



India Discovery Center
Exploring A Timeless Civilization

Study of Classical Period in India (700 BC – 200 BC)

Language and Literature
Prem Nagar

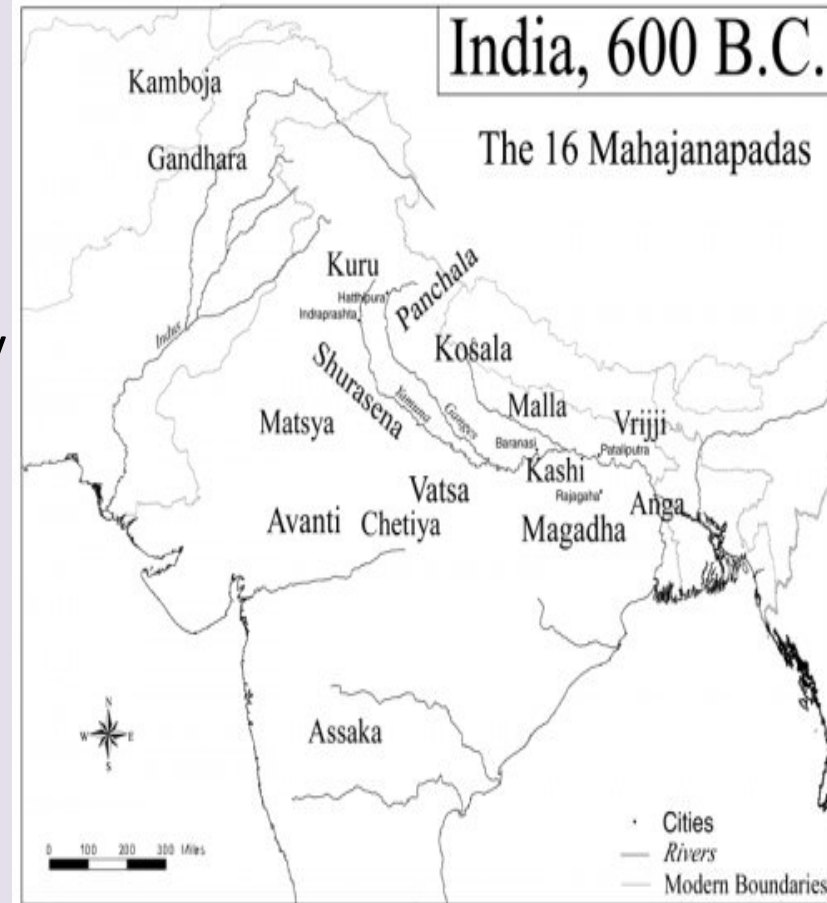
Introduction to Classical Period in India

A period of critical thinking and rationality, with unparalleled scholarship, standardization, consolidation and institutionalization, exemplified by:

- Development of Language: Sanskrit was specified as a Language: Aṣṭādhyāyī, Nyāya-Sūtra
- Transformation Oral Literature from poetry to prose: Vedic Chhanda (छन्दः) to contemporary Bhāsa (भार्या): Brāhmaṇas
- Enumeration of Alphabets, Development of writing (scripts): Proto Brāhmī, Brāhmī, Kharoṣṭhī and Śāradā
- Advances in scientific and secular literature (Śāstra and Sūtra): Aartha-Śāstra, Vastu-Śāstra, Natya-Śāstra,
- Early Hindu, Jaina, and Budhisht Literature: Kalpa Sūtra, Mīmāṃsā-Sūtra, Tripitaka
- Development of epic poetry for story telling (Mahākāvya): Mahābhārata and Rāmāyaṇa (great poetic compositions)

Language

- **Language was systematized:**
Grammar dealing with phonetics, alphabets, etymology, and syntax,
- **Language was developed:**
Language, the expression of ideas by speech sound:
 - Sanskrit, Prakrit, Tamil, and Pali
- **Lipi (Script) was established:**
Writing, the communicating by a set of visible marks:
 - Scripts evolved in early India,
Examples of Scripts and icon Path:



Pre-Pāṇini Grammar

Vedanga (Pedagogy) was developed to preserve Vedic texts and to deal with phonetic nuances:

- Vedanga: Śikṣā (Pronunciation of Vedic recitation), Vyākaraṇa (grammar) and Pratiśākhya (grammatical elements), part of Vedanga, considered earliest grammar work,
- Pāṇini's Aṣṭādhyāyī (अष्टाध्यायी) mentions several schools of Grammar that existed prior to Pāṇini, examples:
 - Aindra (Indra), Katantra, etc
 - Yāska (600BC) of Nirukta (etymology; explanation of words):
 - Four main word categories defined: nāma (nouns), ākhyāta (verbs), upasarga (pre-verbs or prefixes) and nipāta (particles)
 - Aksapada Gautama (600 BC) asserted 33 consonants, and them grouped into: Sparsha, (full contact consonants), Antahstha (semi-vowels), and Ushmana (sibilants)

Pre-Pāṇini Grammar (Continued)

- Pre Panini Vedic Vyākaraṇa comprised six to eight Grammarians works*:
 - **Rik Tantra** of Shaakataayana, **Atharva Chaturaadhyāyī** of Shaunaka, **Pratijna-sūtra** and **Bhaashikaa-sūtra** of Kaatyaayana, **Saamatantra** of Gaargya and **Akshara Tantra** of Apishaali, and names of these:
 - Brahmam, Aindram, Yamyam, Roudram, Vayavyam, Varunam, Savitram, Vaishnavam.
- Pre-Pāṇinian scholars mentioned by Pāṇini include:
 - Apisali, Kasyapa, Gargya, Galava, Cakravarmāna, Bharadvaja, Sakatayana, Sakalya, Senaka and Sphoṭayāna.

*Ref: Aṣṭādhyāyī (अष्टाध्यायी)

Pāṇini's Arrangement of Sanskrit Sounds

akṣara (अक्षर) syllables as: Vowels (स्वरः) and Consonants (व्यञ्जनम्)

- **Sounds are arranged by how they are produced:**
 - The location where they are articulated, Effort required for producing the sound, Duration of sound produced, and Quality of sound
- **Vowels are independent sounds**
 - produced without touching the speech Organ: अ,
 - free flowing and intonable sound, and hence the life of the language

IAST	Devanāgarī
1. ai uṅ	१. अ इ उ ण्।
2. r k	२. ऋ लृ क्।
3. e o ṅ	३. ए ओ ङ्।
4. ai au c	४. ऐ औ च्।
5. ha ya va ra ṭ	५. ह य व र ट्।
6. la ṅ	६. ल ण्।
7. ṅa ma ṅa ṅa na m	७. ङ म ङ ण न म्।
8. jha bha ṅ	८. झ भ ञ्।
9. gha ḍha dha ṣ	९. घ ढ ध ष्।
10. ja ba ga ḍa da ś	१०. ज ब ग ङ द श्।
11. kha pha cha ṭha tha ca ṭa ta v	११. ख फ छ ठ थ च ट त व्।
12. ka pa y	१२. क प य्।
13. śa ṣa sa r	१३. श ष स र्।
14. ha l	१४. ह ल्।

Māheśvara Sūtrāṇi's fourteen verses organizes phonemes of Sanskrit.

Pāṇini's Arrangement of Sanskrit Sounds (Cont.)

- **Consonants are dependent sounds**
 - Produced by contact of part of the mouth, either tongue or lips, **ब** (Ba),
 - These are mute sounds and not intonable, these sounds are body of language
 - Can be Intoned by attaching a vowel,
- All the 64 alphabets he organized in **fourteen verses of Māheśvara Sūtrāṇi's**,
- Pāṇini's grammar was based on Bhasha

IAST	Devanāgarī
1. a i u ṅ	१. अ इ उ ण्।
2. ṛ k	२. ऋ लृ क्।
3. e o ṅ	३. ए ओ ङ्।
4. ai au c	४. ऐ औ च्।
5. ha ya va ra ṭ	५. ह य व र ट्।
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Māheśvara Sūtrāṇi's fourteen verses organizes phonemes of Sanskrit.

Pāṇini's articulation mechanism became foundation of Indian languages, a profound contribution in linguistics!

Language and Literature

Pāṇini Phonetics, Phonology and Morphology

Pāṇini's science of phonetics and grammar evolved from Vedic Literature.

He built the structure of the Sanskrit language based on his grammar.

