in the day.

TABLE 4: NYASA FOR SURYA NAMASKARA

PART OF MANTRA	KARANYASA	ANGANYASA
Hrām	Aṅguṣṭhābhyām namaḥ	Hṛdayāya
Hrīm	Tarjanībhyām namaḥ	Śirase
Hrūm	Madhyamābhyām namaḥ	Śikhāyai
Hraim	Anāmikābhyām namaḥ	Kavace
Hraum	Kaniṣṭhikābhyām namaḥ	Netratrayāya
Hraḥ	Karatala karapṛṣṭhābhyām namaḥ	Astrāya

2.2.31 Nyasa protocol for Sri Lalita sahasranama, Sri Vishnu sahasranama and Sri Bhagavad Gita

The origin for Sri Lalitasahasranama is the dialogue between Sri Hayagriva and sage Agastya

Rsi: Agastya; Chhandas: Anushtup; Devata: Lalitaparneswari (Vasinyadi vak). Please refer to Table 5 for details.

The genesis of Sri Vishnusahasranama is the dialogue between Yudhishtira and Bhishma lying in the bed of arrows awaiting uttarayana to leave his mortal coil. The witness is no other than Sri Krishna himself.

Rsi: Veda Vyasa; Chhandas: Anushtup; Devata: Vishnu.

Please refer to Table 6 for details.

TABLE 5: NYASA FOR SRI LALITA SAHASRANAMA

PART OF MANTRA	KARANYASA	ANGANYASA
Aim	Aṅguṣṭhābhyām namaḥ	Hṛdayāya
Klīm	Tarjanībhyām namaḥ	Śirase
Sau	Madhyamābhyām namaḥ	Śikhāyai
Aim	Anāmikābhyām namaḥ	Kavace
Klīm	Kaniṣṭhikābhyām namaḥ	Netratrayāya
Sau	Karatala karapṛṣṭhābhyām namaḥ	Astrāya

TABLE 6: KARANYASA FOR SRI VISHNU SAHASRANAMA

PART OF MANTRA	KARANYASA
Viśvam viṣṇur vaṣaṭkāraḥ	Aṅguṣṭhābhyām namaḥ
Amṛtāmsūdbhavo Bhānuḥ	Tarjanībhyām namaḥ
Brahmaṇyo brahmakṛt brahma	Madhyamābhyām namaḥ
Suvarṇa bindurakṣobhyaḥ	Anāmikābhyām namaḥ
Nimiṣo nimiṣasragvī	Kaniṣṭhikābhyām namaḥ
Rathāṅgapaṇi rakṣobhyaḥ	Karatala karapṛṣṭhābhyām namaḥ

TABLE 7: ANGANYASA FOR SRI VISHNU SAHASRANAMA

PART OF MANTRA	ANGANYASA
Suvratas sumukhas sūkṣmaḥ	(Jñānāya) hṛdayāya namaḥ
Sahasra mūrdhā viśwātmā	(Aiśvaryāya) śirase svāhā
Sahasrārcis sapta jihvaḥ	(śaktyai) śikhāyai vaṣaṭ
Trisāmā sāmagassāmā	(balāya) kavacāya hum
Rathāṅgapaṇi rakṣobhyaḥ	(tejase)netrābhyām vaṣaṭ/ netratrayāya vaṣaṭ
Ṛtussudarśanaḥ kālah	(vīryāya) astrāya phaṭ

Both the sahasranama are recited thousands of time each day mostly in southern parts of our country. If these are recited for any *kamyakarma*, it is all the more important to begin with a sankalpa and nyasamantra. For a detailed description of these procedures for Sri Vishnusahasranama with the significance for every action reference is made to R K Mishra's book titled 'Before the beginning and after the end'(25).

Sri Bhagavad Gita also called the sermon on the battlefield, is the quintessence of Mahabharatam called the 'Fifth veda'. The nyasa mantra for recitation of Gita is given in Table 8.

TABLE 8: NYASA FOR SRI BHAGAVAD GITA

PART OF MANTRA	KARANYASA	ANGANYASA
Nainam Chindanti śastrāṇi nainam dahati pāvakaḥ/	Aṅguṣṭhābhyām namaḥ	(Jñānāya) hṛdayāya namaḥ

Na cainam kledayantyāpo na śoṣayati marutah//	Tarjanībhyām namaḥ	(Aiśvaryāya) śīrase svāhā
Acchedyoyamadāhyeyam Akledyośoṣya eva ca/	Madhyamābhyām namaḥ	(śaktyai) śikhāyai vaṣaṭ
Nityam sarvagatassthāṇuḥ acaloyam sanātanah//	Anāmikābhyām namaḥ	(balāya) kavacāya hum
Paśya me Pārtha rūpāṇi śataśoṭha sahasraśah/	Kaniṣṭhikābhyām namaḥ	(tejase)netrābhyām vauṣaṭ/ netratrayāya vauṣaṭ
Nānāvidhāni divyāni nānāvarṇākṛtīni ca//	Karatala karapṛṣṭhābhyām namaḥ	(vīryāya) astrāya phaṭ

2.2.32 Difficult to pronounce akshara combinations in nyasa

In many nyasa mantras, we find combinations of many consonants, at times three or more with one vowel at the end. It requires a trained vocal system to pronounce the sound form of these aksharas. They are tongue twisters of a rare order. A few examples are listed below.

Tsaah	Part of pasa mantra
Llm	Part of kaliyuga mantra
Lsbim	Part of vanamala mantra
Jrmruh	Part of vajra mantra
Kshrvoum	Part of Garuda mantra
Rtsam	Part of jivatma mantra
Tjrom	Part of Narasimha mantra

2.2.33 Cause – Effect matrix

While trying to understand the effects of nyasa practice, we are confronted with the relationship between cause and effect. Both science and sastras agree on this point. If there is an effect we observe, there must have been a cause and vice versa. The difference is in time aspect only. For sastra lays down that the cause might be in a previous birth! In any case we have four possibilities with both cause and effect operating on two levels, gross and subtle.

The matrix is shown below in Table 9.

TABLE 9: CAUSE – EFFECT MATRIX

		CAUSE	
		Gross	Subtle
EFFE CT	Gross	I	II
	Subtle		

	Subtle	III	IV
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We are familiar with the the cause and effect relationship between occurrences in physical and phenomenal worlds. The gross aspect is experienced universally and understood easily. The subtle aspect is not so easily perceived or mentally debated. More and more researches in particle physics or biology or alternativemedicine are undertaken these days in ‘subtle domain’. In spiritual field the subtle aspect dominates. In the grid shown above, we have four possibilities, viz., gross cause-gross effect, gross cause-subtle effect, subtle cause-gross effect and subtle cause-subtle effect.

The dividing line between gross and subtle is not however very clear. Researches on scientific aspects of sastra propositions/dictum will fall in ‘subtle domain’ particularly the measurement of effect, namely what to measure and with what device. Experimental work on nyasa is no exception. However this should not deter us from making a serious attempt. We will discuss this aspect and our first and modest attempt to generate scientific evidence for the effect of nyasa in Section 5.

2.2.34 BENEFITS OF NYASA

Benefits of nyasa as per our modest coverage of literature are twofold, *bhutasuddhi* and *mantrasiddhi*. We discuss these two in this section.

2.2.34.1 Bhuta suddhi

We bring to bear Swami Muktibodhananda Saraswati's (26, p 5) remarks on bhuta suddhi and follow with detailed account on the first of the two effects of nyasa repeatedly mentioned in all agama texts.

'The Srimad Devi Bhagavatam Purana enumerates particular benefits derived from the performance of bhuta suddhi and although we have, as yet, no scientific evidence to prove its validity, we can draw conclusions from our own personal experience of the practice. (This is known as empirical evidence based on subjective experience and is accepted as valid in cases where experimental evidence is not feasible or impossible). Of course the first and most obvious effect is purification indicated by the word 'suddhi'. This takes place on both physical and subtle levels of the body-mind complex. All tantric practices are essentially designed to expand the consciousness and release potential energy, but the effects and demand of most of them are too powerful for the average practitioner to handle. "Bhuta suddhi, however, is within the capacity of all. ... It is not a passive meditation. ... I have found that the practice of bhuta suddhi makes the mind completely tranquil...".

