

Language and Grammar

It is said that for the great Greek civilization, Geometry was the core science. For the older Indian civilization, Grammar (*vyākaraṇa*) is the core science. It was the first science to develop because it was needed to maintain and to understand the large body of intellectual texts such as the four knowledge texts, the Vedas, the numerous philosophical Upaniṣads, the prose Brāhmanas, the sociological Dharmaśāstras and the phonetic-linguistic Pratiśākhya.

India has been a knowledge society since the beginning, and for the Indian people *jnāna*, knowledge, is superior to action (*karma*) and worship (*bhakti*) and is considered as the great purifier. However, another important view is that knowledge and action are equally important. As the *Yoga-Vāsiṣṭha* notes, for human beings knowledge and action are like the two wings of a bird, both indispensable.

As India has always attached the highest value to knowledge and as all knowledge is constituted in language (*jnānam sarvam śabdena bhāsate* — Bharṭṛhari's *Vākyapadīya*), great value has been attached to the study of language in all its dimensions: sounds, words, sentences, metres, etymology and meaning. As the world's first text, the *Ṛgveda*, avers:

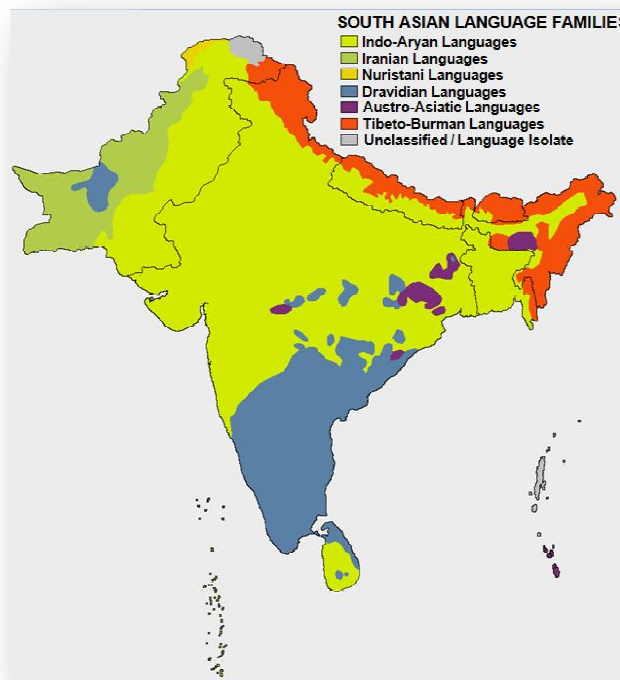
gaurīrmimāya salilāni takṣaty ...

'language cuts forms in the ocean of reality ...' (1.164.41)

It is not surprising, given this primacy of language both as object and as means of knowledge, that there is a long-attested tradition of texts and grammarians in India.

1. Languages of India

Indian languages may be grouped into two major language families: Indo-Aryan and Dravidian (see the map below). The largest one is that of Indo-Aryan languages spoken mainly in the northern part of India. The second largest is the Dravidian language family that includes languages spoken in the southern part of India, the chief ones being Tamil, Kannada, Telugu and Malayalam. Languages spoken by small communities in the North-East, the northern Himalayan regions and also in different small areas of Jharkhand, Chhattisgarh, Andaman etc. belong to the Austro-Asiatic family while Kashmiri belongs to the Dardic group.



Languages of India and neighbouring countries

While there are almost 1,600 languages spoken in India, the Eighth Schedule of Indian Constitution accepts twenty-two as the official languages of India.

India’s languages use a number of scripts, though only about 30 of the 1,600 languages are written down. Some of the major scripts used in Indian languages, including inscriptions, are Brahmi, Kharoshthi, Sharada, Devanagari, Dravida, Old Tamil, Perso-Arabic.

Brahmi	𑀧	𑀘	𑀓	𑀭	𑀫	𑀡	𑀢	𑀣	𑀤	𑀥	𑀦	𑀧	𑀨	𑀩	𑀪	𑀫	𑀬	𑀭	𑀮	𑀯	𑀰	𑀱	𑀲	𑀳	𑀴	𑀵	𑀶	𑀷	𑀸	𑀹	𑀺	𑀻	𑀼	𑀽	𑀾	𑀿	
Bengali	অ	ব	গ	ঘ	ঙ	চ	ছ	জ	ট	ঠ	ড	ঢ	ণ	ত	থ	দ	ধ	ন	প	ফ	স	শ	ষ	ঝ	ঞ	র	ল	ব	ভ	ষ	ত	ট	ঠ	ড	ঢ	ণ	ত
Devanagari	अ	ब	ग	घ	ङ	च	छ	ज	झ	ञ	ट	ठ	ड	ढ	ण	त	थ	द	ध	न	प	फ	स	श	ष	र	ल	व	भ	म	य	र	ष	त	ट	ठ	ड
Tamil	அ	ப	க	த	ட	வ	த	ல	த	ல	ய	க	ச	ல	ம	ந	ண			ப	ப		க	ச	ர		த	ல									
Kannada	ಅ	ಬ	ಗ	ಘ	ಙ	ಚ	ಛ	ಜ	ಝ	ಞ	ಟ	ಠ	ಡ	ಢ	ಣ	ತ	ಥ	ದ	ಧ	ನ	ಪ	ಫ	ಸ	ಶ	ಷ	ರ	ಲ	ವ	ಭ	ಮ	ಯ	ರ	ಷ	ತ	ಟ	ಠ	
Telugu	అ	బ	గ	ఘ	ఙ	చ	ఛ	జ	ఝ	ఞ	ట	ఠ	డ	ఢ	ణ	త	థ	ద	ధ	న	ప	ఫ	స	శ	ష	ర	ల	వ	భ	మ	య	ర	ష	త	ట	ఠ	
IAST	a	ba	ga	dha	dha	va	da	ḍa	tha	ṭha	ya	ka	ca	la	ma	na	ṇa	śa	pa	pha	sa	kha	cha	ra	ṣa	ta	ṭa										

Table showing the main letters of Indian languages, written in different scripts, starting with the first Indian script, Brahmi. (IAST stands for International Alphabet of Sanskrit Transliteration.) (Adapted from Wikipedia.)

