

for

SPIRITUAL SEEKERS

R (Chandra) Chandrasekhar



DISCLAIMER

This book is published in the belief that it will help those who read and follow it to gain at least a nodding acquaintance with both Saṃskṛta and Sanātana Dharma.

This book has a companion website where additional material, as well as external web links, are provided.

Links to external websites are given both in this book and its companion website because—at the time of lookup—those websites contained material that could potentially benefit students. The content and opinion expressed in the linked external websites are not necessarily endorsed in consequence.

Copyright © R (Chandra) Chandrasekhar, 2005–2023. All rights reserved.

Please email corrections and other feedback to: feedback.sssbook@gmail.com

Version 1.2, April 2023.

Soft copy generated in April 2023.

Preface

Sanskrit for Spiritual Seekers is both a course of study and a hyperlinked text, designed specifically for those who seek a deeper understanding of the spirituality of Hinduism, through a study of the Sanskrit language.¹

This book is broad-based, to cater to a variety of reader-needs. You might be seeking a clearer understanding of the various Sanskrit prayers that you recite daily as part of your spiritual practice. Or, if you are in a quest to unlock India's distinctive culture and spirituality, Sanskrit might be your ideal master key. Or you might be keen to explore and experience the power encapsulated in Sanskrit mantras. Each of you will find something of interest in this book.

There are no pre-requisites for this course, except interest and persistence.

I have tried to make the course fun and easy, so that it will evoke your natural sense of enquiry and wonder. There will be no formal assignments, assessments, or examinations, but I have thrown in some teasers and quizzes in the text for you to tackle, if you are so inclined. The greater your effort, the greater your gain.

This book is meant to be read in the sequence of its chapters. Skim through a chapter, if need be, but do not skip it.

The text is principally in English and romanized Sanskrit—also known as IAST—about which more will be said later. It is not necessary for you to learn the Devanāgarī (देवनागरी) script, but it will be covered as we make our way through the course.²

Sanskrit words written in IAST transliteration are, by and large, displayed in sans serif font to allow readers to easily distinguish them from the English text written in a serif font. When occasion demands, proper nouns will be capitalized to accord with English usage, even though Sanskrit does not feature uppercase letters.

Sanskrit has a vast literature, covering subjects like medicine, astronomy, poetry, logic, philosophy, mathematics, spirituality, mythology, etc. Because we are oriented toward the spiritual aspects of Sanskrit, the emphasis here is on the *oral* nature of the language, with particular attention to proper pronunciation. We will also attempt to understand different applicable meanings for the same prayer. This will highlight the plur-

¹ The proper term for Hinduism is Sanātana Dharma or the "Eternal Dharma". Likewise, Sanskrit is called Saṃskṛtam. The anglicized versions are used here merely to assist the unfamiliar reader.

² Sanskrit does not have a unique written script, although the Devanāgarī letters are the most commonly used. The scripts of different regional languages of India have been and are being used, with varying degrees of phonetic fidelity, to express Sanskrit in written form.

ality inherent in Indian spirituality. You will then enjoy the deep satisfaction of chanting the prayers or mantras correctly, bearing in heart and mind the meaning most applicable to you.

The text is fully hyperlinked. You are encouraged to click on the links and browse the relevant web pages for further information and knowledge. The companion website for this book is at https://swanlotus.netlify.app/sss.html. It contains much ancillary material that will round out the richness of Sanskrit. Access to media-rich websites will allow you to better master the oral nature of sacred chants. Those who learn better by hearing and seeing, rather than by reading, will also be thus benefited.

One disclaimer before I move on. I am no Sanskrit expert. Nor do I lay claim to a deep knowledge of Hinduism, spirituality, or to any of the specialized fields touched upon here, like phonetics, computer science, etc. I am simply one who chanced upon Sanskrit, and was charmed by what I encountered, and who now wishes to share some of the riches I found.

This course is more a leisurely stroll through the garden of Sanskrit, rather than a rigidly scheduled journey where you risk missing the boat if you are tardy. There will be ample time for wandering around and smelling the roses and lotuses, and anything else that captures your interest.

The tone of the course is informal and relaxed. Feel free to communicate with me at any time, to ask a question, correct an error, or seek some clarification. If an idea is not clear the first time, do not despair. I will return periodically to concepts that need reinforcement, until they become clear through repeated exposure.

As I said before, the pace of the course is unhurried. Just as a picture that is blurred may be focused gradually until it becomes sharp and clear, so too will the Sanskrit language become clearer with time and effort. The only two characteristics you should bring to this study are *interest* and *persistence*.

Even if you have been discouraged in the past from studying Sanskrit for any number of reasons, cast aside past fears and discouragement, sit back, relax, and enjoy the ride! Something wondrous awaits you as you tune in to the soul of Sanskrit!

R CHANDRASEKHAR COIMBATORE, INDIA APRIL 2023

Contents

| Pr | eface | | iii |
|----|-------|---|-----|
| Ι | San | skrit as a Language and a Discipline | 1 |
| 1 | Intr | oduction to the Sanskrit Language | 2 |
| | 1.1 | Introduction | 2 |
| | 1.2 | Sanskrit: Facts and Figures | 3 |
| | | 1.2.1 Indo-European Language | 3 |
| | | 1.2.2 Characteristics: syllabic, euphonious, inflected, logical | 4 |
| | 1.3 | Pāṇini and his grammar | 4 |
| | 1.4 | Literature | 5 |
| | 1.5 | Veda | 5 |
| | 1.6 | Vedāṅga | 5 |
| | 1.7 | Purāṇa | 6 |
| | 1.8 | Itihāsa | 6 |
| | 1.9 | The Rāmāyaṇa | 6 |
| | | 1.9.1 The Ādiyta Hṛdayam | 6 |
| | 1.10 | The Mahābhārata | 8 |
| | | 1.10.1 The Bhagavad Gītā | 8 |
| | 1.11 | The Yogavāsiṣṭha | 8 |
| | | 1.11.1 The Story of King Lavaṇa | 9 |
| | 1.12 | The Harivaṃśa | 10 |
| | 1.13 | Ṣaḍ Darśana | 10 |
| | | 1.13.1 Sacred text: Muṇḍakopaniṣad | 10 |
| | 1.14 | The Pañca Bhutās or Five Elements | 12 |
| | | 1.14.1 Speech as Fire-born | 13 |
| | 1.15 | Prayer to Lord Hayagrīva | 13 |
| | 1.16 | Peace Chant: Saha Nāvavatu | 13 |
| | 1.17 | Books and online Resources | 14 |
| | 1.18 | Quiz and Teaser | 15 |
| | 1.19 | Closing Prayer | 16 |

CONTENTS

| 2 | The | Science of Sound | 18 |
|----|------|---|----|
| | 2.1 | Sound, Hearing, and Speech | 18 |
| | 2.2 | Importance | 18 |
| | 2.3 | Physics | 19 |
| | 2.4 | Metaphysics | 19 |
| | 2.5 | The Human Voice: Music and Speech | 20 |
| | 2.6 | Sound and Meaning | 21 |
| | 2.7 | The Four Stages of Manifestation of Sound | 21 |
| | 2.8 | Akṣara and Varṇa | 23 |
| | 2.9 | Varņamālā | 23 |
| | 2.10 | Mantra and Devata | 24 |
| | 2.11 | ОМ | 24 |
| | 2.12 | Bījākṣaras for the five elements | 25 |
| | 2.13 | Review | 26 |
| | 2.14 | To Explore Further | 26 |
| | 2.15 | Prayer | 27 |
| | | | |
| II | Spe | ecific Scriptures | 30 |

List of Figures

| 2.1 | Sound waveforms and frequencies | 19 |
|-----|---|----|
| 2.2 | The four stages of sound, their bodily seats, and major attributes | 22 |
| 2.3 | By tracing sound back to its source, man may find his way back to God | 26 |

List of Tables

| 1.1 | The six Vedāṅgās and their fields of enquiry | 5 |
|-----|---|----|
| 1.2 | The six systems of Hindu philosophy or Ṣaḍ Darśanās, their founders, and | |
| | their fields of enquiry. Note darśana → viewpoint | 10 |
| 1.3 | The five elements and their correspondence with the five modes of percep- | |
| | tion and five modes of action | 12 |
| 2.1 | The four stages of sound | 22 |
| | The bījākṣaras corresponding to each of the five elements | |

List of Words

| 1.1 | The root $\sqrt{\text{vid}}$ | | | | | | | 11 |
|-----|--|--|--|--|--|--|--|----|
| 2.1 | Prefixes for negation: a or an | | | | | | | 20 |
| 2.2 | The compound consonant kṣa denotes impermanence. | | | | | | | 23 |

List of Commentaries

| 1.1 | Saha Nāvavatu: | Why pra | ıy "May v | e not hate ea | ach other"? | | 15 |
|-----|----------------|---------|-----------|---------------|-------------|--|----|
|-----|----------------|---------|-----------|---------------|-------------|--|----|

Part I

Sanskrit as a Language and a Discipline

Chapter 1

Introduction to the Sanskrit Language

tasya vācakaḥ praṇavaḥ His word is praṇavaḥ (written OM or ॐ).