Five cosmic elements in creation- The shared concept in all darshanas

Akasa (space), Vayu (air), Agni (fire), Apah (water) and Pritwi (earth) are the cosmic elements (also called elementals) forming the cosmic world. Sastras hold that the physical world is an orderly creation. Taittiriya Upanishad says:

Akasat Vayuh / Vayoragnih / Agnerapah / Adbhyah pritwi //

Taittiriya Upanishad Sikshavalli Pancati 1

(From space proceeds air; from air, fire; from fire, water; from water, earth).

It must be noted that space, air, fire, water and earth are not what we consider in the sense of dictionary meaning. This will be addressed in sections below.

These elementals are known also as 'bhutas' and tattwas. These tattwas are the manifestation of the primordial 'Shakti' and it is due to them that the entire universe exists. In the gross state, they are understood as earth, water, fire, air and space. But the word tattwa or elemental applies to something much more subtle. These five tattwas comprise particular pranic vibrations of one Shakti. In the human body they represent solidity, fluidity, heat, motion and subtle vibration and emotion respectively. The formation of five sense organs and five organs of action follow from the tanmatras (characteristics or monads) of the five bhutas, described below.

Tanmatra –the characteristics or monads of the cosmic elements

The five bhutas have the specific characteristics also called monads, sabda (sound), sparsa (touch sense), rupa (form), rasa (taste) and gandha (odor) for respective bhuta.

Pancikarana concept

While in subtle form, the elementals are free of any characteristics, they acquire the characteristics only in gross state. It is to say that primordial akasa does not sustain sound. It is so for each bhuta. A process known as *pancikarana* becomes operative by which each bhuta acquires the respective characteristic. The methodology is as given in the Table 10.

TABLE 10: PANCHIKARANA OF ELEMENTALS

<i>Akasa</i>	<i>½ Sound + 1/8 of the other four tanmatras (touch, form, taste and smell)</i>
<i>Vayu</i>	<i>½ Touch + 1/8 of the other four tanmatras (sound, form, taste and smell)</i>
<i>Agni</i>	<i>½ Form + 1/8 of the other four tanmatras (sound, touch, taste and smell)</i>
<i>Apah</i>	<i>½ Taste + 1/8 of the other four tanmatras (sound, touch, form and smell)</i>
<i>Prithwi</i>	<i>½ Smell + 1/8 of the other four tanmatras (sound, touch, form and taste)</i>

The five sensory organs and the five organs of action evolve by the interaction of pancabhutas and the mind (10, p 88). This is illustrated in the Table 11 below. The evolution of five karmendriyas and five jnanendriyas starting from Prakriti is described by T. M. Srinivasan in his commentary of Yoga Sutras (27).

TABLE 11: TANMATRAS, BUDDHINDRIYAS AND KARMENDRIYAS

[adapted from Otto Schraeder (10, p88)]

AHAMKARA

TANMATRAS BHUTAS (Qualia) (elementals)	BUDDHINDRIYAS (Sense organs)	KARMENDRIYAS (organs of action)
Sabda(sound)→Akasa(space)	Srotra (ear)	Vac (speech)
Sparsa(touch)→Vayu (air)	Tvac (skin)	Pani (hand)
Rupa(form)→Tejah (fire)	Cakshu (eye)	Pada (feet)
Rasa(taste)→Apah (water)	Rasana (taste)	Upastha (generative organ)
Gandha(smell)→Prithvi(earth)	Ghrana (smell)	payu (eliminary organs)

From ahamkara (refined version of ego or I-ness) which is one of the 24 tattvas higher in the order, the tanmatras evolve one after the other. The tanmatras are the qualities of the bhutas (elementals). The corresponding sense organs and organs of action evolve from the bhutas. Bhutasuddhi covers the entire gamut of 24 tattvas. For a detailed description reader is referred to the book, 'Introduction to Pancaratra and the Ahirbudhniya Samhita' by F. Otto Schraeder

The five cosmic elements and corresponding devatas

The five bhutas have their devatas personified for the purpose of worship including offering of oblations in yajnas/homas. Agni, Vayu, Prthvi and Varuna are the devatas personifying fire, air, earth and water. Surya and Agni take their roles by day and night. Vedic chants in praise of these devata are common. Agni is worshipped for leading us in the right direction in all our endeavours as the Isavasya Upanishad tells. In all Vedic ceremonies Agni and Varuna are always invoked for purification and blessings.

How do these elements get defiled and measure of defilement

The originally pure pancabhutas gets polluted or defiled when they come in contact with prakrti, linked with all three gunas. Though sattwa is part of prakrti, there is no suddhasattwa in these worlds.

There does not appear to be a measure of defilement/impurity, at least as a scientist would prefer to deal with. We might say sastras require the sadhakas to resort to the many steps of purification to take into account of 'just in case of defilement'. There are innumerable

possibilities for physical, mental and intellectual defilement in the very process of worship itself. In the worship of Gods/Goddesses, no room is allowed for such contingencies. These stringent measures are stipulated especially for priests in temple worship.

The agama literature cites that nyasa will lead to bhuta suddhi and mantra siddhi. The cosmic elements are pure by themselves but get defiled in contact with prakriti of which the body is made. The literature does not say explicitly as to how the cosmic elements get purified in the worshipper's body and the measure of purity of each element. Similarly mantra siddhi is an abstract term. Many outcomes are attributed to chanting of Gayatri mantra, for example. These outcomes and claims will probably fall under 'empirical evidence' at the present time.

Purification of tanmatras, pancabhutas and organs of sense and action—Methods

All sastras enjoin the basic requirement of ‘suddhi’- purification in various forms and at many levels in worship to Gods. Yoga mentions about prana suddhi, nadi suddhi, vak suddhi and manas suddhi etc. *Soucha* the first and foremost *yama*, is both external and internal.

External purification by bath with water and cleansing agents is only the start. Even after this bath, a sadhaka purifies by prokshana (sprinkling) with mantra sanctified water and prasana (sipping) of mantra sanctified water three times. The latter is called ‘acamana’ done before every step in worship like sandyopasana, followed by kesavadinyasa referred in an earlier section. Vedic pranayama (sagarbha, meaning with mantra) is believed to achieve prana suddhi. Control of tongue is advised in many sastras for vak suddhi. Meditation on God/Goddess or nature purifies mind and intellect.

How to know that the purification is complete

The state of mind and intellect is the yardstick. It is purely subjective. Swami Muktibodhananda Sarasvati (26) says, “By the use of the tattwa bija mantras and breath, you mentally purify, dissolve and reconstruct the papa purusha (the sinful being) into a golden egg like Hiranyagarbha. This actually helps transform your own individual ego. Then by considering yourself to be the supreme knowledge or consciousness (Siva) you finally attain that state (Sivatamo bhavet)”.

Nyasa leads to bhutasuddhi as per agama sastra

The method of bhuta suddhi described in Sri Devi Bhagavatam is elaborate, a onetime measure to be undertaken under the guidance of a guru during certain times of the year with fasting or fruitarian diet. On the other hand, nyasa is a very simple procedure to be done before every mantra japa. As nyasa is to be done only once irrespective of the number of japamala, it takes very little time and is effective instantaneously. In fact, every mantra diksha is preceded by nyasadiksha for regular adherence. For daily anushtana like sandyopasana by individuals, nyasa is a practical method of bhuta suddhi.

2.2.34.2 MANTRASIDDHI

Concept of mantrasiddhi

“Many people are under the misapprehension that a ‘mantra’ is a prayer, a set of words, a nonsensical group of syllables or a mystical formula. Strictly speaking a mantra is none of these. A mantra is a sound of greatpower, one that has the capacity to transform gross matter (body and mind) into subtle vibration and link that subtle vibration to its original pure consciousness” according to Swami Dharmakeerthi (20, P1).

Dictionary meanings of ‘siddhi’ and ‘siddha’ are given below.

Siddhi: Accomplishment, fulfillment, completion, perfection, complete attainment (of an object).

Siddha: a semi divine being supposed to be of great purity and holiness and said to be particularly characterized by eight supernatural faculties called siddhis such *as anima, laghima* etc.