2. Study of Language in India

2.1. In *R̥gveda*, language is described as a revealer of true knowledge. Bhartṛhari (5th century CE), the great grammarian, says that knowledge and language are interwoven. J.F. Staal has rightly observed that the Indian mind is obsessed with language and philosophy.

And indeed language has been studied since ancient times, aspects and issues such as:

- (i) what is language,
- (ii) speech-sounds (*varṇamālā*) and sound patterns (*dhvani karma*),
- (iii) formation of words (*pada-racanā*),
- (iv) classification of words (*pada-jāti*),

- (v) process of derivation of a grammatical form of words,
- (vi) meaning and interpretation of words and texts,
- (vii) language of literary compositions,
- (viii) meaning in / of a literary work,
- (ix) relation between a word and the object it denotes, and
- (x) *śabda* as the creative principle.

The study of language arose from the need to understand the knowledge texts such as the *Ṛgveda*. These texts have been transmitted orally from teacher to disciples for millennia. Though India had a scientific phonetic script (see table on Sanskrit consonants further below), still knowledge was stored and transmitted orally. Six disciplines known as *vedāṅgas* developed to articulate and interpret texts: *śikṣā* (phonetics), *nirukta* (etymology), *vyākaraṇa* (grammar), *chanda* (prosody), *kalpa* (ritualistic performances) and *jyotiṣa* (astronomy). Out of these six disciplines, the first four pertain to language, its sounds, words and forms, etymology and metre. These four are today part of modern linguistics.

What is the Indian definition of language? Three features of language are:

- (i) It is primarily speech. Consider our words for language: *bhāṣā*, *vāk*, *vāṇī*, *bolī* etc. All assert that language is speech (writing is secondary as it represents speech).
- (ii) It is the means of thought – thinking is not possible without language.
- (iii) It constructs for each of us things, experiences, emotions and ideas by naming them. With these we know things that are not present physically. Someone utters the word ‘cow’ and we see in our mind the picture of a particular animal and can describe it at length.

2.2. Many statements have been made about language in the early texts. The *R̥gveda* distinguishes between ordinary language (*bhāṣā*) and good speech (use of language) that should be used to speak the truth (5.44.6) and to say what one sees (10.35.8; 9.95.2; 8.59.3). A good speech is characterised by originality and creativity (not just imitative) (6.76.12). It is sweet to hear (1.182.4; 2.21.6; 8.59.3), lucid, fluent (*pravāhamaya*) and clearly articulated (4.58.6; 10.98.35; 5.63.6). It should be used purposefully (1.164.10) and should be rich in meaning (4.58.6). It should be thoughtful and capable of ensuring welfare of the people (8.100.11). Language is ‘a great gift of gods to men’ and hence should be employed with care (7.18.1).

In the Brāhmaṇa texts, speech is rooted in the mind: ‘Speech is preceded by the mind because speech expresses what is comprehended by the mind’ (*Pañcaviṃśa Brāhmaṇa*). In the Upaniṣads, there are references to language about both the meaningful combination of speech-sounds (words) and the meaning associated with them. In many places, the Upaniṣads discuss the relationship of one’s own self and language: ‘The wise should merge the speech in the mind (*mana*), and that (mind) in the intellect (*buddhi*), the intellect in the Great Self (*mahāpuruṣa*), and that (Great Self again) in the Self of peace (*śānta-ātman*).’

3. Disciplines of Language Studies in India

Let us discuss in brief the four of the six *vedāṅgas* that deal with language: *śikṣā* (phonetics), *vyākaraṇa* (grammar), *nirukta* (etymology) and *chanda* (prosody).

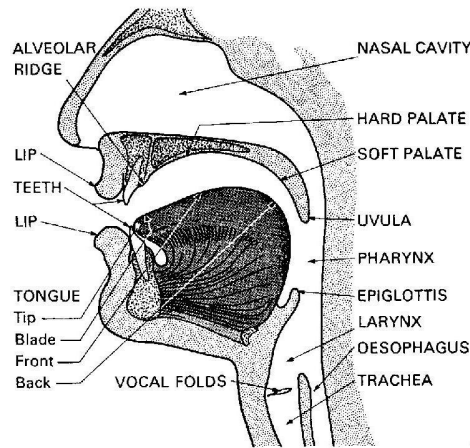
3.1 Śikṣā (Phonetics)

Phonetics, the science of speech-sounds, developed in response to the need to preserve and articulate accurately the Vedic hymns (*mantras*) in the oral tradition. Yāska refers to this in his *Nirukta*. Phonetic study produced a brilliant understanding and a highly

sophisticated analysis of the speech-sound structure and sound patterns of human languages. Four aspects of the speech-sounds have been studied:

- (i) how speech-sounds are produced,
- (ii) listing and classification of speech-sounds (*varṇamālā*, garland of letters or speech-sounds, the alphabet),
- (iii) sounds in context (*sandhi*), and
- (iv) how a sound changes when it is spoken along with other sounds.

The diagram below shows the places of articulation of speech-sounds in the oral and nasal cavities along with the articulators (active and passive):



The *Pāṇinīya Śikṣā* describes the process of speech production involving both the mental and the physical faculties. When there is a desire to speak, a measured amount of the life breath (*prāṇa*) is retained in the lungs. Then this breath moves upwards in the form of air stream, passes through the vocal cords (*kaṇṭha*) and sets them vibrating. This vibration makes the sound audible. In the articulation of a vowel sound, the air stream is allowed to flow without any obstruction through the oral and nasal cavities. Different vowels are articulated through lowering or rising of the tongue and also through

rounding or un-rounding of the lips. A consonant sound (*vyañjana*) is articulated by the contact of the active articulator (such as tongue and lips) and the passive articulators (marked above).

a) Places of articulation

According to Indian linguistic tradition, the places of articulation (passive) are classified as five. They are (see the table below for examples):

- *kaṇṭhya*: velar
- *tālavya*: palatal
- *mūrdhanya*: retroflex
- *dantya*: dental
- *oṣṭhya*: labial

Apart from that, other places are combinations of the above five places. They are:

- *dantoṣṭhya*: labial-dental (for example, /v/)
- *kaṇṭhataālavya*: diphthongs (for example, /e/)
- *kaṇṭhosthya*: labial-velar (for example, diphthong /o/)

The articulators (active) are four:

- *jihvāmūla*: tongue roots, for velar
- *jihvāmadhya*: middle of the tongue, for palatal
- *jihvāgra*: tip of the tongue, for cerebral and dental
- *adhoṣṭa*: lower lip, for labial

b) Efforts of articulation

Effort of articulation (*uccāraṇa prayatna*) is of two types for consonants:

(i) *Bāhya prayatna*: external effort

- *spṛṣṭa*: plosive, i.e. a sound produced by the sudden release of air after a complete block (for instance, *pa*, *ka*),

- **īshatspr̥ṣṭa**: approximant, i.e. when the tongue (articulator) is brought very close to the place of articulation (for instance, *ja*),
- **īshatsam̐vṛta**: fricative, when the articulator and the places of articulation are brought close together and the air is forced through (for instance, *va*).