Yoga Sūtra of Patañjali 1:27

In the beginning was the Word, and the Word was with God, and the Word was God.

NEW TESTAMENT, JOHN 1:1

1.1 Introduction

Sanskrit, or Saṃskṛtam, is the ancient, sacred language of India. It means "completely done" or "well done". The knowledge and wisdom of the Vedas—embodied in the way of life known as Sanātana Dharma—was primarily transmitted orally. The desire to preserve the Vedas, without distortion or error, led to a profound enquiry into the human voice, the origin and production of sound, of vibration, duration, grammar, metre, pitch, phonetics, recitation, memorization, language, etymology, etc.

Sanskrit was originally developed to be the vehicle used to preserve the knowledge and wisdom of the Vedas.

Because this wisdom was so precious, the vehicle had to be excellent as well. In time, the ancient Vedic language evolved into the polished classical Sanskrit that is now used in daily prayers. The ṛṣis, or seers, responsible for this, were justifiably proud of their achievement, and christened the result "well done".

This fascination with the sound produced by the human voice led to the profound investigation of the process of articulation, and, ultimately, to mantra śāstra, or the science of vibration through incantation, which saw unparalleled development in ancient India.

1.2 Sanskrit: Facts and Figures

1.2.1 Indo-European Language

Sanskrit belongs to the unique triad of the world's three oldest languages—Tamil, Sanskrit, and Greek—each of which can boast of a fully developed grammar. Tamil is the world's oldest language, and one that is still in everyday use today. Sanskrit is the second oldest, and the eldest sister of all Indo-European languages, of which Greek, Latin, German, French, and English are members. Therefore, learning Sanskrit will aid in better understanding other Indo-European languages, especially how words are derived from *roots*. This relationship between words and roots will claim our attention throughout this course, and is essential to a good working knowledge of Sanskrit, especially for understanding the meanings of commonly recited prayers.

At this point, it is worth quoting what the eminent lexicographer, Sir Monier Monier-Williams, late Boden Professor of Sanskrit at Oxford University, has said of this subject:

...the Hindus are perhaps the only nation, except for the Greeks, who have investigated, independently and in a truly scientific manner, the general laws which govern the evolution of language.

The synthetical process which comes into operation in the working of those laws may well be called the saṃskaraṇa, 'putting together', by which I mean that every word in the highest type of language (called saṃskṛta) is first evolved out of a primary dhātu—a Sanskrit term usually translated by 'Root', but applicable to any primordial constituent substance, whether of words, or rocks, or living organisms—and then, being so evolved, goes through a process of 'putting together' by the combination of other elementary constituents.

Furthermore, the process of 'putting together' implies, of course, the possibility of a converse process of vyākaraṇa, by which I mean 'undoing' or 'decomposition'; that is to say, the resolution of every root-evolved word into its component elements. So that in endeavouring to exhibit these processes of *synthesis* and *analysis*, we appear to be engaged, like a chemist, in combining elementary substances into solid forms, and again resolving these forms into their constituent ingredients.¹ [1, p. xii]

The above quotation perfectly encapsulates what we hope to achieve in this study of Sanskrit: we are engaged in a game of decomposing words into their roots to get at their meaning, using a magnificent set of rules, so that there is a sense of triumph at the end, once the meaning has been deciphered. If there are several meanings, all equally grammatical, the subject may be enriched by this plurality of viewpoints, which should lead to lively discussion and debate. This is one reason why commentaries abound in

¹ The *emphasis* is mine. Today, not only is the chemist engaged in this analysis-synthesis; so are those involved in electronic signal processing and communications, genetic engineering, and many other contemporary fields of knowledge.

the literature of Sanskrit. Different thinkers present their own *viewpoints* on the text, consistent with grammar and logic.

1.2.2 Characteristics: syllabic, euphonious, inflected, logical

Sanskrit is a *syllabic language*² in which a single syllable is a single letter, assigned a single character in the written form of the language. The script is called Devanāgarī, meaning "of the city of the gods or devās", implying that it is the language of the devās.³ As already noted, Sanskrit has a strong oral tradition and many characteristics of the language derive from this. There is no upper case in the devanāgarī script; so all romanized Sanskrit words are shown in lower case only, although in the interests of textual harmony, exceptions are made in this book to accord with the English practice of capitalizing proper names.

Each syllable in Sanskrit has an unambiguous pronunciation. For purposes for eu-phony Sanskrit has sandhi rules that govern how two sounds should coalesce when they are juxtaposed. We will cover sandhi in detail later on.⁴

Each syllable in Sanskrit is also classified into a normal or long syllable depending on the *duration* of the intonation. The old Vedic language also had a *pitch*, or change of tone, which is absent from classical Sanskrit, but which may be heard even today when priests schooled in the vedās recite hymns. This oral tradition has survived intact for almost five millennia and is testament to the vitality of mind over matter.

Sanskrit is an inflected language in which nouns and adjectives are *declined* and verbs are *conjugated*. It has *three* numbers: singular, *dual*, and plural. Although the details of Sanskrit grammar are demanding and will not detain us any more than is strictly necessary, some familiarity with recurring phrases and forms will assist us in understanding prayers better.

1.3 Pāṇini and his grammar

Sanskrit has a clear and concise grammar compiled by the illustrious grammarian $P\bar{a}nini$ who states that he has drawn upon the work of 64^5 predecessors. Another famous ancient grammarian was Patañjali although it is unclear whether he is the same person who codified the Yoga Darśana.

The grammar of Pāṇini is called the Aṣṭādhyāyī, or the "eight chaptered" and consists of 3,959 sūtrās, or threads. Because of the oral tradition that relied on memorization, his grammar is very terse and may easily be printed on 48 A4-sized pages today. The

² As are all Indic languages, in fact.

³ The word deva literally means a luminous or radiant being who exists in a subtler dimension of existence. The proper masculine, nominative plural of deva is devāḥ, here written as devās, using the English s as a plural suffix, simply out of convenience. As we progress, such ungrammatical hybrid usages should gradually decline.

⁴ In English, the absence of rigid sandhi rules makes the pronunciation of the similarly spelled *bough* and *cough* sound worlds apart.

⁵ A favourite number of the Hindus: witness the 64 arts and the chessboard.

⁶ He is in effect stating that his work is more of a description than a prescription.

Aṣṭādhyāyī has been called "...one of the greatest achievements of any ancient civilization ...[and]...the most detailed and scientific grammar composed before the nineteenth century in any part of the world." [2, p 11]

1.4 Literature

Sanskrit has a copious literature—in excess of 160,000 major works, many of which deal with other than strictly spiritual subjects [3]. The major classes of Vedic and related spiritual literature in Sanskrit are considered briefly below.

1.5 Veda

The Vedās are four our in number: Rgveda, Yajurveda, Sāmaveda, and Atharvaveda. The Vedās are *revealed*—*seen or heard*—*scriptures*. Swami Sivananda has written [4, pp 13–14]:

The Vedās are the eternal truths revealed by God to the great ancient ṛṣis of India. The word ṛṣi means a seer from dṛś, *to see*. He is the mantra draṣṭa, a seer of mantra or thought. The thought was not his own. The ṛṣis *saw* the truths or *heard* them. Therefore, Vedās are what are heard (śruti). The ṛṣi did not write. He did not create it out of his mind. He was the seer of thought which existed already. He was only the spiritual discoverer of the thought. He is not the inventor of the Veda.

For more details on the Vedās and of Hinduism in general, I very strongly recommend Swami Sivananda's authoritative treatise, *All About Hinduism* [4]. Online versions of this book are available as free downloads in HTML [5], in PDF [6], and in epub [7] formats.