- Phonetics (properties of speech sounds),
- Phonology (organization of sounds), and
- Morphology (study of words)
- Use of transformations and recursions,
- Distinguished language as spoken and recitation of Vedic texts
- Simplified phrase formations and meaning by using concept of

Prefix + Root + Suffix

Phrase / Word

- Listed 22 Prefix (origin Unknown) and Tense also could be prefix,
- Roots or Verbal roots, there are 2000 different verb roots in the traditional list
- Suffix (conjugation) function of Number, person and tense,

Correct interpretation of Vedic padas (words)

Nirukta (निरुक्त), Mīmāṃsā and others developed

- **The study of Nirukta (etymological) interpretation of a word probably started for the Brāhmaṇa layer of texts**
 - ✓ To find explanations of words or poetic derivations
 - ✓ For linguistic analysis for exact form of words or expressed ideas
- **A Commentary on Nighantu by Yāska (5th century BC) is a surviving text on Nirukta, and this is a lexicographic arrangements**
 - ✓ Also called **Nirvacana-Śāstra**,
 - ✓ Nighantu is not a dictionary, but a genre of texts
- **Mīmāṃsā focuses mainly on interpreting Vedic Hymns as is!**
- **Kātyāyana and Patañjali: samudāya (collection) of sounds that represent a word, and a collection of words to represent a phrase or a sentence (Vārttika 7).**

Language Development

Vocal Speech existed for millennia (Dates unknown)

Term used for language in the Vedic texts is vāk (related to “voice”)

- The development of Language during the Classical Period was a culmination of the change from primitive articulatory modes to refined languages, such as
 - **Sanskrit**
 - **Prakrit**
 - Ardhamagadhi
 - **Pali**
 - Maharashtri
 - Gandhari
 - Shauraseni (शौरसेनी)
 - Magadhi
 - **Tamil**

Language Development (Continued)

Chart is an insight of the process of evolution of these languages. This gives an understanding of just what has evolved and from what origins!

Language/ Script (Lipi)	Region	Source Languages	Source Dialects	Derivative Languages
Sanskrit, script: Brahmi and Sharda but now in Devanagari	North-West Ancient India: Sapta-Sindhuland, Doab, Punjab, till Kabul in Afghanistan and Haryana to Ganga-Yamuna	Many Languages including: vernacular: prākṛta ☞	Many Dialects, including Punjabi, Kashmiri, etc	Shauraseni, a derivative of Classical Sanskrit,
	South - East India	Dravidian	Dravidian	Telgu, Tamil
	Gandhar Bihar, Jharkhand, Malda, West Bengal, Nepal.	Gāndhārī	Magadhi Prakrit	Magahī, Bengali
	Chota Nagpur Plateau of Jharkhand, Chhattisgarh, West Bengal, and Odisha,	North Munda	Santali, Mundari and Ho	Odia
	Central Odisha and along the border between Andhra & Odisha	South Munda	Korku and Sora	Odia, Telgu
Prakrit, Script: Brahmic, Kharoṣṭhi	Magadha (Modern Bihar)	Ardha-Magadha	Dramili, language of forest-dwellers,	Gauḍī, Lāṭī and Māhāraṣṭrī.
	Eastern India	Magadhi	Bhojpuri, Magahi, Maithili	Bengali, Assamese, Odia
	West - East of Ancient India	Maharashtri ☞	Pracya, Bahliki, Dakṣinatya, Sakari, Candali, Sabari, Abhiri,	Marathi, Konkani Sinhala and Maldivian.
	North-Central India	Shauraseni	Khariboli: Braj Bhasa, Bhojpuri, and Awadhi.	Shauraseni Evolved as: Hindi.
	Bihar	Paiśācī	Bhūtabhāṣa	
	North-West Ancient India	Sanskrit and Gāndhārī		
Pali, Script: Brahmi, Gandhāran Sinhalese (Brahmic)	Magadha (Modern Bihar)	Prakrit and Ardha-Magadhi	Paiśācī was the ancient name for Pāli	Pali: a derivative of Prakrit, Sinhalese (Sri Lanka)
	North-West Ancient India	Sanskrit and Gāndhārī		

Sanskrit Language

- Pāṇini's work was the culmination of analysis by many Grammarian who studied Vedic Chhandas,
- Four main Sanskrit dialects were in use: Paścimottarī (Northwest), Madhyadeśī (mid-country), Pūrvi (East) and Dakṣiṇī (South),
- He analyzed and compiled linguistics as: Aṣṭādhyāyī (अष्टाध्यायी), which are 3959 verses on linguistics, syntax and semantics, that became foundation of Sanskrit Vyākaraṇa (व्याकरण, Grammar)
- Literature writing was in Brāhmī, Śāradā and later in Devanagari script
- Sanskrit became a language of learning, hence a mark of social class
- Sanskrit literature was in the form of poetry, drama, or scientific, philosophical and religious works

Classical Sanskrit (Pāṇini Sanskrit) is a codified derivative of Vedic Sanskrit and became the formal basis of literary expression!