Mantrasiddhi referred in Patanjala Yoga sutram

Chapter 3 of Patanjali Yoga Sutram is entirely devoted to ‘Powers’ (siddhis) that are stated to accrue to the yogi when he/she practices samyama (Dharana, Dhyana and Samadhi) on any of the yamas/niyamas or any quality he/she wants to acquire. For example, *Bhuvanajnanam surye sanyamat (PYS 3-27)*.

(By making samyama on the sun one gains knowledge of the cosmic spaces).

The repetition of sacred words or mantras is, as we have been told, an invaluable aid in spiritual progress according to Swami Prabhavananda (28).

Steps to achieve mantrasiddhi

Swami Dharmakeerthi (20, P 8) lists seven steps by which a mantra makes the gross into subtle. The first step is to begin with the mind which is in ‘vikalpa’ state. This is the very nature of mind. The last step is reaching ‘suddha satva’ when the higher Self is revealed.

Signs of achieving this state are listed in a later section.

Classification of mantras

It is believed there are over seven crores (0.7 million) of mantras. Though a large number is lost, it is possible to obtain them in a deep state of concentration. Mantras are classified in the

following ways; namely, according to the number of letters, gender of the mantra, temperature, kalikulachakra, vedic/tantric/apta type, chakra, astrological chart.

Rules regarding mantrasadhana

The mantra selected for the sadhaka must be efficacious. For this purpose and subsequent guidance a Guru is needed. The other rules governing the sadhana are enumerated below.

Mantra artha, Mantra caitanya, Kallukas, Mantra setu, Maha setu, Infusing power, Mandala, Yantra, Karanyasa and Anganyasa.

For a description of these rules, Swami Dharmakeerthi's book on 'Mantra' may be referred.

Three essential ingredients

The three essential ingredients of mantrasiddhi are:

*Faith in the guru

*Faith in the mantra

*Faith in the devata attributed to particular mantra

This faith has to be absolute and unqualified. It is said that the moment intellect starts analyzing and doubting the veracity of the mantra, the adhishtana devata or the capacity of the guru, then the whole sadhana becomes fruitless and retrograde. Just as the mind has to be quietened, the intellect also should be quietened.

Signs of mantrasiddhi

How does the sadhaka know of the progress or the attainment of siddhi. One guideline is available. The following list on mantrasiddhi is created by Ramaswamy Sastry(29).

Feeling that the devata's body has permeated one's own body

Feeling brilliant at heart and pleasant in mind

Reduced appetite, reduced excretion, less sleep

Less interest in worldly affairs

Seeing brilliance all around and feeling that own body is emanating bright light

Sometimes without any feeling and sometimes easily excited and happy

Hearing celestial music and seeing celestial beings in the sky

Flashes of divine fragrances and more sensitive to smell

Seeing flashes as if it is night during day and as if it is day during night

Seeing flashes of thunder and lightning when there is no cloud

Feeling healthy, happy and dignified

Feeling that hereafter only less japa is required (not out of lethargy).

The attributes listed above are indeed subjective. Some physiological or physical/mental/intellectual changes may be measurable by parameters based on appropriate design of experiments. Ramaswamy concludes the list with 'Mantrasiddhi is essential for doing mantra prayogas for self and others'.

Nyasa leads to mantrasiddhi as per agamasastra

The normal process of achieving mantrasiddhi appears arduous and difficult. Many sadhakas fall by the way side after many unsuccessful attempts. Agamasastras aver that just like bhutasuddhi, mantrasiddhi is also easy to achieve by the procedure of anganyasa and karanyasa. As we have stated earlier, there is a nyasa procedure for every mantra, nyasa needs to be done only once irrespective of the number of mantra japa and lastly unqualified faith in the nyasa (as in the case of mantra itself) is the building block. Swami Dharmakeerthi is of the opinion that karanyasa, anganyasa, rishyadinyasa and dhyana for each mantra is to be done.

In summary, mantrasiddhi is acquired by spiritual persons is a long and arduous process. Many aspirants not conforming to the rigid requirements fall by the wayside. By contrast for simple iconic or non-iconic day – to – day worship of ishta devatas, nyasa provides the answer.

2.3 AIMS AND OBJECTIVES

2.3.1 Aims

The literature survey was aimed at collecting the information on nyasa-the concept and practices from agama and other scriptural texts.

2.3.2 Objectives

* To classify information on nyasa into different categories and systems of agama worship

* To highlight nyasa procedures applicable for individual and congregational worship

2.4 MATERIALS AND METHODS

2.4A Vedic sources and Classical Yoga Texts

Various agama sastras known as samhitas, and texts on saiva, sakta and vaishnava agamas, puranas and itihasas.

2.4 B Methods

Reference to original texts

Reference to commentaries

Reference to books on Agamas and journals

Non formal and unstructured discussion with scholars and agama practitioners

2.5 Summary

Literature on agamas in general and nyasa in particular is extensive indicating the importance of its use in iconic or non-iconic worship of the divine. The mandatory nature of its use prior to each and every mantrajapa or purificatory steps in divine worship conveys the rigid system to be followed especially in congregational worship. Agamas are on par with vedas in every way, be it philosophical, theological or simply religious for the good of mankind. Whereas the vedas are believed to be apaurusheya (not composed by a person, being coexistent with the divine), agamas are the results of dialogues our seers (Rsis) had with Gods/Goddesses.

The genesis of most agama sastras indicate the concern the seers had for the welfare of the mankind to implore the Gods/Goddesses for steps to mitigate the sufferings of mankind, animal kingdom and ecology. In fact agamas are one step ahead of vedas since the latter is restricted to three varnas and males whereas agamas can be practiced by one and all. Nyasa is an anchor for effective application of agama sastra worship.

3.0 REVIEW OF SCIENTIFIC LITERATURE ON NYASA

Since this study is the first of its kind in the efforts of SVYASA to find a useful link between science and sastra, no scientific literature is available as a guide or a roadmap.

4.0 AIMS AND OBJECTIVES

4.1 AIMS OF THE STUDY

- To understand the basic concept of Nyasa practice in agama worship of the divine
- To collate the varied nyasa practices in saiva, sakta and vaishnava agama worships
- To explore the possibility of adapting nyasa in yoga therapy

4.2 OBJECTIVES OF THE STUDY

- To study the effect of practice of nyasa prior to mantrajapa on BMI of the sadhaka
- To measure changes if any, in chosen subtle energy parameters of the sadhaka

4.3 JUSTIFICATION FOR THE STUDY

All scientific endeavours attempt and succeed in expanding the horizons of knowledge by encouraging man's effort to explore nature both externally and internally. The outcome of such explorations leads to the progress of mankind in physical, phenomenological and philosophical worlds we inherit. This study is a miniscule part of man's inward journey in the grand scenario of the progress of mankind.

Scientific study - The rationale

Science and sastras have 'search for truth' as their primary purpose. While the purpose is same, the methodology is different. Science by and large draws the inferences and conclusions from controlled experiments which are verifiable, objective and falsifiable. Sastras are largely based on experience of people in their interactions with animate and inanimate world and more profoundly by revelations of direct truth by seers (Rsis). These findings are subjective in a scientific sense but are upheld as correct. Another basic difference between science and sastras is the former is considered as value free. The focus of sastras is on values considered essential for a sane, ethical coexistence of all components of society. Some values are held as eternal while some others may change from time to time and specific to subcultures. With these basic differences in mind we proceed with the objective of the research on Nyasa.

The rationale for undertaking a scientific study of benefits of nyasa practice stems from two angles. First, it is for people to understand and realize the beneficial aspect in modern day living of stresses and strains. Scientific evidence will be more convincing to modern generation than simple faith or belief. Second is to advance the borders of science in understanding nature and probably lead to paradigm shifts.

4.4 HYPOTHESES

1. Practice of nyasa before Gayatri mantrajapa does not lead to reduction in 'Integral Entropy' of human subjects
- 2 Practice of nyasa before Gayatri mantrajapa does not lead to increase in 'Integral Area' of human subjects
3. Practice of nyasa before Gayatri mantrajapa does not lead to increase of 'Spatial fractality' of human subject

5.0 METHODS

5.1 PARTICIPANTS

5.1.1 Sample size

Since this study is the first of its kind, no guidance or benchmark is available to decide about the sample size. Since nyasa is a procedure coupled to mantrajapa, the investigator decided to select participants from a traditional vedic institution where the students would be practicing mantrajapa daily. Veda Vijnana Gurukulam located in Channenahalli, Bengaluru was chosen. Out of sixty students in the institution in different stages of traditional learning, thirty students were selected as sample.