1.6 Vedānga

The word Vedānga means "limb(s) of the vedās". The Vedāngās are six fields of specialized studies, considered important enough to be conjoined with the vedās. They are tabulated in Table 1.1.

| VEDĀNGA | FIELD |
|-----------|-------------------------|
| Śikṣa | Phonetics |
| Candas | Rhythm and Metre |
| Nirukta | Etymology |
| Vyākaraņa | Grammar |
| Jyotiṣa | Astronomy and Astrology |
| Kalpa | Ritual Practices |

TABLE 1.1: The six Vedāngās and their fields of enquiry.

A comprehension of Nirukta and Vyākaraṇa serve the purpose of jñāna (wisdom) while Śikṣa and Candas subserve bhakti (devotion) and Jyotiṣa and Kalpa are harnessed for karma (rightly performed action).

1.7 Purāņa

The major purāṇās number eighteen, as do the minor purāṇās. They were all compiled by the great polymath-ṛṣi Vyāsa, called Kṛṣṇa-Dvaipāyana, for this age. The purāṇas literally mean "belonging to the olden time" and deal with cosmogony, divine genealogy, right conduct, action and reaction, etc. They have been designed to have mass appeal and to make philosophy accessible to the general public.

The Śrī Lalitā Triśati (three hundred [names] of She who sports) stotra occurs in the Mārkaṇḍeya Purāṇa. Interestingly, Mārkaṇḍeya is the great ṛṣi who, though destined to die young, sought refuge in Lord Śiva and recited the Mahā Mṛtyuñjaya mantra (great victory over death mantra) and become a cirañjīvi, literally "long-lived" or "immortal". This is an interesting link between two very profound and powerful prayers.

The Mahā Mṛtyuñjaya mantra is regularly recited toward the end of the Śrī Rudram, which occurs in the Yajurveda.

The life of Bhagavān Kṛṣṇa is recounted in the Bhāgavata Purāṇa, also called the Śrimad Bhāgavatam.

1.8 Itihāsa

There are four itihāsās: the Rāmāyaṇa, the Mahābhārata, the Yogavāsiṣṭha, and the Harivaṃśa. The word itihāsa literally means "thus it happened", or "so it was".

1.9 The Rāmāyaṇa

The Rāmāyaṇa means "Rāma's path" or "Rāma's way", and consists of 24,000 verses in seven books, written by Vālmīki who is known as ādi kavi or "first poet" in Sanskrit. Legend goes that he saw a cruel hunter killing one of two birds that were engaged in amorous play on a tree branch. The grief of the surviving bird for its lost mate moved him so much that he composed his first poem in a metre that was henceforth known as a śloka, denoting its origin in grief, or śoka. It is also noteworthy that the Rāmāyaṇa is mostly a chronicle of separation and its attendant grief.

1.9.1 The Ādiyta Hṛdayam

There is a tradition in Sanātana Dharma to extract a portion of a larger work and use it as a daily prayer or spiritual practice for a specific purpose. The Ādiyta Hṛdayam → "Heart

⁷ This hymn may also be considered a mantra, with occult significance, known to those who recite it.

of the Sun" is one such portion of the Rāmāyaṇa extracted from it, and used as a daily prayer by devotees. It is a dialogue between the sage Agastya and Lord Śrī Rāmacandra, the hero of the Rāmāyaṇa.

Agastya Maharṣi gives Rāma a pep talk, as he retires in the evening, dispirited after yet another day in battle with Rāvaṇa, but without victory. Rāma is beset not only with fatigue, but his confidence in his ability to vanquish Rāvaṇa has also been dented. The Ādiyta Hṛdayam is therefore prescribed as an antidote to fear and loss of self-confidence, leading to the attainment of all-round success.

This is a popular hymn that is recited by many and translations in English and Indian languages abound. The word-meanings and translations that are available online at the Brain-Snacks [8] and ReSanskrit [9] websites should suffice for starters.

Digression 1: Science in the Ādiyta Hrdayam

The amount of science that finds mention in the Ādiyta Hṛdayam is remarkable. In verse 11 of the Ādiyta Hṛdayam, Sūrya, the Sun, is personified as having *seven* horses pulling his chariot, as he traverses the sky. The number seven could denote the seven days of the week or the seven colours of the spectrum. In addition, the horses are described as:

haridaśvaḥ = harit + aśvaḥ where harit → "yellow, tawny, or green" and aśvaḥ → "horse".

Let us take the word harit to mean "yellow" or "green". Because the Sun appears golden yellow, it is sensible that his horses appear yellow. But, why would the sun have green horses? One could ignorantly cock a snoot at this grotesque horse colour. But a little analysis will reveal that chlorophyll, the catalyst for photosynthesis, is colored green, and it helps convert the ultraviolet solar rays into carbohydrate. Then, the metaphor of green horses for chlorophyll becomes logical and founded in science. Just as the horse is a pulling force, the catalyst chlorophyll is a pulling force to convert radiant solar energy to chemical form while itself remaining unchanged.^b

Verse 22, in its second line, talks about the water-cycle:

nāśayatyeṣa vai bhūtaṃ tadeva sṛjati prabhuḥ I pāyatyeṣa tapatyeṣa varṣatyeṣa gabhastibhiḥ II 22 II

It refers to the Sun as drinking water, heating it, and showering it again as rain, all by its darting rays. This may be primary school science now, but it must have been a revelation millennia ago.

```
    <sup>a</sup> haridaśvaḥ sahasrārchiḥ saptasaptirmarīcimān ।
    timironmathanaḥ śambhustvaṣṭā mārtāṇḍa aṃshumān । 11 11
```

It is mind boggling to think that there were travelling minstrels and bards in India, in bygone ages, who could recite the entire Rāmāyaṇa from memory. The oral tradition of Sanskrit must therefore have embodied methods for training the mind to memorize. It is interesting to speculate whether there were error-correcting codes in the Sanskrit works themselves that could lead to an error being detected, and possibly corrected, as happens in modern electronic communications.

^b Sri Swami Shantanand Saraswati first made me aware of this scientific interpretation.

1.10 The Mahābhārata

The Mahābhārata or "great epic of the Bharata dynasty" has 100,000 verses in its current form and was dictated by none other than Vyāsa to Gaṇapati, who is reputed to have broken off one of his tusks to serve as a writing tool in order to function as a scribe. The Mahābhārata is so massive a compilation of human wisdom that it has been said that what is not in the Mahābhārata cannot be found anywhere else. Since human nature, conduct, and affairs have changed little over the centuries, this statement is very plausible.

1.10.1 The Bhagavad Gītā

One of the most-quoted of the Hindu scriptures, the Bhagavad Gītā or "Lord's Song" occurs in the Mahābhārata and consists of the advice Bhagavān Kṛṣṇa gives to Arjuna on the battlefield of Kurukṣetra on how to live life. Because it consists of 700 verses, the Bhagavad Gītā is also called the Saptaśati or "seven-hundred [verses]".

1.11 The Yogavāsiṣṭha

The Yogavāsiṣṭha Mahā Rāmāyaṇa—to give its full name—is principally a treatise on the path of wisdom, or jnāna, even if it contains the word yoga in its title [10]. But instead of introducing philosophy through difficult-to-grasp abstractions, it has chosen to convey the same knowledge through delightfully varied stories—expressed through rich poetic imagery—that may be enjoyed by everyone, from wide-eyed children to wisdom-eyed renunciant-ascetics.

This magnificent treatise is attributed to Maharṣi Vālmīki, the famed author of the Rāmāyaṇa. It is a dialogue between the sage Vasiṣṭha and his royal pupil, Śrī Rāmacandra, the hero of the Rāmāyaṇa, on the nature of reality, creation, bondage, and liberation, among other subjects.

The Yogavāsiṣṭha consists of 32,000 verses comprising 64,000 lines; it is therefore also called the Bṛhat Yogavāsiṣṭha where bṛhat \rightarrow "big".⁸

A more recent work, called Laghu Yogavāsiṣṭha, written by a Kashmiri scholar called Abhinanda Paṇḍita strives to summarize the massive Bṛhat Yogavāsiṣṭha into a more manageable 6,000 verses [11]. This summary has again been condensed into a more concise work called Yoga Vāsiṣṭha Sāra, or *Essence of Yoga Vāsiṣṭha*, an English translation of which is now available [12]. There are two verses from the latter text that I find particularly illuminating:

Association with the wise, abandonment of latent impressions, self-enquiry, control of breathing—these are the means of conquering the mind.—*Yoga Vasishta Sara: The*

⁸ One remarkable characteristic of the Yogavāsiṣṭha is that despite its hoary origin, it clearly states that our so-called "waking existence" is naught but a "dream", which once dissolved, will catapult us into experiencing "reality" directly. This is the goal of all spiritual effort. Compare this deep idea with that behind the 1999 movie *The Matrix*, in which our waking experiences are postulated to be based on an elaborate deception—a simulated reality.