(ii) **Ābhyantara prayatna**: internal effort

- **alpa-prāṇa**: unaspirated or slight aspiration (for instance, *ba*)
- **mahā-prāṇa**: aspirated (for instance, *bha*)
- **śvāsa**: unvoiced (for instance, *ka*)
- **nāda**: voiced (for instance, *ga*)

c) **Articulation of consonants**

Articulation of consonants will be a logical combination of components in the two prayatnas, effort. The table below gives a view upon articulation of consonants.

Sanskrit Consonants						
Prayatna niyamāvalī	kaṅṭhya (jihvāmūla)	tālavya (jihvāmadhya)	mūrdhanya (jihvāgra)	dantya (jihvāgra)	dantoṣṭya	oṣṭya (adhosta)
sparśa, śvāsa, alpaprāṇa	ka	ca	ṭa	ta	—	pa
sparśam, śvāsa, mahāprāṇa	kha	cha	ṭha	tha	—	pha
sparśa, nāda, alpaprāṇa	ga	ja	ḍa	da	—	ba
sparśa, nāda, mahāprāṇa	gha	jha	ḍha	dha	—	bha
sparśa, nāda, alpaprāṇa, anunāsika, drava, avyāhata	ṅa	ṅa	ṅa	na	—	ma
antastha, nāda, alpaprāṇa, drava, avyāhata	—	ya	ra	la	va	—
ūṣman, śvāsa, mahāprāṇa, avyāhata	visarga	śa	ṣa	sa	—	—
ūṣman, nāda, mahāprāṇa, avyāhata	ha	—	—	—	—	—

Classification of Speech-Sounds

Śivasūtra (also known as *Pratyāhārasūtra*) is believed to have originated from Śiva's dance. A text called *Nandikeśvara-kāśikā* of Nandikeśvara begins with the following verse:

*nṛttāvasane naṭarājrajo nanādaḍhakkāṃ navapañchavāram |
uddharttukāmosanakādisiddhān etadvimarśe śivasūtrajālam ||*

At the end of His Cosmic Dance,
Śiva, the Lord of Dance,
with a view to bless the sages Sanaka and so on,
played on His *ḍamarū* [double-sided drum] fourteen times,
from which emerged the following fourteen *sūtras*.



The table below is a classified list of Sanskrit speech-sounds that forms the first part of Pāṇini's *Aṣṭādhyāyī*. Sounds are grouped together (into sets) according to their properties and are referred to / summarized by the first sound and the last. For example,

the three sounds of the first group are referred to as *aṅ* – such terms as *aṅ* are called *pratyāhāras* and are an economical way of referring to a large number of sounds.

	Phonetic Transcription	Devanāgarī
1.	a i u ṅ	अइउण ।
2.	ṛ ḷ k	ऋलक ।
3.	e o ṅ	एओङ ।
4.	ai au c	ऐऔच ।
5.	ha ya va ra ṭ	हयवरट ।
6.	la ṅ	लण ।
7.	ña ma ṅa ṅa na ṁ	जमङणनम ।
8.	jha bha ṅ	झभञ ।
9.	gha ḍha dha ṣ	घढधष ।
10.	ja ba ga ḍa da ś	जबगडदश ।
11.	kha pha cha ṭha tha ca ṭa ta v	खफछठथचटतव ।
12.	ka pa y	कपय ।
13.	śa ṣa sa r	शषसर ।
14.	ha l	हल ।

3.2. Nirukta (Etymology)

Nirukta is the science of study of the meaning of words used in texts. It was composed by Yāska (9th century BCE). It is a commentary on *Nighaṅṭu*, a classified list of Vedic words compiled by Yāska himself. The text is composed in the form of a discussion. By the time of Yāska, the language of the Vedas had become difficult to understand because many words had gone out of use and their meanings were no longer clear. So some scholars, such as Kautsa, argued that Vedic hymns are meaningless. So Yāska prepared a list of such difficult words (*Nighaṅṭu*) and then explained their origin and meaning (in *Nirukta*).

Yāska classifies all words into four classes: *nāma* (nouns and pronouns), *ākhyāta* (verbs), *upasarga* (prefixes) and *nipāta* (indeclinables).

Method of explaining the meaning of words: Yāska takes a word and derives it from a verb root (*dhātu*) on the basis of its phonetic and semantic similarities. For example, the word *pāka*, ‘a cooked dish’, is made from the root √*pac*, ‘to cook’. He gives examples of such meanings by quoting examples of use from various works.

3.3. Vyākaraṇa (Grammar)

Grammar is valued as the most important discipline for the study of all other knowledge disciplines.

The first attested study of language is a kind of lexicography, list-building — there are many *pada-paṭha*, enumerations of the Vedic words. It is not possible to do this without a knowledge of the grammar of language. These are lists of verb roots, prefixes etc. This breaking-down of a continuous text into its parts such as sentences and words is not possible without some knowledge of *vyākaraṇa*, literally ‘an instrument of division or analysis’. The scholars who prepared these lists of nouns or verbs were the first grammarians. In Sanskrit, several such lists have been made for both compositional / written (*vaidikī*) and spoken language (*laukikī*).

The tradition holds that there was a long tradition of grammatical thinking before Pāṇini. Pāṇini (7th century BCE) in the *Aṣṭādhyāyī* refers to the works of ten grammarians such as Āpiśali, Kāśyapa, Gārgya and others. Eighty-five grammarians before Pāṇini are known to us by name.