5.1.2 Selection and source of participants

As stated above, the source of participants is a traditional vedic institution located near SVYASA Yoga University, Bengaluru. For practical considerations half of the total population of students was selected for this study.

5.1.3 Inclusion criteria

- Males in age group 10-16
- Willingness to volunteer as subject, learn the nyasa procedure and practise
- Should be in good health

Should be practicing Gayatri mantrajapa regularly for a minimum of one year

5.1.4 Exclusion criteria

- On prescription drugs for health problem
- Lacking initiative to learn
- Females

5.1.5 Ethical considerations

An ethical committee was constituted to certify the design, methodology and experimental procedure and to ensure the implications of the study were explained to the participants and informed consent of each participant was obtained.

5.2 DESIGN OF THE STUDY

5.2.1 Parameters for measurement and device

Generally the parameters for measurement will be chosen first for any study and then a suitable measuring device selected. However in this study, the process was reversed for two reasons. There is no prior scientific study on the subject. Among a plethora of parameters, it was a tough task to hazard a guess. The introduction of Electro Photonic Imaging (EPI) in the medical diagnostic research scenario gave the investigators an opportunity to apply in this study. The choice of the parameters followed from the total kit of 13 parameters the device is capable of measuring.

5.2.2 Electrophotonic Imaging [EPI] - Application in current research

The device known as Electro Photonic Imaging [EPI] – also known as Gas Discharge Visualization– is used for the investigations reported here. This was developed by Dr. Korotkov (30). The instrument consists of a high voltage, high frequency generator whose field is applied to the finger tips of subjects. The field draws out electrons and photons from the body through the finger tips. Since the electric field is applied through a glass plate, the current through the finger is in the low microamperes range and no discomfort is felt by the subject. Thus, the measurement is entirely non-invasive and safe. Since the finger tips of all fingers represent organs according to acupuncture theory, subtle energy flow of chi or prana in the body is monitored through this method. For current research on the subtle effect of nyasa, EPI is thought to meet the requirement very well.

5.2.3 Instrument details and parameters

EPI consists of an insulating glass plate on which the fingers are placed one at a time. A CCD camera underneath the glass plate captures the pictures of corona discharge from the fingers when the electrons drawn out create a discharge due to the high voltage (Figures 2&3). The subject keeps the ten fingers one after the other on the sensor glass plate. The fingers should be dry. In-built software computes 13 parameters for the ten organs/systems corresponding to the ten fingers and produce plots called EPI-grams. If for any reason any diagram is incomplete or wrongly drawn, it shows up and instantaneous re-recording is possible. Though the instrument computes 13 parameters, Dr. Korotkov recommends focus on three parameters considered most important and adequate for normal study purpose. These are integral entropy, integral area and spatial fractality. These are described below.

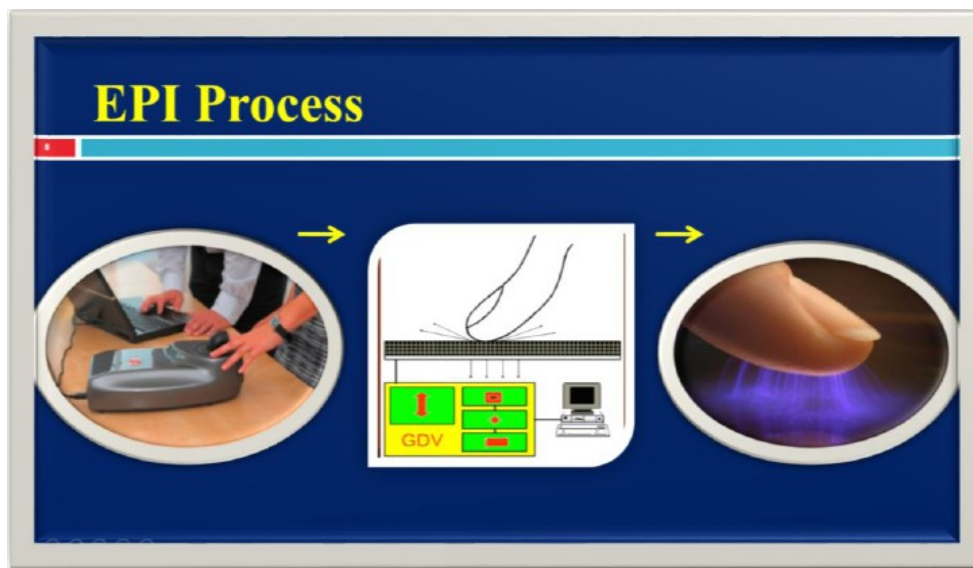


FIGURE 2 EPI INSTRUMENT AND PROCESS

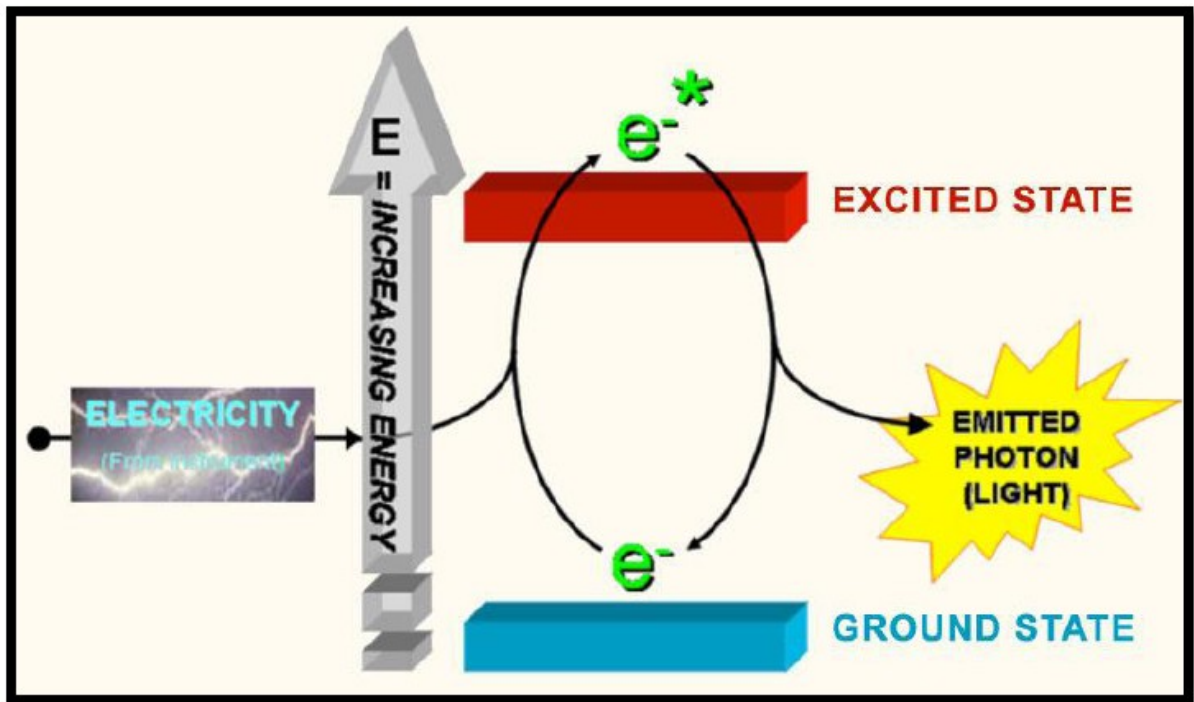


FIGURE 3 EXCITATION OF PHOTONS AND ELECTRONS IN EPI

5.2.4 The utility of EPI in current research

The instrument is found suited to measure the effect of subtle phenomena. The measurements are quick and with training, anyone can operate the instrument. The software prepares and projects the EPI-grams in a short time and the data can be printed in the form of tables, graphs and charts. Wherever the setting for a measurement is not proper, immediate graphic representation is available to rerecord immediately.