⁹ laghu → "little"

Essence Of Yoga Vasishta, 4:21. [12]

If one meditates on that state which comes at the end of the waking state and the beginning of sleep, he will directly experience undecaying bliss.—*Yoga Vasishta Sara: The Essence Of Yoga Vasishta*, 10:10. [12]

These are two eminently practical verses that succinctly state what should be *done* by the seeker of liberation. If these two verses are the seeker's only takeaway from the Yogavāsiṣṭha, she/he will be enriched immeasurably by their practice.

Since we are interested in *Sanskrit* as it pertains to spiritual seekers, it is important to identify sources of the *original* Sanskrit text, for those interested to probe further. The online availability of scanned documents, as well as searchable digitized documents, means that we are blessed with easy access to the Yogavāsiṣṭha in its original language and glory.

The Wisdom Library website [13] contains the *complete* Yogavāsiṣṭha with word-meaning, grammatical analysis, and English translation. It is a boon to the devoted student of Sanskrit. A compilation of the Sanskrit verses from this website into a single searchable digital document is also available [14]. Scanned versions of the original, with an 1891 translation, by Vihari Lalla Mitra, are also available online [15–17].

Of these, the dedicated website, https://yogavasishta.org/, merits special mention. The English translation of the Yogavāsiṣṭha is presented there as a searchable HTML text. Moreover, the stories may be searched and accessed separately: a valuable feature for such a large text. Even a cursory reading of the translation on this site will reflect the rich poetic imagery of the Sanskrit original. The interested student is exhorted to browse this site frequently.

1.11.1 The Story of King Lavana

I have found the story of a king called Lavaṇa to be a captivating examination of the nature of time, as perceived in the waking and dream states, told so entertainingly, that one could be excused for failing to discern the deep underlying philosophy about time being an illusion.

You may read the story of Lavaṇa online here. If you prefer to read a printed book, Lavaṇa's story has been recounted in English, faithfully and accessibly, by R K Narayan in his *Indian Epics Retold: The Ramayana, the Mahabharata, Gods, Demons and Others* [18]. If you are unacquainted with the itihāsas, Narayan's book will serve as an enjoyable and authoritative introduction to them.

EXPLORATION: Compare and contrast the Yogavāsiṣṭha and the Bhagavad Gītā

The Yogavāsiṣṭha and the Bhagavad Gītā are similar and yet different. Explore and list their similarities and differences; the more the better.

Why do you think these two scriptures have survived for millennia and command devoted study even to the present day? Again, the greater the depth of analysis, the better.

1.12 The Harivamśa

1.13 Şad Darsana

There are six orthodox systems of Hindu ,philosophy, called ṣaḍ darśanās literally "six viewpoints". Each of these systems has a founding compiler of the viewpoint and is composed of laconic aphorisms called sūtrās, literally "threads". The six systems are tabulated below:

| Darśana | Founder | FIELD |
|-----------|------------|----------------|
| Nyāya | Gautama | Logic |
| Vaiśeșika | Kaṇāda | Categorization |
| Sāṃkhya | Kapila | Creation |
| Yoga | Patañjali | Consciousness |
| Mīmāṃsa | Jaimini | Action |
| Vedānta | Bādarāyaṇa | Contemplation |

TABLE 1.2: The six systems of Hindu philosophy or Ṣaḍ Darśanās, their founders, and their fields of enquiry. Note darśana → viewpoint.

They are complementary but mutually supportive. For example, Sāṃkhya gives the theory, Yoga the practical methods, and Vedānta the experiential results that ensue when the discipline enjoined by these systems is followed. It is beyond the scope of this course to go any deeper into any of these systems, as their waters run deep.

Everything other than the Vedās and Vedāngās are called smṛti, meaning "what was remembered".

The key to Sanskrit vocabulary lies in familiarity with the roots or dhātus from which the vocabulary is elaborated. Every so often, we will look at specific roots or owrd-usages so that we gain a slow but increasingly familiar knowledge of the language. The first root we examine is vid in Vocabulary 1.1.

1.13.1 Sacred text: Mundakopanisad

In the sacred text, the Muṇḍakopaniṣad (1.1.4), we encounter an interesting questionand-answer dialogue on knowledge. We will translate only one verse here:

तस्मै स होवाच । द्वे विद्ये वेदितव्ये इति ह स्म ब्रह्मविदो वदन्ति पराचैवापर च ॥ १.१.४ ॥ tasmai sa hovāca। dve vidye veditavye iti ha sma brahmavido vadanti parā caivāparā ca ॥ 1.1.4 ॥

Vocabulary: The Root √vid

Sanskrit vocabulary is systematic and algorithmic. Knowing the *root* enables us to generate a whole corpus of words related to that root. We will examine roots of interest in a leisurely fashion as we progress through the course. The first root we will consider is vid.

The word veda comes from the root or dhātu $\sqrt{\text{vid}}$, "to know".^a vid is related to the English verb *wit* in the sense of *wittingly* or *unwittingly*. When we comprehend something, we say, "I see". In this sense, the Sanskrit root vid and the English word "video" are also related. Sanskrit words descended from this root include:

| SAMSKRTA | English |
|-----------------------|--|
| veda (m) ^b | true or sacred knowledge |
| vidyā (f) | knowledge |
| veditavya (mfn) | to be known |
| vedya (mfn) | to be known |
| viddhi (v) | know |
| vidu (mfn) | intelligent |
| vidura | wise ^c |
| vidvān (m) | knower |
| viduṣī (f) | knower |
| vedānta (m) | vedānta = veda + anta; end of the vedās; |
| | ādi → beginning; anta → end |
| avidyā (f) | ignorance; non-knowledge |

^a The square root sign $\sqrt{}$ is a stylized letter "r" and stands for the word "radix" or root.

Vocabulary 1.1: The Root $\sqrt{\text{vid}} \rightarrow \text{"to know"}$. The systematic process by which the vocabulary of Sanskrit is generated makes it easy for one who knows the rules to correctly produce unfamiliar words from known roots.

Two kinds of knowledge are to be known—so indeed the knowers of Brahman declare—the higher as well as the lower^a

The conjunction $ca \rightarrow$ "and". It usually occurs in the middle or even at the end of a verse or sentence. The word eva \rightarrow "verily, also, even", etc., and is used for emphasis. The word sma is classified as a *particle* and is usually inserted as a syllabic filler, often indicating a sense of the past, or the sense of "ever", and to satisfy metrical constraints. More about this later.

This simple analysis should give you a flavour for what I call the *algebra of Sanskrit*. It involves simple addition, subtraction, and sandhi rules. Once you are so equipped,

^b The letters in parentheses have the following expansions: (m): masculine; (f): feminine; (n): neuter, for nouns; (v): verb.

^c Also, a wise character in the Mahābhārata.

^a The Upaniṣad goes on to say that knowledge, even of the Vedās, is of the lower kind, which might be contrary to our expectations. For an interesting read, take a look at Swami Krishnananda's text, available in HTML [19] and PDF [20].

| Saṃskṛta | English |
|---------------------|--|
| tasmai | to him (Śaunaka, the student) |
| sa | he (the Ḥsī Āṅgiras, the teacher) said |
| hovāca | said |
| dve vidye veditavye | two kinds of knowledge are to be known |
| iti | thus |
| ha sma | indeed |
| brahmavido vadanti | the knowers of Brahman have said |
| parā caivāparā ca | parā caivāparā ca = parā + ca + eva + aparā + ca; the higher and also the lower |
| brahmavido vadanti | the knowers of Brahman have said parā caivāparā ca = parā + ca + eva + aparā + ca; the higher and |

you are can start developing your capability of *deciphering meanings by decomposition of texts*.

1.14 The Pañca Bhutās or Five Elements

Underlying all intellectual effort of the ancient Hindus was their quest to solve the master problem of life, solving which, all other questions were answered. In the process, they analyzed and classified creation with a thoroughness and rigour that modern researchers would envy. Fundamental to this analysis was the human focus: the observer was analyzed along with the observed creation. One outcome of this study was a revealing classification about speech and language.