Pāṇini’s *Aṣṭādhyāyī* is a grammar of both the spoken language (*laukikī*) and the compositional language (*vaidikī*). It is composed in the *sūtra* (abbreviated and exact) style and contains around 4,000 *sūtras*. As these *sūtras* are arranged into eight chapters, hence the text is called *Aṣṭādhyāyī* (*aṣṭa-adhyāyī*, ‘eight chapters’). Then each chapter contains

four subsections called *pāda* (so a total of 32 subsections). It is the only complete, rule-bound and comprehensive description of a natural human language. For the later grammarians this grammar became a model for the analysis of many other languages.

Indian grammar analyzes language as a structure of five levels. The first level is of *varṇa*, sound; the second level is *akṣara*, syllable. The third level is of *śabda*, words that are made of syllables. As in Yāska, in Pāṇini's grammar also, all words belong to four classes: *nama* (substantive, i.e., nouns and adjectives), *ākhyata* (verbs), *upasarga* (prefixes), *nipata* (indeclinables). *Upasargas* are words such as *pra-*, *pari-*, which are used in the beginning of some other word, a verb or a verbal derivative or a noun, to make a new word that means some activity. Thus 'anti-God' means 'not believing in God'. And *nipātas* such as *iva*, *na*, *ca* etc., are particles which possess no gender and number and do not change their form, words such as adverbs, conjunctions in English

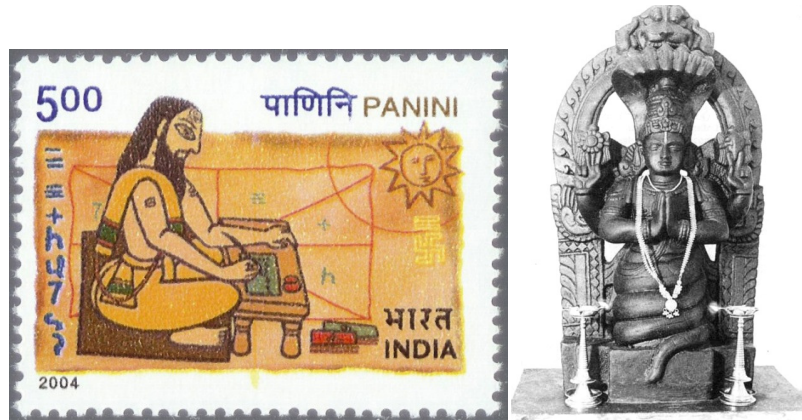
The next level of organisation is *pada* (inflected words such as 'boys' which means 'boy + plural'). Formation of *pada* from *śabda* is in the scope of grammar. A *pada* is formed by a conjunction of *prakṛti* (base) and *pratyaya* (affix).

Word formation includes *derivation*. All *padas* are divided into two sets: those that are like nouns and those are like verbs. From verbs nouns can be formed and from nouns verbs can be formed with the help of affixes that are called in grammar derivational affixes, such as, *-er* in English which is used to change verbs into nouns: *drive* > *driver*. Thus in Sanskrit, from the verb root √*pac* (to cook), the noun *pācak* (cook) is derived by adding the affix *-ak*.

Sentences that meet the rules of Pāṇini's grammar are accepted as *siddha*, literally 'ripe' or 'mature'. In English grammar, we say the sentence is 'grammatical'. Pāṇini's grammar has influenced modern linguistics via Ferdinand de Saussure, who was a professor of Sanskrit at Geneva in the late 19th century. This grammar has also served as

a model for grammars of many languages: Persian, Tibetan, Tamil, Prakrit, besides many Indian and central Asian languages. On account of its appropriateness for computational grammar, the *Aṣṭādhyāyī* has come to be studied in the departments of Linguistics and Computer Science.

Leonard Bloomfield in his celebrated book *Language* acknowledged the contribution of Pāṇini in the advancement of human knowledge: ‘The *Aṣṭādhyāyī* of Pāṇini is one of the living monuments of human intelligence.’ (p. 11)



Depictions of Pāṇini (*left*) and Patañjali (*right*) (source: Wikipedia). Note that Patañjali’s lower body is in the form of a snake, which stands for Śeṣanāga, the mythical guardian of treasure: Patañjali guarded knowledge, which is regarded as the highest treasure.

After Pāṇini, there was a succession of thinkers of language, grammar and philosophy of language: Kātyāyana (4th century BCE) who commented on Pāṇini’s rules, Patañjali’s (2nd century BCE) who composed *Mahābhāṣya* (literally, ‘The grand commentary’), a commentary on *Aṣṭādhyāyī*, and Bhartṛhari (5th century CE) whose *Vākyapadīya* is a celebrated work of philosophy of language and grammar. Grammar influenced both philosophy and literary theory; thinkers such as Bharata (2nd century BCE), Bhāmaha (6th century CE), Vāmana (7th–8th century) and Abhinavagupta (9th

century) composed works on language and the philosophy of literature. Buddhists and Jains were also deeply influenced by Paṇini's grammar and composed *Cāndra Vyākaraṇa* (4th century CE) and *Jainendra Vyākaraṇa* (5th century CE) respectively. In the long tradition of grammars and grammarians comes Nāgeṣh Bhaṭṭa (1670-1750), who wrote three books on the philosophy of grammar and is accepted as the final authority.

Theory of Grammar

Patañjali distinguishes between the principal purpose and the ancillary purposes of the science of grammar. The chief purpose is to attain a mastery of the language. Other purposes are: understanding the texts, ability to argue and debate and articulate accurately the hymns and sacred verses. He also makes a distinction between widely acceptable linguistic forms, standard usage, and forms acceptable only in a specific region, dialectal usage. He accepts *loka* (the world of usage) as authority and accepts all varieties of usage. According to Patañjali, the goal of grammar is to lay down *dharma-niyama*, to show the standard usage. It restricts the choice to the best of the available possibilities. Just as furniture can be made of all kinds of wood but teak is to be preferred and hunger can be assuaged by eating the flesh of any animal but the flesh of only some animals is to be eaten and all water is water but only Ganga water is auspicious, in the same way, the intended meaning may be conveyed best by one of the forms.

The 'desired result' in language transaction is the successful transfer of meaning: this is the *dharma* of language and towards the attainment of this *dharma* it is the function of grammar to lay down *niyama* – *dharma-niyama*, restriction for an efficacious transfer of meaning. He also refers to (a) *mleccha-prayoga*, the usage of the non-native speakers, (b) *apaśabda*, any of the dialectal variants, and (c) *duṣṭaśabda*, an inaccurate usage due to physical infirmity or ignorance.