Prakrit (प्राकृत, *prākṛta*)

Prakrit language existed for millennia alongside Vedic Sanskrit

- **Prakrit was spoken by the common people** in North-India during Pre-Vedic and Vedic periods, hence Language of the Masses, and had four main regional forms:
 - Māhārāṣṭrī, Śaurasenī, Māgadhī and Ardhamāghadī
- **Ardhamāghadī** was used to write Jaina scriptures
- **Vararuchi** (known Kātyāyana) a grammarian who compiled **Prākṛt Prakāśa**, and Bhamaha wrote a commentary on it
- Prakrit comprises **64 syllables** similar to Sanskrit
- Writing System used Brāhmī, and Brahmi-derived scripts
- Prakrit seemed simpler than Sanskrit for both sound and grammar

Language and Literature - South India (Tamil)

- **Tolkāppiyam, grammar of Tamil Language, compiled by Tholkappiyar, in 3 books of nine chapters each – Ezhuttadikaram, Solladikaram and Poruladikaram,**
- Formulated **thirty phonemes** and few dependent sounds, example: (āytam (ஃ) dependent or restricted phoneme)
- Has 12 vowels, 18 consonants one special character (ஃ, pronounced as "akku"): **31 alphabet letters,**
- He classified Tamil into sentamil (**classical Tamil**) and koduntamil (**dialectal of Tamilagam**),
- **Sangam literature**, a collection of 2381 poems by 473 poets (102 anonymous) developed
- Tamil script evolved from a Southern form of Brāhmī script

அ	ஆ	இ	ஈ	உ	ஊ
a	ā	i	ī	u	ū
எ	ஏ	ஐ	ஓ	ஔ	ஔள
e	ē	ai	o	ō	au
க	ங	ச	ஞ	ட	ண
ka	ṅa	ca	ña	ṭa	ṇa
த	ந	ப	ம	ய	ர
ta	na	pa	ma	ya	ra
ல	வ	ழ	ள	ற	ன
la	va	za	ḷa	ṟa	ṇa
ஐ	ஸ	ஷ	ஹ	க்ஷ	ஸ்ரீ
ja	ṣa	śa	ha	kśa	sri

Southern form of Brāhmī script

Evolution of Pāli (500-100BCE)

- Pāli, a Prakrit language of North India, Buddha himself spoke Pāli and **Pāli propagated with the spread of Buddhism**
- Pāli is a vernacular language, spoken in the kingdom of Magadh (Mauryan Empire),
- Pāli Grammar seemed to be Kaccayana (Pali school of Southern India),
- Pāli and Prakrit have some common inscriptions:
 - ✓ both used for western Ashokan Edicts at Girnar in Saurashtra, Central-Western Prakrit is found in the eastern Hathigumpha
- Word-stem forms of Pali and Sanskrit appears to be identical
- Pāli inherited Sanskrit Phonetics, Phonology and Morphology
- Writing systems used for Pāli:
 - ✓ Kharoṣṭhī, Brāhmī and Brahmi-derived scripts

Development of Lipi (लिपि, Script)

Writing system is a way to record different sounds with a series of shapes

- Writing is traced back to the Indus Valley civilizations (4000-3500bc)
- Why this writing was followed by a gap, and why writing reappeared in Classical Period is difficult to explain
- Vedic Period likely had writing alongside its oral tradition:
 - ✓ The Vedic literature is too vast, too consistent, and too complex to have been entirely created, memorized, preserved and spread without a written system (Jack Goody (1987)).