Five *elements* or bhūtās were recognized by the ancient Hindus: earth, water, fire, air and ether, graded in order of increasing freedom and subtlety. All physical creation was seen as arising from these five elements. In the human body, five organs of sense perception, pañca jñānedriyās, and five organs of action, pañca karmendriyās, were classified as each originating from one of the five bhūtās. This is shown in Table 1.3.

| Element | Sense | Action |
|---------|-------------------------------|----------------------------------|
| Earth | Smell | Excretion |
| Water | Taste | Procreation |
| Fire | Sight | Speech |
| Air | Touch | Locomotion |
| Ether | Hearing | Manual dexterity |
| | Earth Water Fire Air | Water Taste Fire Sight Air Touch |

TABLE 1.3: The five elements and their correspondence with the five modes of perception and five modes of action.

¹⁰ Other ancient cultures like the Greeks and the Chinese also have similar classifications.

1.14.1 Speech as Fire-born

Speech and vision are *fire-born* according to this classification, and special emphasis was placed on seeing only good, and speaking only good, because of the destructive power of fire. It is noteworthy that the Tamil poet Tiruvalluvar in Tirukkural 129 has said

```
தீயினாற் சுட்டபுண் உள்ளாறும் ஆறாதே நாவினாற் சுட்ட வடு
tīyinā cuṭṭa puṇ uḷḷāum ārādē
nāvinār cutta vaḍu.
```

which means

A wound from fire will ultimately heal; But rarely does a wound caused by speech ever heal.

Interestingly, in English we have expressions like "he made a fiery speech that inflamed the passions of the audience", indicating an implicit recognition of the fiery origin of speech and sound. Likewise, a statement like "he gave me a withering look," seems to recognize that the sense of sight is also fire-born.

In the body, the fire element is associated with the manipura cakra in the lumbar spine, and the navel—associated with the solar plexus—on the front of the body. It was postulated that a properly intoned sound will appear to issue from the navel. While it may seem counter-intuitive, this assertion has withstood the test of time and of subjective experiential validation.

1.15 Prayer to Lord Hayagrīva

```
ज्ञाननदमयं देवं निर्मलस् स्फतिकाकृतिम् ।
आधारं सर्वविद्यानां हयग्रीवं उपास्महे ॥
jñānanda-mayaṃ devaṃ nirmalas sphaṭikākṛtim I
ādhāraṃ sarvavidyānāṃ hayagrīvaṃ upāsmahe ॥
```

We worship hayagrīva (Lord with the neck [and face] of a horse), who is the substratum of all knowledge, who is permeated with wisdom and bliss, and whose form is radiant like a flawless quartz crystal.

1.16 Peace Chant: Saha Nāvavatu

The Upaniṣads begin with śānti mantrās or "peace chants" which are recited at the beginning and the end of periods of study and contemplation. Some are common to more than one Upaniṣad while others are distinctive to a particular Upaniṣad.

| Saṃskṛta | English |
|----------|--------------------------------------|
| jñāna | wisdom |
| ānanda | bliss |
| mayam | permeated (with) |
| devam | radiant |
| nirmalaḥ | nis → without; malaḥ → flaw/taint |
| sphaṭika | quartz crystal |
| ākṛtim | form or body |
| ādhāram | foundation or substratum |
| sarva | all |
| vidyānām | of knowledge (plural) |
| haya | horse |
| grīvam | neck or face |
| upāsmahe | we worship; upa → near; asmahe → are |
| | |

```
ॐ॥
सह नाववतु सह नौभुनक्तु सहवीर्यं करवावहै ।
तेजस्वि नावधीतमस्तु मा विद्विषावहै ॥
ॐ शान्तिः शान्तिः शान्तिः ॥
```

ΟM

saha nāvavatu saha naubhunaktu sahavīryaṃ karavāvahai I tejasvi nāvadhītamastu mā vidviṣāvahai II OM śāntiḥ śāntiḥ II

OM!

May that [Brahman] protect us both (Teacher and Disciple);

May that [Brahman] nourish us both;

May we work in harmony with great vigour;

May our study be illuminating and fruitful;

May we not hate each other.

OM! Peace! Peace! Peace!

The word-by-word analysis of this text will be taken up later. This foray is simply to give you the taste of a short but real text from the Vedās. See Commentary 1.1 on "May we not hate each other."

1.17 Books and online Resources

The Sanskrit Documents web site provides many important Sanskrit works online. We will delve later in the course into the formats in which the documents at this site are provided.

COMMENTARY: Saha Nāvavatu: "May we not hate each other."

It is noteworthy that the ancients recognized that students can and do resent both the process of learning and the corrections emanating from their teachers. Human beings learn by making mistakes: there is no learning without errors. Given that we function as individual egos with personalities, it is also natural to resent our errors as well as those who correct us. This subtle psychology was recognised, and the prayer enshrines the preventive invocation, "May we not hate each other."

COMMENTARY 1.1: Saha Nāvavatu: Why pray "may we not hate each other"?

The book *The Wisdom of India* by the scholar Lin Yutang is once again in print and is available as an inexpensive paperback [21]. Anyone wishing to be educated in Indian culture and entertained at the same time will do well to read this book.

There are many books, in English and Indian languages, and online resources that are available to the keen student of Sanskrit. Many have been motivated by a desire to study the original spiritual teachings of India, rather than from a desire to learn a language or grammar for its own sake. This is similar to the aim of this course. These books and online web sites will be mentioned progressively in this course, as and when the need arises.

1.18 Quiz and Teaser

I intend the last section of each chapter to be an opportunity for you to reflect on what you have encountered in it, and also to extend—by your research and parallel reading—the ideas you have come across. At the very least it should be food for thought.

Have you ever wondered whether creatures have languages? Even if they cannot articulate sounds, and are constrained by their anatomy to the range of sounds they can make, could there be a repertoire of specific cries or calls that denote danger, fear, hunger, grief, joy, etc.? If you have encountered a flock of house sparrows taking their mid-morning "tea break", you will understand what I am getting at: a joyous outpouring of communal togetherness, as they rejoice and relax. Or have you heard a murder of crows grieving over the demise of a fellow member? Or been awakened by a parliament of owls hooting, and rending the midnight silence, as they feed and recycle Nature?

Humankind has been bequeathed a unique, programmable vocal apparatus that may be used to generate a vast range of sounds. Even more wondrous is the variety and character of languages that have evolved over time. From the crude sounds needed for the survival of the group, to the polished grammars of mature languages, the development and use of language seems to me to be one of the greatest achievements of the human species. What do you think? Can you imagine a world without language?

Each time you express a thought through the spoken or written word, spare a thought for the miracle of language that humankind is legatee to.

BIBLIOGRAPHY Closing Prayer

1.19 Closing Prayer

लोकाः समस्थाः सुखिनो भवन्तु । lokāḥ samasthāḥ sukhino bhavantu । May all the worlds be happy.

We will look at this and other prayers in greater detail and context as we progress through the course.

Bibliography

- [1] Monier Monier-Williams. *A Sanskrit-English Dictionary*. Reprint of original OUP 1899. New Delhi, India: Motilal Banarsidas, 1999. URL: https://www.sanskrit-lexicon.uni-koeln.de/scans/MWScan/2020/web/index.php.
- [2] Steven R Holtzman. *Digital Mantras: The Languages of Abstract and Virtual Worlds*. Cambridge, MA, USA: The MIT Press, 1995.
- [3] George L Hart. *A Rapid Sanskrit Method*. 5th ed. New Delhi, India: Motilal Banarsidass, 2000.
- [4] Swami Sivananda. *All About Hinduism*. 6th ed. Sivanandanagar, UP, India: The Divine Life Society, 1988.
- [5] Swami Sivananda. *All About Hinduism*. 1999. URL: https://www.dlshq.org/download/hinduismbk.htm, visited on 2022-11-22.
- [6] Swami Sivananda. *All About Hinduism*. 1999. URL: https://www.dlshq.org/download2/hinduismbk.pdf, visited on 2022-11-22.
- [7] Swami Sivananda. *All About Hinduism*. 1999. URL: https://www.dlshq.org/download2/hinduismbk.epub, visited on 2022-11-22.
- [8] Anand. *Aditya Hridayam Translations*. 2003-11-04. URL: http://brain-snacks.info/sanskrit/Aditya-Hridayam/ah.html, visited on 2023-04-25.
- [9] Sushant Ratnaparkhi. *Aditya Hrudayam Stotram Meaning Explained ReSanskrit*. Has a link to a seven minute recitation of Aditya Hrudayam at https://www.youtube.com/watch?v=F1KG1AlsQkk. 2018-10-25. URL: https://resanskrit.com/blogs/blog-post/aditya-hrudayam-stotram-explained, visited on 2023-04-25.
- [10] Swami Sivananda. *The Yoga Vasishtha The Divine Life Society*. 2021. URL: https://www.dlshq.org/religions/the-yoga-vasishtha/, visited on 2023-04-23.
- [11] Maharshi Valmiki and Abhinanda Pandita. *Laghu-Yoga-Vāsiṣṭha*. Trans. by K Narayanaswami Aiyer. Adyar Library and Research Centre, 2001.
- [12] Maharshi Valmiki and Abhinanda Pandita. *Yoga Vasishta Sara: The Essence Of Yoga Vasishta. An English Translation from the Sanskrit Original.* Trans. by Swami Sureshananda. Sri Ramanasramam, 2005.