5.2.5 Experimental design

EPI instrument was used to measure parameters of subjects performing nyasa followed by Gayatri mantra japa. The control group consisted of subjects practicing relaxation before Gayatri mantra japa. The duration of nyasa and relaxation was kept to one minute. Both control and experimental groups recited Gayatri 20 times. Self as control method and cross over design was adopted. The approval of the Ethics Committee of the University was obtained before start of the study. Confidentiality of the subjects was maintained and withdrawal from the study at any time was explained to all.

GROUP A

MEASUREMENT 1	MEASUREMENT 2	MEASUREMENT 3
Base Line	After relaxation for	After Nyasa and

	one minute and 20 Gayatri	20 Gayatri
GROUP B		
Base Line	After Nyasa and 20 Gayatri	After relaxation for one minute and 20 Gayatri

The subjects are students of a gurukulam. They are students of first three years of sastra studies, in the age group 16-20, with regular daily practice of Gayatri for periods ranging from one to three years. They were all initiated into nyasa for Gayatri mantra by an acharya of the gurukulam. The subjects practiced nyasa for two days before measurements were made. All subjects are of good health and not taking any drugs for any health problems. They are all from similar socioeconomic background and form a homogenous group.

5.2.6 Parameters

Three EPI parameters were selected for analysis; they are integral entropy, spatial fractality and integral area.

5.2.7 Type of design

Self as control with cross-over from control to experimental has been selected as design. This is shown in Figure 4. **FIGURE 4 SELF AS CONTROL WITH CROSS OVER DESIGN**
Legend: N/G: Nyasa followed by Gayatrijapa; R/G: Relaxation followed by Gayatrijapa; (1), (2) and (3) indicates measurement epoch.

5.2.8 Sample size

This research is the first of its kind. No guidance for sample size is available. Therefore it was decided to take all available student population in the gurukulam as sample. Thus the study was made on 30 subjects. The separation between control and experimental groups was randomized. Every alternate subject who came into the laboratory for measurement was assigned to control and experimental. Though the measurements were taken for all thirty subjects, the data is available for less number of subjects due to noisy data, improper finger placement and drop out of data around some fingers and hence these could not be included in the study.

Data on integral entropy and integral area 29 subjects (15 control and 14 experimental)

Data on spatial fractality 22 subjects (10 control and 12 experimental)

5.2.9 Preparation of subjects for study

The purpose and procedure of measurements were explained in detail to all the subjects together. The subjects were given instruction on nyasa by their Acharya who is a familiar figure and he explained how to carry out nyasa - Karanyasa and Anganyasa. Informed consent was taken from each subject as per standard practice. The subjects practiced nyasa before reciting Gayatrimantra japa for two days.

Method of relaxation was standardized for one minute, about the same time taken for nyasa practice. Before actual measurement, each subject was briefed regarding the steps and the procedure. Any questions / doubts were clarified by an expert who assisted the researcher, in subject's own language in addition to English.

5.3 VARIABLES STUDIED

Anganyasa and Karanyasa were studied together.

5.4 INTERVENTIONS

While the focus is on the effect of nyasa on mantrajapa, two interventions, viz., nyasa followed by Gayatri mantrajapa and relaxation followed by Gayatri mantrajapa are the two interventions employed in this study. Cross over from one to the other intervention for the same subject is done to compare the effect.

5.5 DATA EXTRACTION

Data on three parameters, viz., Integral Entropy, Integraol Area and spatial fractality are extracted from EPI grams generated by the device.

5.6 DATA ANALYSIS

Data is analysed qualitatively and limited quantitative analysis is done with charts and graphs.

6.0 RESULTS

6.1 Integral Entropy

The concept of entropy discovered first for application in thermodynamics has encompassed many other areas - statistical mechanics, quantum mechanics, information theory and cosmology to name a few. It is found equally applicable to biological systems. In current research, the instrument captures and records a measure called 'Integral entropy'. It is a measure of disorder in the system -here relates to disorder in the subtle energy in the subject. If it decreases from one measurement to another, it signals positive change. Contrariwise, entropy increase denotes negative change.

6.1.1 Results

Table 12 shows the results of Integral Entropy for both conditions.

TABLE 12: ENTROPY UNDER EXPERIMENTAL AND CONTROL CONDITIONS

ENTROPY	GROUP A	GROUP B	TOTAL	PERCENTAGE
Decreases in N/G and R/G	1	3	4	13
Decreases in N/G & increases in R/G	4	5	9	31
Increases in N/G and R/G	4	2	6	21
Increases in N/G & decreases in R/G	6	4	10	35
Total	15	14	29	100

(Legend: N/G: Nyasa followed by Gayatri; R/G: Relaxation followed by Gayatri)

6.1.2 Inference

Both relaxation and nyasa followed by Gayatri produce change in entropy in either direction when compared with baseline measurement, even if to a small degree. Both decrease entropy in 4 out of 29 subjects. Both increase entropy in 6 out of 29 subjects. Thus neither nyasa nor relaxation has a marked effect on decrease in entropy. In the rest of 19 subjects, decrease in entropy takes place both in nyasa and relaxation.

In summary, practice of nyasa does not appear to have significant effect on reduction of entropy compared to relaxation on Gayatri mantra recitation. Null hypothesis is proved. A positive outcome of the study is that entropy decrease can and does take place when Gayatri mantra japa is recited preceded by nyasa or relaxation. For some individuals nyasa may augment the entropy reduction and for some others relaxation could augment the entropy reduction. It is possible both nyasa and relaxation prepares the individual for the effect of the mantra. The readings are taken only after each practice, namely, relaxation followed by Gayatri, and nyasa followed by Gayatri. Thus it is seen the study design does not necessarily focus on only relaxation or only Gayatri. The total effect is a cumulative sum of R+G and N+G. It is also possible that Gayatri is the main contributor for reduced entropy since the participants are well versed in Gayatri japa. The novelty of R or N could actually be an entropy enhancer since the participants are new to both and could have some hesitation and doubt in carrying out the new procedure.

6.2 Integral area

When high voltage electricity is passed through the fingers (for a very short time) electrons will be ejected from finger tips. Depending on the quantity of electrons ejected and their energy level, the integral area of the image varies in size. Higher the area, better is the health of the systems/organs corresponding to the particular finger. This parameter has the following features.

- Level of adaptation of organism to inner (psycho-physiological) and external (stress, food, ecology) influences.
- Character of metabolism.
- Adequacy of functional reserves.

6.2.1 Results

Table 13 shows the results of Integral Area under the two conditions.

TABLE 13: INTEGRAL AREA UNDER EXPERIMENTAL AND CONTROL CONDITIONS

INTEGRAL AREA	GROUP A	GROUP B	TOTAL	PER CENT
Decreases in N/G and R/G	0	2	2	7
Decreases in N/G & increases in R/G	5	6	11	38
Increases in N/G & R/G	6	1	7	24
Increases in N/G & decreases in R/G	4	5	9	31
Total	15	14	29	100

(Legend: N/G: Nyasa followed by Gayatri; R/G: Relaxation followed by Gayatri)

6.2.2 Inference

Both relaxation and nyasa affect integral area in either direction when compared with base measurement although to a small degree. Both increase integral area in 7 out of 29 subjects. Both decrease integral area in 2 out of 29 subjects. Thus neither nyasa nor relaxation has a marked effect on increase of integral area. In the rest of 20 subjects, both nyasa and relaxation increase the integral area.

States 3 and 4 (in the table above) together account for 55% - a good indication of effect of nyasa. State 2 indicates relaxation is effective for 38% of the subjects. State 1 where both nyasa and relaxation are ineffective accounts only for 7% of the subjects.

In summary it can be stated that both nyasa and relaxation affect Integral area positively – however, nyasa's influence is 17% more. We may conclude that in case of Integral area, the null hypothesis could be contradicted. This means that changes observed in Integral area could be due to practice of nyasa.

6.3 Spatial fractality

Fractality is a feature characteristic self-repetitive shape of wide ranging objects in nature such as clouds, broccoli and DNA to name a few and denotes repeatability. Increase in fractality signals positive change and decrease signals negative change. This parameter has the following features.