Development of Lipi (लिपि, Script)

(Continued)

- The term “lip” (लिप्) appears in many texts:
 - 4.4.23 of the Brihadaranyaka **Upanishad**, 5.10.10 Chandogya Upanishad, 2 in Isha Upanishad and 5.11 in Katha Upanishad and in Pāṇin **Aṣṭādhyāyī**
- Lalitavistara Sūtra describes that Siddhartha (500 BC-400BC) gained mastery of scripts at Brahmin Lipikara and Deva Vidyasinha, and lists 64 types of scripts (Georg Bühler (1898))
- Jaina texts list eighteen lipi’s, not all of which are in the Buddhist list.
- List of scripts in Jaina texts likely far older than the Buddhist list (Richard Salomon (1998)).

Evolution of Scripts in India

Indus Script signs (Harappan phase (3500-2000 BC)), attested on Ravi and Kot Diji pottery. The Indus signs occur in strictly ordered sequences that recur at many different sites.

Harappan, Punjab, India (3300–1300 BCE)			
Mohan Joda-Daro, Sindh, Pakistan, 2500			
Chanhudaro, Sindh, Pakistan, 4000-1700-BCE			
Allah-Dino, Karanchi, Pakistan, (2000 BCE)			
Lotahl, Bhāl Gujarāt, India, 3700 BCE			
Pabumath, Kutch district, Gujarat			
Desalpar Gunthli, Gujrat, India			
Kalibangan, Ghaggar, Rajesthan, India			
Hulas, Saharanpur, Uttar Pradesh, India			
Gonur Tepe, Turkmenistan			
Kish, city of Sumer in Mesopotamia, Iraq			

Ref: AIRĀVATI, Archaeology, Epigraphy and Numismatics; Felicitation volume in honour of Iravatham Mahadevan

Classical Period

Examples of Scripts and Possible icon Path

Indus to Post-Indus Periods (3500BC–200 BC)

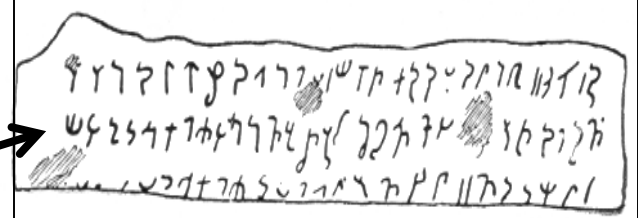
Classical Period

Indus



Kot Diji and Mature Harappan periods (3500-2000BC)

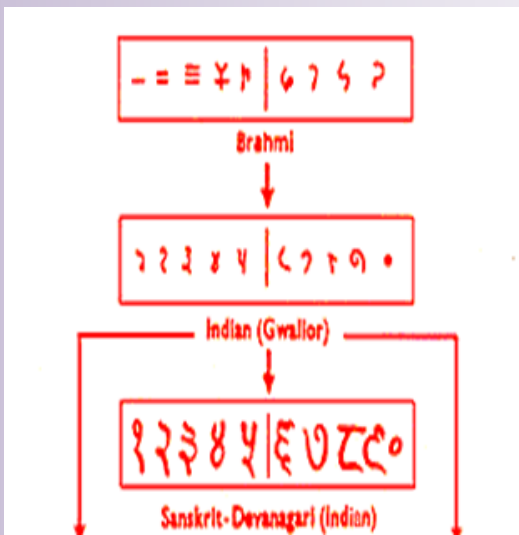
Kharoṣṭhī



Proto Brāhmī --> Brāhmī

Śāradā

𑀧	𑀘	𑀓	𑀔	𑀕	𑀖
a	ā	i	ī	u	ū
𑀫	𑀬	𑀭	𑀮	𑀯	𑀰
e	ai	o	ī	u	ū
𑀅	𑀆	𑀇	𑀈	𑀉	𑀊
ka	kha	ga	gha	ṅa	
𑀛	𑀜	𑀝	𑀞	𑀟	𑀠
ca	cha	ja	jha	ṅa	ṅa
𑀲	𑀳	𑀴	𑀵	𑀶	𑀷
ṭa	ṭha	ḍa	ḍha	ṇa	ṇa
𑀹	𑀺	𑀻	𑀼	𑀽	𑀾
ta	tha	da	dha	na	na
𑀿	𑁀	𑁁	𑁂	𑁃	𑁄
pa	pha	ba	bha	ma	ma
𑁅	𑁆	𑁇	𑁈	𑁉	𑁊
ya	ra	la	ḷa	va	
𑁋	𑁌	𑁍	𑁎	𑁏	𑁐
śa	ṣa	sa	ha		
𑀅	𑀆	𑀇	𑀈	𑀉	𑀊
ka	kā	ki	kī	ku	kū
𑀛	𑀜	𑀝	𑀞	𑀟	𑀠
la	lā	li	lī	lu	lū
𑀲	𑀳	𑀴	𑀵	𑀶	𑀷
le	lē	lo	lō		