BIBLIOGRAPHY Bibliography

[13] Maharshi Valmiki. *Yoga Vasistha [Sanskrit]*. Original Sanskrit with English Translation. Trans. by Vihari Lala Mitra. 2019-04-27. URL: https://www.wisdomlib.org/hinduism/book/yoga-vasistha-sanskrit, visited on 2023-04-22.

- [14] Maharshi Valmiki. *Yoga Vasistha complete text in digital format*. Ed. by Lokesh Sharma. 2022-06-06. URL: https://github.com/lokeshh/yv_text, visited on 2023-04-23.
- [15] Maharshi Valmiki. *Yoga Vasishtha Maharamayana*. Trans. by Vihari-Lala Mitra. Originally published 1891 in India. 2012-07-10. URL: https://archive.org/details/YogaVasishthaMaharamayana, visited on 2023-04-23.
- [16] Maharshi Valmiki. *Shri Yogavasishtha Ramayan*. Uploaded by Sant Shri Asharamji Bapu Ashram. 2017-07-04. URL: https://archive.org/details/ShriYogavasishthaRamayan/Shri-Yogavasishtha-1/, visited on 2023-04-23.
- [17] Maharshi Valmiki. *Home Yoga Vasishta.Org*. Read 32,000 Verses Of Yoga Vasishta Maha Ramayana Online... | Yoga Vasishta The Means Of Liberation. Ed. by Thomas L Palotas. Trans. by Vihari Lala Mitra. 2015-06-26. URL: https://yogavasishta.org/, visited on 2023-04-23.
- [18] R K Narayan. *Indian Epics Retold: The Ramayana, the Mahabharata, Gods, Demons and Others*. The Penguin Premium Classic Edition. Penguin Modern Classics, 2023.
- [19] Swami Krishnananda. *Commentary on the Mundaka Upanishad*. 2017. URL: https://www.swami-krishnananda.org/mundaka_0.html, visited on 2022-11-22.
- [20] Swami Krishnananda. *Commentary on the Mundaka Upanishad*. 2017. URL: https://www.swami-krishnananda.org/mundak/Mundaka_Upanishad.pdf, visited on 2022-11-22.
- [21] Lin Yutang, ed. *The Wisdom of India*. 9th ed. Mumbai, India: Jaico Publishing House, 2000.

Chapter 2

The Science of Sound

In the correct pronunciation of OM, the sound proceeds from the navel, with a deep and harmonious vibration, and gradually manifests itself by stages at the upper part of the nostrils where the anusvāra or the candrabindu is sounded.

SWAMI SIVANANDA: JAPA YOGA

2.1 Sound, Hearing, and Speech

2.2 Importance

Because the human voice not only produces music, but also serves to communicate with others via language, the principles underlying human speech have been investigated in India since ancient times. The power of sound from the human voice—whether speech or music—was harnessed for *spiritual* purposes, and was therefore studied very seriously indeed.

In our own day and age, the frequencies and durations of speech sounds, and their intelligibility, for example, are of vital interest to communication engineers. When a mobile telephone conversation takes place, the speech of one speaker is converted from sound to electricity. It is then chopped up using mathematics and transmitted as electronic signals. The same signals are then beamed, perhaps by satellite, to the other speaker's location, where the receiving mobile phone again uses mathematics to "unchop" or re-assemble the electronic signal, and then converts the electricity again into sound.

This whole process must take place in such a way that the "amount" of signal being transmitted is minimized, so that the maximum number of telephone conversations can take place over a given channel. It cannot introduce too much delay either. And all this must be done without compromising the intelligibility or clarity of the speech. So, the study of the human voice is still an area of active research, *only the purpose is now different*.

THE SCIENCE OF SOUND Physics

2.3 Physics

The human hearing apparatus is tuned to hear *audible sounds* that are produced by pressure waves in the air that vibrate between 20 times and 20,000 times every second. This rate of vibration is termed the *frequency* of the sound, and the term "times per second" or "cycles per second" is given the unit *hertz*¹ and is abbreviated Hz.

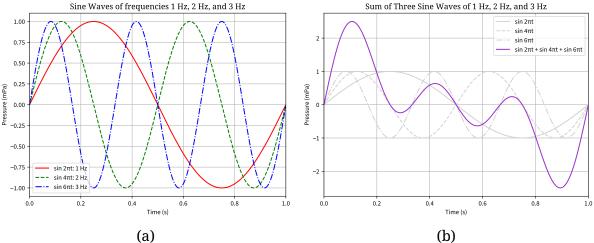


FIGURE 2.1: (a) Waveform of sine waves of frequencies 1, 2, and 3 Hz representing sound waves. The horizontal axis represents time in seconds while the vertical axis represents pressure in millipascals. The 1 Hz, 2 Hz, and 3Hz waves are inaudible. (b) The sum of these three waves results in this waveform, which does not look like the original sine waves. This is a demonstration of how arbitrary waveforms may, in principle, be synthesized from sine waves.

Any sound below 20 Hz is termed *infrasound* and anything above 20,000 Hz is called *ultrasound*, and the human ear hears neither. Animals on the other hand are sensitive to both the very low and very high frequencies, as well as the audible frequencies. Domestic animals like chickens have been known to detect the very low frequency waves that precede an earthquake, and dogs and horses have been trained to respond to ultrasound.

In order to be audible, not only should the frequency be in the desired range, so should the intensity of the sound. We can hear quiet whispers as well as the ear-shattering roars of jet planes: a range of intensities whose ratio is 10^{14} , i.e., the number one appended with 14 zeroes, which is a very large range indeed!

The normal range of frequencies produced by the human voice—as speech and music—lies between 200 and 8,000 Hz. Telephone systems, which have a "passband" of 300 Hz to 3,400 Hz, must deliver sounds in this band of frequencies without detectable distortion or noise across large distances if intelligent conversation is to take place.

2.4 Metaphysics

Long before the term *big bang* was invented, the seers of India had pondered creation. The primal throb, the original impulse or movement, the subtlest primordial vibration

¹ After the German physicist Heinrich Rudolf Hertz (1857–1894) who conducted pioneering experiments with radio waves.

that disturbed the equilibrium of the uncreated, leading to polarization and creation, they called spanda. The vibration that is perceived *after* creation, and *within* creation they called nāda. This highly technical term covers not only audible sound, produced when matter *strikes* matter, but also the subtle, non-physical sound called anāhata nāda, or the "unstruck sound," that Yogis intuitively "hear."

Vocabulary: Prefix for negation: a or an

In Sanskrit, a word is usually negated by prefixing "a" to it. If, however, the word begins with a vowel, the prefix for negation is "an". Compare this with the prefixes "a", "in", and "un" in the English words atypical, insensitive, and unimportant.

Both hata and āhata mean "struck," and the negation anāhata means "unstruck." It comes from the root $\sqrt{\text{han which means}}$ "to strike". The *root* or dhātu will be indicated in these notes by the square root sign, as shown above. This symbol is really a stylized letter "r" standing for the word *radix* or *root*. This is in accord with existing convention.

The Bahasa Malaysia word *hantam* with the sense of "wallop" comes from this root, as does the English word *hunter*.

The Lalitā Triśatī name sarva hantrī may be translated roughly as "huntress of all", signifying Devī as the destroyer of everything.

VOCABULARY 2.1: A word in Sanskrit is negated by prefixing it with a if it does not begin itself begin a; and with an if it does.

It is instructive at this point to quote from the scholar, Dr Judith Tyberg [1], who writes:

Every sound in Sanskrit is said to have two aspects, the more audible sound and the subtler essential sound element behind, vibrant with the meaning natural to it. This vibrant sense-sound within is the real śabda or fundamental sound, also called sphoṭa. The outward audible sound, its instrument of expression is called dhvani or the external sound, a quality of śabda. The sphoṭa arises in the indivisible, permanent Spirit, and is eternally luminous with power and when the dhvani or the spoken word, its vehicle, is perfectly sounded within and without, it stimulates this inner vibrant activity with the result that the power within responds and illuminates. "Itself luminous like a lamp, it illuminates others", thus the great poet-grammarian Bhartṛhari describes sphoṭa in his treatise Vākyapadīya.