Grammar thus establishes *sādhu* words as *siddha* and *asādhu* words as *asiddha*, not accepted as standard.

After Patañjali comes the age of *prakriyā*, re-ordering the rules of Pāṇini's grammar to simplify it. The *Siddhānta-Kaumudī* of Bhaṭṭojidikṣita (17th century CE) is a *prakriyā* text.

Sanskrit grammar is also accepted in India's intellectual tradition as a philosophy. Śrī Mādhavācārya (13th century) in his *Sarvadarśanasamgraha* has a chapter on 'Pāṇini Darśana', Pāṇini's philosophy, one of the sixteen philosophies explained in that important book. Bhartṛhari's *Vākyapadīya* (5th century) is the landmark work in the domain of philosophy of language. Apart from this, many grammarians such as the Buddhist Chandragomin, the Jain Hemachandracārya, Pali and Prakrit grammarians and Tamil grammarians (Tolkāppiyar and his *Tolkāppiyam*) have immensely enriched the traditions of language studies in India.

Today, Sanskrit Grammar is an important subject of study in most the major world universities.

3.4. Chanda (Prosody)

The Vedas are also India's first literary compositions and the Vedic seers are the first poets. A major portion of the Vedic compositions is metrical. So the science of prosody also developed in India in very early times. In oral traditions, prosody also helps to maintain the text as it is. A change occurring in a versified text in course of time can be easily traced as it disturbs the rhythm (flow) of the text. Sage Piṅgala, supposed to be a contemporary of Pāṇini, had composed a prosody text called *Piṅgala-sūtra* or *Chanda-sūtra*. Of the many metrical arrangements, *anuṣṭubh* is the most frequently employed metre in the classical Sanskrit literature and the epics *Rāmāyaṇa* and *Mahābhārata* have

used this metre. Tamil metres are described in the *Tolkāppiyam*. Apart from these, there are various local metres in different Indian languages.

Comprehension

1. Discuss in your group the reasons for phonetics being a key aspect of language study in ancient India
2. What is the meaning of lexicon? Frame more words using ‘lexis’ as the root word.
3. What is the term given to one who works on compiling words?
4. Refer to the above image showing places of articulation of speech-sounds in the oral and nasal cavities: which of the six *vedāṅgas* do they represent?

Activity 1

- Complete the table with four key statements about Pāṇini:

	Name	Meaning / Function
1.	Varna	
2.		
3.		
4.		
5.		

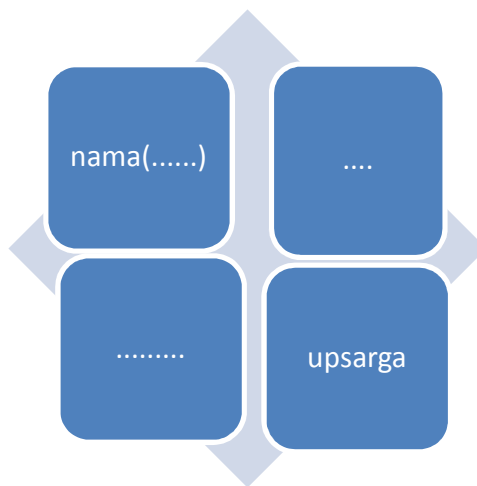
Activity 2

- What are the principles which convert Language units into structures?

	Principle	Meaning
1.	Sequence and order	
2.		
3.		
4.		
5.		

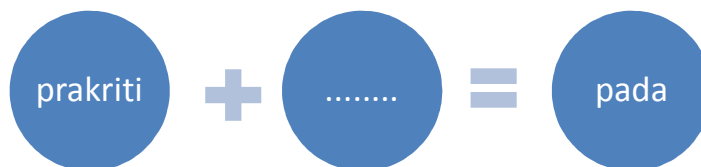
Activity 3

➤ Complete the visual below with the correct terms four classes of *śabda*:



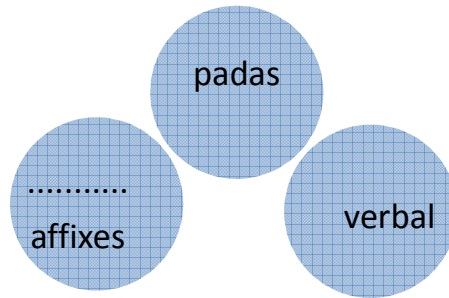
Activity 4

➤ What are the two aspects that complete a *pada*?



Activity 5

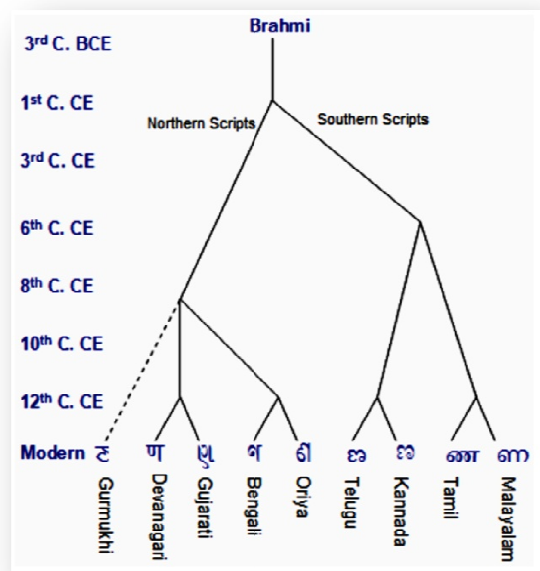
- What are the two sets of *padas*? Complete the visual given.



Activities

- Make a list of twenty words from your mother tongue and any other Indian language, which have nearly the same meanings / roots.
- Use the Internet to list the major stages of development between the following scripts (you may refer to the following diagram as a general guide):

- Brāḥmī and Devanāgarī
- Brāḥmī and Tamil script



- For the following pairs of concepts, list words from your mother tongue and at least two more Indian languages:
- happiness – sorrow
 - success – failure
 - birth – death
- Pāṇini's *Aṣṭādhyāyī* explains grammar in a systematic manner. For example one of Pāṇini's *sūtras* on the places of articulation says, *akuhavisarjanīyānām kanthaḥ*, which means letters a, kavarg (i.e. ka, kha, ga, gha, ṅa), ha and visarga, are called *kaṅṭhya* or articulated in the throat). Now work in pairs or speak in front of the mirror to understand Pāṇini's *sūtra*. Refer to the table of Sanskrit consonants in the above article.