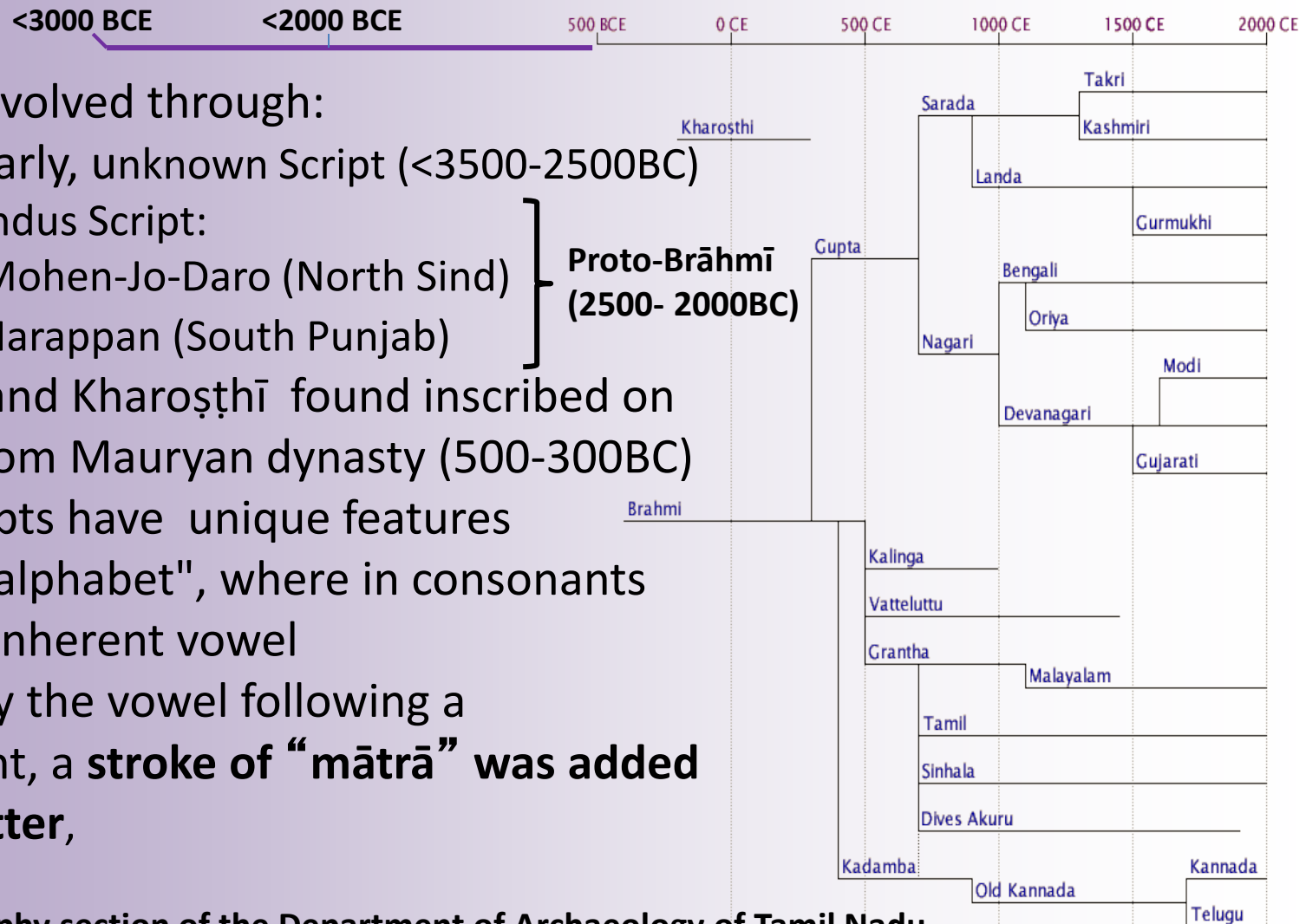
Numbers

𑀧	𑀘	𑀓	𑀔	𑀕	𑀖
a	ā	i	ī	u	ū
𑀫	𑀬	𑀭	𑀮	𑀯	𑀰
ka	kha	ga	gha	ṅa	
𑀛	𑀜	𑀝	𑀞	𑀟	𑀠
ca	cha	ja	jha	ṅa	ṅa
𑀲	𑀳	𑀴	𑀵	𑀶	𑀷
ṭa	ṭha	ḍa	ḍha	ṇa	ṇa
𑀹	𑀺	𑀻	𑀼	𑀽	𑀾
ta	tha	da	dha	na	na
𑀿	𑁀	𑁁	𑁂	𑁃	𑁄
pa	pha	ba	bha	ma	ma
𑁅	𑁆	𑁇	𑁈	𑁉	𑁊
ya	ra	la	va		
𑁋	𑁌	𑁍	𑁎	𑁏	𑁐
śa	ṣa	sa	ha		

1). http://www.ancient.eu/Brahmi_Script 2). <http://www.payer.de/exegese/exeg03.htm#Schriften> 3). <http://www.crystalinks.com/indus.html/>
<http://www.crystalinks.com/indiawriting.html>

Writing System in India – Scripts

- Writing evolved through:
 - an early, unknown Script (<3500-2500BC)
 - The Indus Script:
 - Mohen-Jo-Daro (North Sind)
 - Harappan (South Punjab)
- Brāhmī and Kharoṣṭhī found inscribed on stones from Mauryan dynasty (500-300BC)
- Both scripts have unique features "syllabic alphabet", where in consonants carry an inherent vowel
- To modify the vowel following a consonant, a **stroke of “mātrā”** was added to the letter,



Source: Epigraphy section of the Department of Archaeology of Tamil Nadu.

Literature

Unfolds structured presentation of human thoughts, history, legends, natural scenery and social conduct

Types of Literature Developed

- Legend and Folk Literature
- Philosophical Literature
- Knowledge Literature
- Religious Literature
- Other Literature

Type of Literature	Attributes	Period	Example	Assumption
Folk Tales	Story Telling	Primitive	Oral Language	Records of events/ efforts in understanding
Sravyakāvya (Poems): Poetry	Ritualistic, Chhandas, Metrical	Pre-Vedic and Vedic period	Vedas	Unravel Nature to make sense
Drśyakāya (Drama): Story telling	Historical (Itihas), Shloka, Metrical, Mahākāvya	Classical	Rāmāyana and the Mahābhārata	Probable effort to record history