In this metaphysical view, the non-physical aspects of sound have been classified with the same impartial objectivity that typifies physics; even if the quantitative aspect takes a back seat.

2.5 The Human Voice: Music and Speech

It has been speculated² that speech arose to replace gesticulation as a means of communication when man needed to communicate "with his hands full" with some task or

² Paget [2] quoted by Flanagan [3].

other. In time, this led to the "specialized pantomime of the tongue and lips" that we know today as speech [2].

It is interesting to ponder whether the human voice was used to make speech or music first. When I first heard the chants of the Sāma Veda, they seemed to me to be an expression of the joy that came with the discovery that the human voice could be tamed and taught to make pleasing sounds far beyond primitive grunts. It was, literally, music to my ears.³

Speech, on the other hand, requires the intermediation of language, before communication can be established. The relationship between thought, language, speech, and script is complex and, in latter-day languages, constantly evolving. It is more likely therefore, that the human voice was first used to make music rather than speech.

2.6 Sound and Meaning

"The grammarians of Sanskrit assigned meanings to *root sounds* based on what they perceived to be a natural correspondence between a sound, śabda, and its śakti, or the power inherent in it" [1]. It may seem far-fetched for Sanskrit to claim this uniqueness between sound and meaning, given the multiplicity of the world's languages. Rather than dismiss this claim outright, though, let us look at some further classification of sound from the sages of India.

2.7 The Four Stages of Manifestation of Sound

Swami Sivananda [4, p. xi] has explained that sound has four levels of manifestation:

- 1. para: The subtlest aspect of sound that is literally "beyond". It is the non-audible, generic basis of all sounds and has not undergone differentiation.
- 2. paśyanti: Sound that is "seen" by the mind. The vibration, still inaudible, has begun to be purposefully focused.
- 3. madhyama: Sound that resides in the heart, literally in the "middle" between the inaudible paśyanti state and the audible sound. This sound is also called anāhata, or unstruck, as explained above.
- 4. vaikharī: Audible sound produced by human speech.

 Each stage of sound has specific characteristics that are tabulated in Table 2.1.

It is also possible that the "aaahs" and "ooohs" of the Sāma Veda signify man's inability to express in words the boundless joy that comes with the discovery of one's self as the soul.

| STAGE | MEANING | Manifests in | SUBTLE SEAT | PHYSICAL SEAT |
|----------|---------|--------------|-----------------|------------------|
| para | Beyond | prāṇa | mūlādhāra cakra | Coccyx |
| paśyanti | Seen | manas | maṇipūra cakra | Navel |
| madhyama | Middle | indriyāṇi | anāhata cakra | Heart |
| vaikharī | Audible | vāk | viśuddha cakra | Throat and Mouth |

TABLE 2.1: The four stages of sound.

This gradation, from subtle to gross, is characteristic of the classification that pervades every aspect of Hindu thought. In his explanation, Swami Sivananda states that para sound is divine in origin and embodies the "root-ideas or germ thoughts," but remains in an undifferentiated form.⁴ He also makes this remarkable assertion:

"Yogins who have subtle inner vision can experience the pasyanti state of a word which has colour and form, which is common for all languages and which has the vibrating homogeneity of sound. Indians, Europeans, Americans, Africans, Japanese, birds, beasts—all experience the same bhāvana of a thing in the pasyanti state of voice or sound. Gesture is a sort of mute subtle language. It is one and the same for all persons. Any individual of any country will make the same gesture by holding his hand to his mouth in a particular manner when he is thirsty. As one and the same power or sakti working through the ears becomes hearing, through the eyes becomes seeing and so forth, the same pasyanti assumes different forms of sound when materialized." [4]

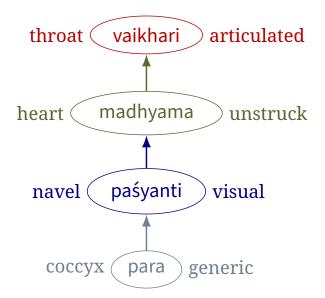


FIGURE 2.2: The four stages of sound, their bodily seats, and major attributes.

⁴ We may think of the para state of sound as a "pluripotent stem cell" equivalent of sound.

2.8 Akşara and Varna

In their classification of sound, the ṛṣis distinguished between articulated sounds that denote speech, and sounds like the cry of a baby, the chirp of a bird, or the rumble of thunder, which do not arise from deliberate human effort at speech. The former, they called varṇa, literally, "colour" and the latter they called dhvani. Each articulated *syllable* was called aksara.

Vocabulary: kṣa and the impermanence it denotes

The term for *syllable* in Sanskrit is akṣara. Here we see the prefix for negation in action again. Only this time it is "a" because the original word begins with the *conjunct or compound consonant* kṣa:

$$a + ksara = aksara$$

The word kṣara means "subject to change or destruction; mutable, perishable". So akṣara means that which cannot be dissolved, or which cannot change or perish.

Indeed, most words beginning with kṣa are related to *limitation in time* in some form or fashion.

The table below shows a few other roots and words beginning with ks:

| SAMSKRTA | ENGLISH |
|-----------|---------------------|
| √kṣi | to perish |
| √kṣad | to cut |
| √kṣaN | to wound |
| √kṣam | to forgive, forbear |
| √kṣal | to wash off |
| √kṣar | to melt away |
| √kṣip | to throw |
| √kṣud | to crush |
| √kṣudh | to be hungry |
| √kṣvel | to jump |
| kṣaya (m) | decrease, loss |
| kṣaNa (m) | a moment in time |

VOCABULARY 2.2: If a word begins with kṣ followed by a vowel sound, it usually denotes temporal impermanence.

2.9 Varņamālā

The Sanskrit alphabet is called varṇamālā which means "garland of colours", or akṣaramālā, denoting a "garland of (imperishable) syllables." Once again, the common igneous origin of sight and speech is apparent in the term varṇamālā. Indeed, different colours correspond to different rates of vibration of light. By using the word for colour to distinguish between the sounds of different vowels and consonants, the ṛṣis were uncannily

THE SCIENCE OF SOUND Mantra and Devata

sophisticated for their time, using the metaphor of sight to meaningfully describe sounds of *different spectral content*.

Discussion 1: akṣara as the Sanskrit word for syllable

Why are syllables given this rather daunting definition?

What is so immutable about sound?

The cosmology of Hinduism is clear that all creation proceeded out of *vibration*, prime among which is the *monosyllable*, or ekākṣara, OḤ. Being of divine origin, OḤ is imperishable. All vibrations born of OḤ are likewise imperishable. One needs to bear in mind constantly that the Sanskrit words for sound, light, colour, and movement or vibration may be used interchangeably in this context.

2.10 Mantra and Devata

Justice Sir John Woodroffe, writing under the pen name of Arthur Avalon, was responsible for rendering into English a large treasure trove of Sanskrit literature, especially relating to mantra and tantra. One authoritative treatise on the science of mantra śāstra is his book *The Garland of Letters (Varṇamālā): Studies in the Mantra Śāstra* [5]. There is an online facsimile archive of this book [6] from which the following illuminating quotations are taken:

The natural name of any thing is the sound which is produced by the action of the moving forces which constitute it. He therefore, it is said, who mentally or vocally utters with creative force the natural name of anything brings into being the thing which bears that name. ... in all cases it is the creative thought which ensouls the uttered sound which works now man's small magic, just as it first worked in the grand magical display of the World-Creator. ... Each man is Shiva and can attain His power to the degree of his ability to consciously realise himself as such. *Mantra and Devata are one and the same*.⁵ By Japa the presence of the latter is invoked. Japa or repetition of Mantra is compared to the action of a man shaking a sleeper to wake him up. [6, pp 209–210]

Thus, by chanting a mantra we employ the same process by which God created the world. Such is the power of mantra.