- Response of the system to the influence of regulatory systems.
- Reflects the level of uniformity of information by organs/tissues/cells.

6.3.1 Results

Table 14 shows the results of fractality under the two conditions.

TABLE 14: FRACTALITY UNDER EXPERIMENTAL AND CONTROL CONDITIONS

FRACTALITY	GROUP A	GROUP B	TOTAL	PERCENTAGE
Decreases in N/G & R/G	3	1	4	18
Decreases in N/G & increases in R/G	4	4	8	36
Increases in N/G & R/G	1	2	3	14
Increases in N/G & decreases in R/G	2	5	7	32
Total	10	12	22	100

(Legend: N/G: Nyasa followed by Gayatri; R/G: Relaxation followed by Gayatri)

6.3.2 Inference

Both relaxation and nyasa affect spatial fractality in either direction when compared with base measurement although to a small degree. Both increase fractality in 3 out of 22 subjects. Both decrease fractality in 4 out of 22 subjects. Thus neither nyasa nor relaxation has a marked effect on increase of spatial fractality. In the rest of 15 subjects, both nyasa and relaxation increases fractality. In summary, practice of nyasa does not appear to have significant effect on increase of spatial fractality compared to relaxation on Gayatri mantra recitation. Null hypothesis is proved.

A positive outcome of the study is that fractality increase can and does take place when Gayatri mantra japa is preceded by nyasa or relaxation. For some individuals, nyasa may augment the fractality increase and for some others relaxation will augment the same. It is possible both nyasa and relaxation prepares the individual for the effect of the mantra.

7.0 DISCUSSION

Of the three parameters taken for measurement, entropy results are most promising. Entropy is also researched by scientists belonging to various specializations, statistical mechanics, quantum mechanics, thermodynamics, information theory and biology for example. It is remarkable that Erwin Schrödinger (31), a Nobel Laureate in physics wrote a book titled

What is life. The book is said to have been a valuable precursor to the birth of molecular biology itself which later led to the discovery of DNA. Readers are particularly referred to Chapter 6 ‘Order, disorder and entropy’. From considerations of entropy for inanimate and animate matter, Jayant Udgaonkar (32) has stated categorically that “nothing can escape the long arm of the second law of thermodynamics”. We are therefore led to conclude that of the three parameters measured, results of Integral entropy deserve critical evaluation, since this may be a precursor to other manifestations in area and fractality. Thus, entropy could be considered as subtlest variable that is affected in any experimental condition.

The control group carried out relaxation practice for one minute followed by recitation of Gayatri mantra twenty times. The experimental group practices nyasa for the same length of time followed by Gayatri recitation for 20 times. It may be noted that between relaxation and nyasa, the former is easier to perform. Nyasa has to be learnt and practiced for some time for the learning to take effect, say a month before it becomes as easy and spontaneous as relaxation. In spite of this condition, nyasa has shown marginally better outcome.

The results are recast as shown below.

<i>Entropy decreases due to nyasa only</i>	<i>13</i>	
<i>Entropy decreases due to relaxation only</i>	<i>10</i>	
<i>Entropy decrease due to nyasa and relaxation</i>		<i>23</i>
<i>Entropy increases due to nyasa and relaxation</i>	<i>06</i>	

The above data shows a small advantage in favor of nyasa. This is encouraging since the results have been recorded in spite of a short time of nyasa practice. With regular practice for a month, the results could be better. We can conclude that nyasa is promising to be a method for decreased disorder resulting in possible better health.

8.0 APPRAISAL

This research on scientific study of the effect of nyasa is elementary. Many parameters considered for measurement in studies on living systems could all be candidates for study on effect of nyasa. However, a judicious choice should be exercised to select the most suitable. Out of the three taken for this study, entropy seems to be most subtle and also promising.

8.1 SUMMARY OF THE FINDINGS

Our findings based on exploring the sastra literature on nyasa and limited controlled experiments on the effect of nyasa indicate that the nyasa procedure will be useful for the twin purpose of bhutasuddhi and mantrasiddhi on one hand and can be an effective method to reduce entropy. The decrease in entropy is a signal of better health. Nyasa can therefore be applied in yoga therapy as reported by S. Bashyam, T. M. Srinivasan and H. R. Nagendra (33).

8.2 CONCLUSION

As stated earlier, this is the first scientific study on nyasa. The limitations as encountered and perceived are described below, as also suggestions for future study. Though nyasa for Gayatri mantra is simple, a greater familiarity with the practice of nyasa is needed for the learning curve to operate. At least a month of practice of nyasa is recommended.

It is surmised that relaxation itself is not easy to achieve and at times considered 'boring'. Subjects may relax better by a number of visuals of different cues and socio-cultural settings. Measuring Galvanic Skin Response (GSR) to monitor relaxation during practice could provide objectivity to the measurements.

In this study the chanting of the Gayatri mantra was left to the control of the individual. A better procedure could be to play an audio recording with the subjects mentally following the recitation. The recording needs to be done only once, which is reproduced to reduce variation in the quality of recitation and the time taken for recitation. The number of times Gayatri is recited may also be varied. The subjects could be heterogeneous from different subcultures. Basic condition that the subject should be practicing mantrajapa remains, as nyasa is coupled to mantrajapa. The age group of the subjects in this study was incidental. The study should include subjects of different age groups.

Future study promises to open vistas of greater understanding of the research topic of nyasa for specific application in yoga therapy for major health problems and promotion of positive health.

8.3 IMPLICATIONS OF THE STUDY

The study has implications both for those who are committed to follow the dictum of sastras and those who value scientific spirit in whatever they do in daily life. The former, instead of

following sastra mechanically will carry out their sastraic duties with understanding and sincerity. The latter will take to sastra wherever it has the scientific evidence to back the claims of sastra.

8.4 APPLICATIONS OF THE STUDY

The study has potential for applications in yoga therapy in treating many health problems.

Since nyasa is based on touch sense the procedure can be effectively applied to augment touch sense as for example in disorders related to peripheral neuropathies. The concept of nyasa will also enlarge one's ability to identify with macrocosmic universe as in vyahrti nyasa.

8.5 STRENGTHS OF THE STUDY

This study is the first of its kind combining the features of sastras with a scientific measurement of the benefits of nyasa. The source of subjects for such a study is difficult to get. In this instance, a gurukulam teaching sastras to young students was willing to offer the support. As far as scientific measurement was concerned, a new device capable of measuring subtle changes in the body was also readily available. Discussion with other research scholars working on similar subtle phenomena was also strength of this study.

8.6 LIMITATION OF THE STUDY

Applications of the results of the study should be considered from two angles. Those who are keen to follow the injunctions/instructions of the sastra, but would like to have evidence of the benefits, can volunteer as subjects of similar enlarged studies and learn from direct empirical evidence. Scientists who are open to find out what sastras has in store for mankind can also join the study as researchers. Thirdly people seeking alternative therapy either totally or as a complementary system can undertake a therapy based on nyasa when more data is available from future research. As stated earlier, this is the first study of its kind on nyasa. The limitations as encountered and perceived are listed below, as also suggestions for future study. Future study is promising to open vistas of greater understanding of ancient scriptures.

In the present study, we decided on the measuring device first and later, the parameters within the ambit of the device. Though it is a practical measure consciously followed, the

reversal of the order would be more appropriate. This calls for further insight in the subject. Also the empirical evidence of persons strictly following the canons of agama sastras (Saiva, Sakta and Vaishnava) may provide leads in this direction.

8.7 SUGGESTIONS FOR FUTURE STUDIES

Though nyasa for Gayatrimantra is simple, a greater familiarity with the practice of nyasa is needed for the learning curve to operate. At least a month of practice of nyasa is recommended.

It is surmised that relaxation itself is not easy to achieve and at times considered 'boring'.

Subjects may relax better by a number of visuals of different hues and socio-cultural settings.

Measuring Galvanic Skin Response (GSR) to monitor relaxation during practice could provide objectivity to the measurements.

In this study, the chanting of the Gayatrimantra was left to the individual's control. A better procedure could be to play an audio recording with the subjects mentally following the recitation. The recording could be from a neutral person. The recording needs to be done only once, which is reproduced to reduce variation in the quality of recitation and the time taken for recitation. The number of Gayatri can also be varied. The subjects could be heterogeneous from different subcultures. Basic condition that the subject should be practicing mantrajapa remains, as nyasa is coupled to mantra japa. The age group of the subjects in this study was incidental. The study should include subjects of different age groups.