Sāhitya : Prose Literature	Description, explanation and commentaries of Vedic rituals	Vedic - Classical	Brāhmaṇa, Aranyakas ,Upanishads	Facilitate Rituals
Sāhitya : Shashtra	Rationality, Empirical and Theories & Treaties.	Classical	Nyaya-Sutras, Artha-shastra, Nāṭya-sāstra	Scientific and Basic knowledge
Sāhitya : Sutra	Condensed Manual	Classical	Shulba Sutras, Kalpa Sūtra ,Mīmāṃsā-Sūtra	Condensed manual facilitate dispensation, recall and use

Class of Sanskrit Literature: Sravyakāvya (Poems), Drśyakāya (Drama), Sāhitya (Science of poetry, Chandas) (1937: M. Krishnamachariar)

Legend and Folk literature (Epic Poetry)

Ramayana and Mahabharata are Mahākāvya
(Great Poetic Compositions)

Rāmāyaṇam (रामायणम्) ascribed to Valmiki, consists of:

- narration of the struggle of Rama to rescue Sita from demon king Ravana,
 - 24,000 verses (śloka meter), seven Kandas (books) and 500 sargas (chapters),
 - Considered to be the adi-kavya (the first poem)
- **Mahābhārata**, longest known epic poem, ascribed to Ved Vyāsa
 - ✓ More than 100,000 ślokas, divided into 18 parvas
 - ✓ narrative of Kurukṣetra War between Kaurava and Pāṇḍava princes
 - ✓ Philosophical discussion of “four goals of life” or puruṣārtha
 - **Bhagavadgītā** (भगवद्गीता) (700 verses), the 6th book of Mahābhārata
 - Dialogue between Pandava prince Arjuna being counseled by his guide and charioteer Krishna about fulfilling his Kshatriya (duty) to establish Dharma,
 - Oldest preserved parts found to be from around 400 BC,
 - Earliest references to it are found in Aṣṭādhyāyī (6.2.38 , Pāṇini, 400 BC) and Aśvalāyana Gṛhyasūtra (3.4.4)