2.11 OM

On the monosyllable OM, he writes:

The ancient Hindus had an aptitude, much to be admired in these often verbose days, of saying a great deal in a few words. The Mantra "Om" is an instance. For this short syllable contains a whole philosophy which many volumes would not suffice to state—an Eastern philosophy I may add which is gaining increased support from Western science. [6, p 214]

⁵ My emphasis

... The first Vibration which took place at the commencement of creation, that is, on the disturbance of the equilibrium (Vaishamyāvasthā) was a general movement (Sāmānya Spanda) in the whole mass of Prakriti. This was the Pranava Dhvani of Om Sound. It is not that the Sound is represented as it is by the Sound of the letters Om. Om is only the *approximate* representation or gross utterance to gross ear of the Subtle Sound which is heard in Yoga experience of the first movement which is continually taking place, for at each moment the creative movement is present. From out this general movement and Sound special movements (Vishesha Spanda) and Sounds arise. [6, p 239]

... The first equally distributed motion ...is Om, which is the great seed-mantra (Mahābīja), for it is the source of all others and of all compounded Sounds. Just as Om is the general Sound, the other Bīja Mantras are the particular Sounds which are the letters of the alphabet. These are evolved out of the general Sound which underlies all particular Sounds. Both the Ongkāra or Pranava and the Bīja Mantras as pronounced by the mouth are thus the articulate equivalents of the inarticulate primal Dhvani. [6, p 240]

... For *Om* is sounded as from the navel with a deep rolling and continuous Sound ending at the upper part of the nostrils where the Chandrabindu is sounded. [6, p 241]

... Here the termination is M in the form of the nasal breathing called Chandrabindu (*) which is Nāda and Bindu. The M which ends the Bīja is sounded nasally, high up in the bridge of the nose, and never reaches the lips. [6, p 241–242]

2.12 Bījākṣaras for the five elements

The preamble prayer for Śrī Lalitā Triśatī includes reciting certain bīja-mantras (bīja \rightarrow seed) and touching the thumb and four fingers of each hand in a process called karanyāsam. Each of the pañca mahābhūtās is associated with a specific bījākṣara as shown in Table 2.2:

| Райса Манавнита | Bījākṣara |
|-----------------|--------------------------------|
| pṛthvī | laṃ |
| āpas | vaṃ |
| agni | raṃ |
| vāyu | yaṃ |
| ākāśa | haṃ |
| | pṛthvī āpas agni vāyu |

TABLE 2.2: The bījāksaras corresponding to each of the five elements or pañca mahābhūtas.

The correspondence of the akṣaras with aspects of creation does not end with the macrocosm, but extends also to the microcosm. Each part of the human body is associated with certain seed syllables, which, when invoked, have a purificatory and vivifying power. The interested reader is referred to the monograph by Aryan [7].

THE SCIENCE OF SOUND Review

2.13 Review

The triune aspects of creation as categorized by the rsis are

- 1. consciousness;
- 2. energy; and
- 3. matter.

The discovery of the subtle, unstruck vibration behind material creation led to the perception of sound as a vehicle for divine power. The *consciousness-energy-matter* thread runs through all mantras. By starting with an articulated sound embodying divine power, and tracing it back to its origin in the primal vibration, the rsis gave man a secret method through which he could trace his way back to his source in God. Thus a profound science underlies the Sanskrit alphabet: one that has the power to release man from his mortal bondage. A pictorial depiction of this process is given in Figure 2.3, which is similar to Figure 2.2, except that the arrows are reversed in direction.

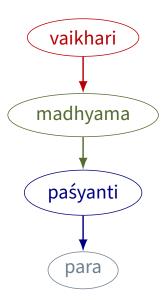


FIGURE 2.3: By tracing sound back to its source, man may find his way back to God. This is the reverse process to that shown in Figure 2.2

EXPLORATION: Vowels and Consonants

Find out, as best you can, what distinguishes a vowel from a consonant.

2.14 To Explore Further

Links to various web sites are given in this section. As with all web-related material, the watchword is *caveat emptor:* buyer beware. The web is largely unregulated both in content and quality. One therefore has to be discerning about any material found there. The links given below are generally interesting, but I do not necessarily endorse the views or viewpoints of specific authors, or the prevailing philosophies of the quoted

THE SCIENCE OF SOUND Prayer

web sites. Please keep this caution in mind as you surf the web and look at links suggested in these or future notes.

Also, do keep in mind that the web is ever-changing: old sites keep disappearing while new ones keep appearing.

A short but interesting account of the life of Justice Sir John Woodroffe [8] is available on the web. Other accounts of his remarkable life are also available in books [9] and online [10–12]. Although, not all his works are currently in print, online versions of some of his books exist. Chapter 25 of his book *Shakti and Shākta*, entitled "Varnamala," is browsable at the Sacred Texts site [13]. His chapter on "Mantra" in the *Mahanirvāṇa Tantra* [14] is also available on the web. His classic treatise on the science of mantra, The Garland of Letters is archived online [6].

The late Shankaracharya of Kanchipuram, Sri Chandrasekharendra Saraswati, also called the Paramācārya, gave a large number of public discourses during his long life. A compilation of some of his talks is available online, including this discourse on the four stages of sound [15].

2.15 Prayer

```
वक्र तुण्ड महाकाय स्Uर्यकोटि समप्रभ ।
निर्विघ्नं कुरु मे देव सर्व कार्येषु सर्वदा ॥
vakra tuṇḍa mahākāya sūryakoṭi samaprabha ।
nirvighnaṃ kuru me deva sarva kāryeṣu sarvadā ॥
```

| Saṃskṛta | English |
|------------|-------------------------------------|
| vakra | curved, bent, crooked |
| tuṇḍa | trunk |
| mahā | large, great |
| kāya | body |
| surya | sun |
| koţi | ten million, 10^7 |
| sama | equal |
| prabha | rays |
| nirvighnam | nirvighnam = nis + vighnam |
| | nis → without; vighnam → obstacles |
| kuru | do, make |
| me | to me or for me; or of me, i.e., my |
| deva | radiant being, Lord |
| sarva | all |
| kāryeṣu | in activities |
| sarvadā | at all times, always |
| | - |

BIBLIOGRAPHY Bibliography

O Lord (Ganesha), with curved trunk, large body, and the radiance of ten million suns, (please) make free from obstacles all my activities at all times.

Bibliography

- [1] Judith M Tyberg. *The Language of the Gods*. 2nd ed. Los Angeles, CA, USA: East-West Cultural Centre, 1976.
- [2] Richard Paget. Human Speech. London, UK: Harcourt, 1930.
- [3] James L Flanagan. *Speech Analysis, Synthesis and Perception*. New York, NY, USA, 1965.
- [4] Swami Sivananda. *Kundalini Yoga*. 6th ed. Sivanandanagar, UP, India: The Divine Life Society, 1971.
- [5] Arthur Avalon (Sir John Woodroffe), ed. *The Garland of Letters (Varṇamālā*. 9th ed. Madras, India: Ganesh & Co., 1989.
- [6] John Woodroffe. *The Garland of Letters Varnamala*. Studies in Mantra Shastra. 2004-05-19. URL: https://archive.org/details/TheGarlandOfLettersVarnamala2900, visited on 2006-07-29.
- [7] K C Aryan. *The Little Goddesses (Mātrikās)*. New Delhi, India: Rekha Prakashan, 1980.
- [8] Karel Assmann Ananda. *Sir John Woodroffe*. 2008-12-30. URL: https://web.archive.org/web/20090923185255/http://users.telenet.be/ananda/jwdrf.htm, visited on 2023-04-04.
- [9] Kathleen Taylor. Sir John Woodroffe, Tantra and Bengal. 'An Indian Soul in a European Body?' Routledge, 2001.
- [10] Wikipedia contributors. *John Woodroffe*. 2023. URL: https://en.wikipedia.org/wiki/John_Woodroffe, visited on 2023-04-05.
- [11] —. *John George Woodroffe (Arthur Avalon) Biography*. URL: https://www.tititudorancea.com/z/john_george_woodroffe_arthur_avalon_biography.htm, visited on 2023-04-06.
- [12] —. Sir John Woodroffe A Great Tantra Pioneer. URL: https://www.shreemaa.org/sir-john-woodroffe-great-tantra-pioneer/, visited on 2023-04-06.
- [13] John Woodroffe. *Shakti and Shakta*. Chapter 25 entitled "Varnamala" (The Garland of Letters). URL: https://www.sacred-texts.com/tantra/sas/sas25.htm, visited on 2023-04-08.
- [14] John Woodroffe. *Mahanirvana Tantra: Introduction and Preface*. Section on Mantra and Gayatri Mantra. URL: https://www.sacred-texts.com/tantra/maha/maha00.htm, visited on 2023-04-08.

BIBLIOGRAPHY Bibliography

[15] V Krishnamurthy. *Paramacharya's Soundaryalahari Discourses: Digest by ProfVK 26-30*. 2023-01-21. URL: http://www.krishnamurthys.com/profvk/gohitvip/DPDS26-30.html, visited on 2023-04-04.

Part II Specific Scriptures