The reasons for the choice of 12 nyasa points in Kesavadinyasa and whether regular practice of nyasa prior to mantrajapa will augment touch sense appear as two most important areas for research with potential for application in therapy.

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APPENDICES

APPENDIX 1 Formation of 50 akṣaras from eight aspects of the primordial

Word AUM

Aspect

Class of akṣaras

Akṣaras

Akāra

Vowels

अ a आ ā

इ ई ऋ ॠ उ ऊ

ऋ ॠ ऌ ॡ

ए e ऐ ai ओ o

औ au अंam अःaḥ

Ukāra

Guttarals

क ka ख kha ग ga

घ gha ङ ṅa

Makāra

Palatals

च ca छ cha ज ja

झ jha ञ ṅa

Nāda

Cerebrals

ट ṭa ठ ṭha ड da ढ ḍa

ḍha ण ṇa

Bindu

Dentals

त ta थ tha द da

ध dha न na

Ghoshā

Labials

प pa फ pha ब ba

भ bha म ma

Śānta

Semivowels

य ya र ra ल la

व va

Atiśānta

Sibilants

श śa ष ṣa स sa ह ha ङ ṅa

APPENDIX 2 Eight characteristics of samskrta aksharas (General)

Dhvani

Sthāna

Jati

Devatā

Prayatna

Mātra

Samjña

Karaṇa

For a description of the eight characteristics, reference may be made to Paniniya Siksha in Siddantakaumudi Choukamba, Varanasi 1985.

APPENDIX 3 Eight specific characteristics of Akāra, Ukāra and Makāra

Characteristic	Akāra	Ukāra	Makāra
Dhvani	Nāda	Nāda	Nāda
Sthāna	Hanu	Uttaroṣṭha	Uttaroṣṭha
Jati	Brāhmaṇa	Brāhmaṇa	Vaiśya
Devatā	Vāyu	Pṛthvī	Arka
Prayatna	Samvṛta	Vivṛta	Spṛṣṭa
Mātra	Ekamātrka	Ekamātrka	Ardhamātrka
Samjña	Hrasva	Hrasva	Uttamasparśa

Karaṇa	Bhūtoṣṭha	Adharoṣṭha	Adharoṣṭha
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APPENDIX 4 Excerpts from the speech of Dr Kortenhorst, a Sanskrit teacher at

the John Scotus School in Dublin about the importance of Sanskrit learning

Dr Kortenhorst spent a year in 'Aksharam' HQ of Sanskrit Bharati located at Bengaluru, Veda Vijnana Gurukulam, Channenahalli and Aurobindo Ashram in Pondicherry to learn Samskrtam and Vedanta. The excerpts:

Sanskrit stands out above all other languages for its beauty, precision in pronunciation and reliability as well as thoroughness in every aspect of its structure.

This is why it has never fundamentally changed unlike all other languages. It has had no need to change being the perfect language of Mankind.

Although India has been its custodian, Sanskrit has had universal appeal for centuries.

The wisdom carried by this language appeals to the west as we can see from Yoga and Ayurvedic medicine as well as meditation techniques and practical philosophies like Buddhism. It supports, expands and enlightens rather than conflicts with local traditions and religions. .

The precision of Sanskrit stems from the unparalleled detail on how the actual sounds of the alphabet are structured and defined. The sounds have a particular place in the mouth, nose and throat that can be defined and never change. That is why the Sanskrit letters are called indestructibles (aksharams) Sanskrit is the only language that has consciously laid out its words from first principles.

APPENDIX 5 TEN TYPES OF GAYATRĪ NYĀSA

Antarmāṭṛka nyāsa

Bahirmāṭṛka nyāsa

Pranāvādi nyāsa

Aṅguliparvagato Gāyatrīvarṇa nyāsa

Gāyatrīpādanyāsa

Gāyatrī akshara nyāsa

Vaiṣṇava tatvātma varṇa nyāsa

Śiva tatvātma varṇa nyāsa

Gāyatrī siro nyāsa

Caturtha pāda sahita Gāyatrī nyāsa

APPENDIX 6 ṢODAŚA NYĀSA

SI Number	Name of nyāsa	Number in category
1	Pranava	3
2	Vyāhṛti	3
3	Akṣara	50
4	Nakṣatra	27
5	Graha	11*
6	Kāla	28
7	Varṇa	4
8	Toya	5
9	Nigama (Veda and vedāṅga)	21
10	Devatā	29
11	Vairāja	11
12	Kratu	32
13	Guṇa	3
14	Mūrti	10
15	Śakti	8
16	Loka	14

- **Dhruva and Saptarṣi are combined with nine Grahas.**

APPENDIX 7 Graha in nyāsa (Item 5 in APPENDIX 6)

Name of Graha	Part of the body for nyāsa
Sūrya	Right eye
Candra	Left eye
Aṅgāraka	Thighs
Budha	Back of the head
Guru	Mouth
Śukra	11 Indriyas (Karmendriyas 5 Jñanendriyas 5 and manas)
Śani	Forehead
Rāhu	Legs
Ketu	Hair
Dhruva	Navel
Saptarṣi	Neck

For a detailed description of the sixteen nyasas given in Annexure 7 and Dhruva nyasa given in Annexure 8, reference may be made to Azhisur T Srinivasachariar's book titled 'Sri Padmatantra prayoga darsah', Chennai, 2006.

APPENDIX 8 Mahanyasa and Laghunyasa

Mahanyasa comprises eight sub-sets, viz., Pancanga rudra nyasa, Pancamukha nyasa, Kesadi padanta nyasa, Dasanga nyasa, Pancanga nyasa, Hamsa Gayatri nyasa and dik samputa nyasa. Interspersed are the Rudram (11 recitations), Camakam and Purusha suktam.

Mahanyasam is led by a priest and joined by large number of Vedic scholars. In terms of time, Mahanyasa takes over one hour. Mahanyasa is done before Ekadasa Rudra Abhishekam.

Laghunyasa consists of nyasa mantras from Yajur veda Taittiriya Aranyaka Kataka Prasna – Pratamanuvaka Pancati 16-22 and Prana pratishta with the three bijaksharas Aam, Hrim and Krom as the main components.

For a detailed description reference may be made to ‘Sri Mahanyasam’ (in Tamil) published by Giri Trading Agency, Chennai, 2006.

APPENDIX 9 Vedic Pramana for Nyasa

Purusha Suktam (Rk Veda 10.9) is the pramana for Nyasa in Veda. Purusha Suktam consists of 64 Rks. They are grouped in sixteen sets of four Rks each. Each set is assigned to one part of the body. Narayana is the Rsi, first 15 sets of mantras follow Anushtup chhandas, the last is in Trishtup Chhandas. Purusha is the Devata.

Rks	Part of the body
1 – 4	Left hand
5 – 8	Right hand
9 – 12	Left leg
13 – 16	Right leg
17 – 20	Left thigh
21 – 24	Right thigh
25 – 28	Left waist
29 – 32	Right waist
33 – 36	Navel
37 – 40	Heart
41 – 44	Neck
45 – 48	Left shoulder
49 – 52	Right shoulder
53 – 56	Mouth
57 – 60	Eyes
61 - 64	Head

The Section, 2.2.13 ‘Vedic pramana for nyasa’ in the text may be referred for a concise meaning of Purusha Suktam. We are only quoting the Rk numbers serially in this table against the body parts for nyasa. For a detailed description reference can be made to Vasudeva Sarma’s book Anhikachandrika, Mumbai, 1916.

APPENDIX 10 Nyasa practice in sandyopasana

Sandyopasana is a nityakarma (a daily duty) ordained in agama sastra. It is a non-iconic worship of the divinity in Surya, done at sunrise, noon and sunset. Nyasa is a part and parcel of sandyopasana. Kesavadinyasa and the nyasa for Gayatri mantrajapa are described in the text. In this Annexure, the nyasa procedure for other mantras used commonly in morning sandyopasana is described briefly.