Project Ideas

1. Prepare a multimedia presentation on the language families in use in India. Find out how many languages are spoken by each student of your class; work out the total number, and use this resource to make your presentation come alive with the diversity and richness of the Indian language scenario. What does it tell you about India and its people? How is the Indian linguistic scenario different from western countries?
2. Discuss the following questions with your class:
 - a) How many languages do you learn at school?
 - b) How many languages classified as 'mother tongues' exist in India?
 - c) What is referred to as the 'three-language formula'?
3. Look at the above map of India ('Languages of India and neighbouring countries') and make a list of the languages and, wherever possible, dialects spoken in

different states of India. You may form groups for different states; at the end, compile information from all groups and draw your conclusions.

Extended Activities

- You have invited Pāṇini and Yāska to preside over the Inauguration Ceremony of a debating society. As Secretary, write your speech introducing your guests of honour to the gathering. Make sure to highlight their contribution to the world of linguistics. At the same time, speak about the objectives of your debating society. Highlight the role of the society in providing opportunities to train learners in models of desirable speech as highlighted in the Ṛgveda.

Further Reading

1. Yudhishthir Mimamsak, *Sanskrit Vyakaraṇaśāstra Kā Itihāsa* (Students' edition in Hindi), Varanasi: Chowkhamba Publishers, 1998.
2. Suniti K. Chatterji, (ed.), *The Cultural heritage of India*, vol. 5: *Languages and Literature*. Kolkata: Ramakrishna Institute of Culture, 1978
3. *The Aṣṭādhyāyī of Pāṇini*, tr. Rama Nath Sharma, 6 vols, Delhi: Munshiram Manoharlal, 2002-2003.
4. Kapil Kapoor, *Dimensions of Pāṇini Grammar*, Delhi: DK Printworld, 2005.

Internet Resources

- Languages and scripts of India: www.cs.colostate.edu/~malaiya/scripts.html
- Brahmi alphabet : www.omniglot.com/writing/brahmi.htm
- Major Indian languages: <http://theory.tifr.res.in/bombay/history/people/language/>
- Indian languages: <http://indiansaga.com/languages/index.html>



Primary Texts on Language: A selection

In the extracts below, references have been collected from Vedas, Upaniṣads, Brāhṃaṇas, grammatical and philosophical and other foundational sources. They dwell upon the nature of language, levels and states of language, relationship of language and the world and thought, components of speech, purpose and function of *vyākaraṇa* (literally, instrument to analyse language, grammar).

Reflections on Language from Vedic Sources

(In this the goddess of Vāk speaks in the first person:)

Through me alone all eat the food that feeds them – each man who sees, breathes, hears and the words outspoken.

They know it not, but yet they dwell beside me. Hear one and all the truth as I declare it.

... I make the man I love exceedingly mighty, make him a sage, a ṛṣi and a brāhṃaṇa. (*Rgveda*, 10.125.4-5)

We shall discuss alphabet (letters-vowels and consonants), syllables, speech production, pitch and intonation – [all in this chapter] *śikṣā*. (*Taittiriyoṇiṣad*, 1.2)

These are ... *aparā* sciences – the six Vedas, Ṛk-, Yaju-, Sāma- & Atharva-, the six auxiliary disciplines of Vedas, Phonetic, Ritual, Grammar, Etymology, Metrics and Astronomy. These disciplines are not *para* knowledge which is the means for *moksha*, the ultimate liberation. (*Muṇḍakopaniṣad*, 1.5)

Sthavira Sākalya says that breath is a beam, and as the other beams rest on the main beam of the house, the eye, the ear, the mind, the speech, the senses, the body, the whole self rests on this breath. Of this self, the breath is like the sibilants, the bones ... the mutes, the marrow ... the vowels and flesh and blood, the fourth part, the semi-vowels, so says Harsva Mandukya. ... The human body is the divine lute. (*Aitareya Āraṇyaka*, III, 2, 1)

In the extracts below, culled from various Vedic sources, first the four phases of language are identified (*Ṛgveda* 1.164.45). The subsequent three passages (ii–iv), describe the role of breath and mind in language. The fifth passage from *Chāndogyaopaniṣad* identifies speech as an index of life and describes how speech merges in breath in the dying moments. In the sixth passage, there is a prayer therefore that speech be preserved and the text goes on to identify speech as a means of knowledge.

(i) Speech hath been measured out in four divisions; the Brāhmaṇas who have the understanding know them. Three kept in close concealment cause no motion; of speech, men speak only the fourth division.

Here are these four divisions or structures of the language:

- (a) *Parā*: speech as unitary thought
- (b) *Paśyantī*: collecting breath sufficient for projected utterance
- (c) *Madhyamā*: sequencing of speech and pushing the air column up
- (d) *Vaikharī*: manifest / articulated. (*Ṛgveda* 1.164.45)

(ii) Lord! May my speech rest in my mind and mind merge into my speech! O Lord, be visible and bring knowledge to my mind and speech. May the acquired knowledge never leave me and with self-study I bridge this day and

night. I will speak truth only. May the Lord defend me and my Teacher. (*Aitareyopaniṣad*, 1)

(iii) He created Prāṇa, from Prāṇa faith, sky, air, fire, water, earth, senses, mind and food strength, penance, *mantras*, *karma* and worlds and in the world names also. (*Praśnopaniṣad*, 4)

(iv) Thus the substantial part of the later food is transformed and gains the form of speech; mind originates from food, vital force from water, speech from the *tejas*. Thus what have I said is true. (*Chāndogyopaniṣad*, VI.4.5)

(v) A dying person recognizes the world until his speech merges into his mind; when his speech merges into mind, mind into vital force, the vital force into five and lastly this fire into the Supreme Deity. (*Chāndogyopaniṣad*, VI.15.1.2)

(vi) O Lord, preserve my life, preserve my *prāna*, guard my *apāna*, guard my *vyāna*. Preserve my eyes, preserve my ears. Strengthen my speech with good instructions. Satisfy my mind ... vouchsafe me light of knowledge. (*Yajurveda* 13.54)

May our speech, the giver of pure food that enables us to acquire knowledge, possessing practical wisdom born of all sciences, be a purifier. May it desire and manifest the glory of arts and crafts and noble actions, helping us to associate ourselves with pure and righteous deeds. (*Ṛgveda*, 1.3.10)

O men, just as a lady doctor well-versed in the science of medicine ... having mastery over Āyurveda ... stretches out the healing sacrifice, for prosperity with [her] speech, so should not ye do! (*Yajurveda*, 19–12)

O adorable and learned teachers and preachers as thou lead us on the path with nobility of thy mind, teach us exertion with thy sweet and joyful words, give us knowledge ... lay before us ... the noble arts performed by the sages through wisdom and truthful speech, hence thou art worthy of respect by us. (*Yajurveda*, 8.45)

O fair-tongued, preserver of various objects, make pleasant for all, the commendable paths of rectitude, with thy sweet sermon and excellent exposition. Develop the society and philosophical subjects with thy holy thoughts and strengthen our innocuous worship through learned persons. (*Yajurveda*, 29.26)

O Vedic speech, show us the path, so that observing the principle of unification, we may thrive. (*Atharvaveda*, 6.94.3)

Kauntharavya says speech is united with breath, breath with blowing air, the air with the all-gods, all-gods with the world of heaven, the world of heaven with Brahman. This is the gradual union ... By speech are Vedas composed, by speech these metres are strung. By speech friends are united. ... Now when we speak, breath is in speech – speech then swallows breath. When we are silent or in sleep, speech is in breath – breath then swallows the speech. They swallow each other. Speech indeed is the mother, breath the son. He, who knows this union obtains ... fame, glory. (*Aitareya Āraṇyaka*, III.1.6)

Phonetics

Pāṇinīya Śikṣā, (tr. & ed., Manmohan Ghosh)

A text on general phonetics describes the process of articulation of speech sounds.

Ātmā (the self) with *buddhi* (intellect) perceives things and sets the mind to an

intention of speaking; the mind (then) gives impetus to the fire within the body, and the later drives the breath out. (6)

(The breath which is thus) sent upwards and is checked by the roof of the mouth attains to the mouth and produces speech sounds (*varṇas*), which have a five-fold classification – according to their pitch, quantity, place of articulation, the primary effort (*prayatna* i.e. adjusting the articulator) and secondary effort (*anupradāna*, i.e. stiffening or loosening the vocal cords) . So said those who were versed in (pronouncing) speech sounds. Learn this carefully. (9-10)

Nirukta (Etymology)

The twin texts *Nighaṇṭu* and *Nirukta* of Yāska (9th century BCE) are the oldest extant work on dictionary and expounding its meaning. The following extracts are from *Nirukta* that tell about parts of speech and how a word is derived from its root (verbal).

The *Nighaṇṭu* and the *Nirukta* of Śrī Yāskācārya (tr. & ed., Lakshman Sarup)

A traditional list [of Vedic words] has been handed down to us. It is to be (here) explained. This same list is called *Ni-ghaṇṭavas*. From what (root) is (the word) *Ni-ghaṇṭavas* derived? They are words quoted from the Vedas (*ni-gamāh*). Having been repeatedly together from the Vedic hymns, they have been handed down by tradition ...

Now what are the four classes for words? They are the following: noun and verb; and prepositions and particles. ... The verb has becoming as its fundamental notion, nouns have being as their fundamental notion. But both are dominated by becoming ...

... there are six modifications of becoming: genesis, existence, alternation, growth, decay, and destruction.

He is the bearer of a burden only, – the blockhead who, having studied, does not study the meaning of the Veda. But who knows the meaning obtains all good fortune and, with wrong act (*pāpa*) purged off by knowledge, attains heavens.

Whatever is learnt without its being understood is called mere cramming; like dry logs of wood on an extinguished fire, it can never illuminate. (1:1-5)

Now (we shall deal with) etymology.

With reference to this, the words, the accent and the grammatical forms of which are regular and are accompanied by an explanatory radical modification, should be derived in the ordinary manner.

But the meaning being irrelevant, the explanatory radical modification being non-existent, one should always examine them with regard to their meaning, by analogy of some common course of action.

If there be no such analogy, one should explain them even by the community of a (single) syllable or letter;

But one should never (give up the attempt at) derivation. (2:1-4)

4. Patañjali's *Mahābhāṣya* (adapted from S.N. Dasgupta's translation)

Now commences the science of words.

1. Which words are meant here?
2. Both the current as well as the archaic.

3. Now, what constitutes the word in *gauḥ*? Is the word *go* that which constitutes the object (viz. the animal) possessed of a dewlap, a tail, hump, hoofs and horns.
4. No, says the Grammarian; it is verily the *dravya* i.e. the object.
5. Well, then, is the word *go* that which constitutes beckoning, moving and winking?
6. No, says the Grammarian; it is verily the action.
7. Well, now, is that, which constitutes the white or the blue, or the grayish or the brown, the word?
8. No, says the Grammarian; it is the quality, in fact.
9. Well, now, is the word that general feature, which remains unbroken although the things are broken or which remains uncut although the things are cut?
10. No; says the Grammarian, that is, in fact, the genus or the common form.
11. Well, what is the word in *gauḥ* then? Word is that which, when uttered, gives rise to the knowledge of objects possessed of dewlaps, tails, humps, hoofs and horns. Or, in other words, word is that sound from which there arises the knowledge of things in the affairs of the world. For instance, a person producing sound by mouth is addressed as follows: go on with your words, or, do not talk words, or this boy is speaking words. It follows, therefore, that 'word' means sound or utterance of letters.
12. Now, what are the advantages of learning this Grammar of Science of words?