Mantra	Purpose	Rṣi(s)	Chandas	Devatā(s)
Prokṣaṇa	External purification	Sindhudvīpa	Anuṣṭup	Āpo
Praśna	Internal purification	Sūrya	Anuṣṭup	Agni
Punar prokṣaṇa	External purification	Vāmadeva	Anuṣṭup	Dadhikrava
Arghyapradhāna	Offering oblation to Sūrya	Viśvāmitra	Devīgāyatrī	Gāyatrī
Āsana mantra	Sitting posture for japam	Pṛthivyameruprṣṭa	Sutālam	Kūrmō
Prāṇāyāma *	Regulating breathing	Atri Bṛgu Kutsa Vaśiṣṭha Gautama Kaśyapa Aṅgīrasa	Gāyatrī Uṣṇik Anuṣṭup Bṛhati Paṅkti Triṣṭup Jagati	Agni Vāyu Arka Vāgiśa Varuṇa Indra Viśvedevaḥ
Gāyatrīāvāhana	Invoking Gāyatrī	Vāmadeva	Anuṣṭup	Gāyatrī
Gāyatrī upasthāna	Bidding adieu	Viśvāmitra	Bhirud Gāyatrī	Mitra

- **Seven Rsis, seven chhandas and seven devatas are associated with seven vyahrtis (upper worlds) Bhuh, Bhuvah, Suvah, Mahah, Janah, Tapah and Satyam**
- Prasana mantra and Upasthana mantra are different for noon and evening sandyopasana.**

APPENDIX 11 Keśavādinyāsa

Mantra	Finger(s)	Point of touch
Aum Keśavāya namaḥ	Right thumb	Right cheek
Aum Nārāyaṇāya namaḥ	Right thumb	Left cheek
Aum Mādhavāya namaḥ	Right ring finger	Right eye

Aum Govindāya namaḥ	Right ring finger	Left eye
Aum Viṣṇave namaḥ	Right forefinger	Right nostril
Aum Madhusūdanāya namaḥ	Right forefinger	Left nostril
Aum Trivikramāya namaḥ	Right little finger	Right ear
Aum Vāmanāya namaḥ	Right little finger	Left ear
Aum Śrīdharāya namaḥ	Right middle finger	Right shoulder
Aum Hṛṣīkeśaya namaḥ	Right middle finger	Left shoulder
Aum Padmanābhāya namaḥ	Right hand four fingers	Naval
Aum Damodarāya namaḥ	Right hand four fingers	Forehead

Note: Only the tip of the finger is to be used.

APPENDIX 12 Nyāsa for three Vyāhṛtis Bhūḥ, Bhuvah and Suvaḥ

Mantra	Variant 1	Variant 2
Aum Bhūḥ	Pādayoḥ	Pādayoḥ
	Taking the hands near the feet (Not touching)	
Aum Bhuvah	Dakṣiṇa bāhou	Hṛdhaye
	Touching right shoulder with right hand four fingers	Touching the heart with right hand four fingers
Aum Suvaḥ	Vāma bahou	Mastake
	Touching left shoulder with right hand four fingers	Touching the forehead with right hand four fingers

APPENDIX 13 GĀYATRĪĀKṢARA, NYĀSA AND MUDRA

GĀYATRĪĀKṢARA	NYĀSA*	MUDRA
Tat	Pādāṅguliparvabhyo namaḥ	Sumukham
Sa	Pādāṅgulibhyo namaḥ	Samputam
Vi	Jaṅghābhyām namaḥ	Vitatam
Tuh	Jānubhyām namaḥ	Vistṛtam
Va	Ūrubhyām namaḥ	Dvimukham
Re	Śiṣṇāya namaḥ	Trimukham
Ni	Vṛṣaṅbhyām namaḥ	Caturmukham
Yam	Kaṭyai namaḥ	Pañcamukham
Bhar	Nābhyai namaḥ	Ṣanmukham
Go	Udarāya namaḥ	Adhomukham
De	Stanāya namaḥ	Vyāpakāñjalim
Va	Urase namaḥ	Śakaṭam
Sya	Kaṅthāya namaḥ	Yamapāsam
Dhī	Dantebhyo namaḥ	Granthitam
Ma	Tālave namaḥ	Unmukhonmukham
Hi	Nāsikāyai namaḥ	Pralambam
Dhi	Netrābhyām namaḥ	Muṣṭikam
Yo	Bhrūbhyām namaḥ	Matsyam
Yo	Lalātāya namaḥ	Kūrmam
Na	Pūrvamukhāyai namaḥ	Varāhakam
Pra	Dakṣiṇa mukhāyai namaḥ	Simhākrāntam
Co	Paścima mukhāyai namaḥ	Mahakrāntam
Da	Uttara mukhāyai namaḥ	Mudgaram
Yāt	Mūrdhnyai namaḥ	Pallavam

- **The body part on which the matra is to be repositied.**

Note: Mudras are shown first and then the nyasa mantra is recited.

(The research scholar is indebted to Acarya Kesav Deo, New Delhi for introducing to the world of mudras for Gayatri mantra).

1.0 INFORMED CONSENT FORM: A SAMPLE COPY

S Bashyam

Research Scholar

SVYASA

29 July, 2012

Dear Vidyarthi

Veda Vijnana Gurukulam

Greetings to you for achieving high standards of excellence in your intellectual pursuits in Vedic studies.

I am doing research in Nyasa in SVYASA. This is a simple procedure as per agama sastras to be followed before every mantrajapam for example., Gayatri mantrajapam.

We will be doing experimental measurements to find out what happens when we do nyasa. We will explain the purpose, the methods and any adverse effect the procedure may have in detail before we begin the study. Acaryamahodaya Dr Ramachandra Bhat will give you the diksha for nyasamantra for Gayatri. Acarya sushrutha will help in setting up the measurement protocol.

I thank you for joining the measurement protocol. Your informed consent is needed before the measurement is done. Kindly sign the following letter for accepting to be a subject in the measurement protocol.

Yours sincerely

S Bashyam

I have been fully informed about the purpose and the method of measurement protocol and any adverse effect the procedure may have as a result of nyasa practice.

I am joining the study as a subject.

(ADITYAH SUTARAH)

2.0 INSTITUTIONAL ETHICAL COMMITTEE APPROVAL

**Dr H R Nagendra
Vice Chancellor
SVYASA**

20th July 2013

I hereby appoint a committee comprising the following officials of SVYASA to study the proposal of Sri Sarangapani Bashyam Ph D scholar to carry out measurements of the effect of doing the Nyasa procedure prior to Gayatri mantrajapa with the students of Veda Vijnana Gurukulam Channenahalli as subjects, with the approval of Dr Ramachandra Bhat Director, from all aspects of experimental design including informed consent of subjects and submit the committee's approval by 25th July, 2013

S/Sri

1

2

3

(H R Nagendra)

The proposal submitted by Sri Sarangapani Bashyam Ph D scholar for the experimental study of the effect of Nyasa prior to Gayatrimantrajapa has been examined and approved.

S/d ()

()

()

Dated: 25th July 2013

3.0 QUESTIONNAIRE(S).

No questionnaire was used in this study

4.0 LIST OF PUBLICATIONS FROM THIS DOCTORAL THESIS

1. 'Kesavadinyasa-Concept and practice' S Bashyam, Ramachandra Bhat and P Ramanujan 'Sevadih' Half yearly research Journal (Jan 2013-Jun 2014 consolidated volume) Sri Venkateswara Vedic University, Tirupati, A.P (ISSN 2229-4031)
2. 'Vyahrti nyasa-Concept and practice' S Bashyam and Ramachandra Bhat Accepted for publication in forthcoming issue of VISVABHARATHI Vol 111-(ISSN2277-2065) of Pondicherry University-Department of Sanskrit

3. 'Nyasa-scientific study' S Bashyam, T.M. Srinivasan and H. R. Nagendra –*Yoga Mimamsa* 2015, 46, pp 15-21

4. 'Nyasa – A Metaphysical Bridge between Macrocosm and Microcosm' S Bashyam, T M Srinivasan, GuruDeo and H R Nagendra in *International Research Journal of India* Vol II, Issue IX, May 2017 pp 1-7

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LIST OF PLATES

No plates are included in thesis.