13. The advantages are: preservation of Veda, ability to change the case and gender affixes, the study of Veda, facility of knowing the sense of words, and lastly, removal of any ambiguity of sense.
14. Knowledge of changing the case-inflection, is also an advantage: the hymns of the Vedas are not uttered ... in all genders and cases. ... A man who does not know grammar is not able to use their forms with changed gender and case-affixes where necessary. Now ... there is a text that says that a Brahmin should, without any motive, devote himself to knowledge.
...
15. Grammar has also to be studied ... to know words with economy of effort.
16. Grammar has also to be studied for the removal of doubts If one is not a grammarian, one cannot determine the sense from the accents A Brahmin therefore should not speak incorrect words; an incorrect word is a bad word; we should study grammar so that we should not be utterers of incorrect words. ...
17. The sentence beginning with *duṣṭaḥ śabda* [the translator is referring to the Sanskrit sentence in the original text] means: a word with an incorrect accent or an improper letter, becomes improperly used, and does not therefore convey the required sense; such a word ...ruins the speaker.... Grammar should be studied so that we should not employ wrong accents.
18. The sentence beginning with *yadadhita* means: words studied without the knowledge of their sense, being only mechanically uttered by the mouth, do not ... produce their effect, just as dry fuel does not burn unless it is put into fire. ... A man who, in his dealings, uses words in their correct

sense, being cognizant of the nice distinctions in sense, is always victorious ... as he knows verily the proper use of words; if he, however, used incorrect words, he meets failure. ...

19. The stanza beginning with *saktumiva* means: at the place where learned thinkers with their intelligence purify speech as men sift barley from corn with a sieve, friends behave with a spirit of friendship having the blessed fortune staying inside their speech. ...
20. Which is the place referred to?
21. The place where they study Vedic speech and obtain knowledge.
22. Who are those learned thinkers?
23. Of course, the grammarians.
24. How do you say that they become fast friends?
25. Because blessed fortune dwells in their speech. The word *lakṣmī* (fortune) is derived from the root *laks* to shine. *Lakṣmī* is called so, as by her shining she is able to remove ignorance.
26. Now the exposition of the Science of words has to be given. ... How that exposition has to be given – whether by expounding incorrect words, or correct words or both ..., which is the better method out of the two? ... Of course, the exposition of correct words on account of their small number. The exposition of correct words can be done with a small effort; the exposition of incorrect words is a difficult task, as every one of the correct words can have many incorrect forms. ...
27. Well now, in giving the exposition of [correct] words, in order to know the correct words, should each word be taught individually?...

28. No, it is not necessary to do so, say the Grammarian. ...
29. Then how are these correct words to be taught?
30. There should be followed the method of laying down general principles and exceptions so that with a comparatively small effort, a man would learn bigger and bigger collections of words.
31. What could that method be?
32. Of course, the method of laying down general rules and exceptions. There should be first given a general rule and then its exception should be stated.
33. What kind of general rule should there be stated? So also what kind of exception should be given?
34. There should be stated a general rule with a wide application, ... then a specific exception to the rule should be given.
35. Well, now, what does a word mean? Does it mean the universal or particular?
36. Both, says the Grammarian, are possible.
37. How can it be known?
38. Because the preceptor *Pāṇini* has recited *sūtras* of both the kinds: He has laid down the aphorism[s] ‘general form’ as the sense of a word [and] has written the aphorism[s] having in his mind ‘an individual object’ as the sense of a word.
39. Well, is word permanent or is it produced [at the time of utterance]?

40. The question whether word should be looked upon as permanent or produced, has been prominently discussed in his work *Samgraha* by the teacher Vyāḍi. The faults of both the views have been shown there as also the advantages of both the views. The decision given there, after all, is that in the Science of Words, Grammar has to be written either way, whether the word be assumed to be permanent or produced.
41. But, how is this Grammar of the great teacher Pāṇinī composed? Is it composed by the grammarian with permanence of word in his mind or temporariness of word in his mind?
42. The *Vārttikakāra* [i.e., Kātyāyana, a 3rd-century BCE commentator of Pāṇinī] ... lays down:
43. With word, its sense and their connection already given [the science of Grammar proceeds].
44. A word is not incorrect simply because it has gone out of use
45. All such unused words are found in some area of language use ... words [which are not used in a particular province] are in use in other provinces ... or in Vedic Literature
46. A man who uses words after studying the rules of the Science of Words viz. Grammar, gains merit. ... Rules and examples together constitute Grammar – usages or words that are to be explained, and rules that explain them.

Grammar, Language and Knowledge

Bhartṛhari's *Vākyapadīya*, *Brahmakāṇḍa*, tr. K.A. Subramania Iyer

Anādinidhanam Brahma śabdatattvam yadaḥṣaram

Vivartate'rthabhāvena prakriyā jagato yataḥ (I.1)

The Brahman who is without beginning or end, whose very essence is the word, who is the cause of the manifested sounds, who appears as the many objects, from whom the creation of the world proceeds.

4. In the words which are expressive, the learned discern two elements: one is the essential word in the mind which, the other, is used to convey the meaning.

45. That there is an essential difference between them is the view of some followers of tradition. Other hand, some think that they are one but appear to be different owing to difference in the point of view.

46. Just as the fire which is within the churn sticks is the cause of the other fire [which is kindled], similarly, the word which is in the mind [of the speaker] becomes the cause of the different expressive words.

48. Just as a reflection, found elsewhere [as in water] seems to have movement because of the movement of water, such is the relation between the word in the mind and the words actually spoken and heard.

49. Just as the mind of the speaker first turns towards the words, in the same way, the attention of the hearers also is first directed towards them.

50. Just as light has two powers, that of being revealed and that of being the revealer, similarly, all words have two distinct powers.

51. No meaning is conveyed by words which have not themselves become the objects of knowledge.

Comprehension

1. Elaborate on the metaphor used by Sthavira Sākalya to describe centrality of breath.
2. What according to the *R̥gveda* are the four divisions or structures of the language?
3. What are the objectives of studying grammar, according to Patañjali?
4. XYZ has to appear for a competitive examination. The vocabulary section has a list of 600 words. XYZ has memorized the meanings of the 600 words, but has not learned to use them in actual context. Refer to *yadadhitam* in Patañjali's *Mahābhāṣya* and comment.

References

1. K.V. Abhyankar & Jayadev Mohanlal Shukla, (eds.), *Patañjali's Vyākāraṇa-Mahābhāṣyam*, Poona: Bhandarkar Oriental Research Institute, 1975.
2. Dasgupta, S.N. (tr. & ed.), *The Mahābhāṣya of Patañjali (with Āhnikā I-IV)*, (ed.), New Delhi: Indian Council of Philosophical Research, 1991.
3. Subramania Iyer, K.A., (ed. & tr.), *The Vākyapadīya of Bharṭṛhari*, vol. 1, Poona: Deccan College, 1965