Philosophical Literature

- **Brāhmaṇa (ब्राह्मणम्, 900 - 700BC), Development of Prose Literature**
 - ✓ consists of ritual commentaries, procedures, justifications, and explanations. A total of 19 *Brāhmaṇas* exist, the oldest dated from about 900 BC, while latest *Brāhmaṇa* (such as the Shatapatha-*Brāhmaṇa*) was completed by about 700 BC. Codification of *Brāhmaṇa* and Aranyakas was completed by 600 BC.
- **Upanishads (800-500BC), 200 have survived, 14 are considered to be Important, Upanishad is commonly known as Vedānta:**
 - Metaphysical schemes of samskara, karma, dharma and moksha
 - Examples: Brhadaranyaka, Chandogya (700-600BC), Taittiriya, Aitareya, and Kaushitak

Vedānta explores our understanding of the origin and functioning of the universe!

Philosophical Literature (Continued)

- **Sūtra Literature**
 - **Rishi Kapila (700 BC) credited for Sāṅkhya-sūtra** (dualistic philosophy of Samkhya)
 - **Mīmāṃsā-Sūtra (मीमांसा सूत्र) Jaimini (300–200 BC)** reflection, consideration, profound thought, examination, and Emphasizes Pratyakṣa (perception),
- **Other:** Vedanga, Kalpa, Jyotisha, etc

Knowledge Literature - Language and Grammar

- **Nyāya-Sūtra (न्याय)** by **Aksapada Gautama (600 BC)**: knowledge and logic, has five books, with two chapters each; a total of 528 sutras
- **Aṣṭādhyāyī** (Eight Chapters) ascribed to Pāṇini (600BC-500BC): Treaty on grammar, science of phonetics, etc
- **Nirvacana-Śāstra** (lexicographic) or Nirukta, by Yāska (500 BC),
- **Mahābhāṣya** ascribed to **Piṅgala (400 BC)**, and **Mahābhāṣya** (महाभाष्य) attributed to **Patañjali (400BC)**, a commentary on Pāṇini's Ashtadhyayi,
- **Kātyāyana's Varttika (300BC)**, comprises an elaboration of Pāṇini's grammar, views of Vyāḍi and Vājapyāyana on the meaning of words, sentence-meanings and connection tended towards word-universal
- **Chandaḥ-Śāstra** by **Piṅgala (पिङ्गल 200 BC)** the earliest known treatise on Sanskrit prosody

Prolific work of Panini and others standardized human language and created the formal basis!

Language and Literature

Knowledge Literature - Secular

- **Artha-Śāstra** (science of Socio-economics) and **Niti-Śāstra** (compendium of ethics) by: Chanakya/Kauṭilya /Vishnugupta: 400 BC):
 - ✓ Envisioned a United India (Chandragupta and Bindusara)
 - ✓ Is an Early Indian political treatise on Socio-Politics and economy
- **Nāṭya-Śāstra** (नाट्य शास्त्र, Treatise on Dramaturgy, (300BC-200BC))
 - ✓ Ascribed to Bharata Muni, consists 36 chapters, 6000 poetic verses; it propounds the Rasa Theory, and it is the beginning of Alaṅkāra-Śāstra (science of figure of speech)
- **Kama-Sūtra** ,(कामसूत्र) (400BC – 200AD) credited to Vātsyāyana
 - ✓ discusses gracious living, the nature of love, family life, etc
- **Sāma-Veda** (सामवेद, 1200BC-1000BC) from sāman "song" is the Veda of melodies and chants, the first book on Music,

Chanakya's Behavioral Economics and Integration Politics created conditions that possibly invigorated the creation of a very rich literature in subsequent periods.

Knowledge Literature - Science and Technology

- **Caraka-saṁhitā** (चरकसंहिता), **Suśruta-saṁhitā** (सुश्रुतसंहिता) and **Bheḷa-Saṁhitā** (Ayurveda-Knowledge of Life) is a system of medicine that deals with Pathology, Diagnosis, Anatomy, Sensorial Prognosis, Therapeutics, Pharmaceuticals and Toxicology.
- **Vastu-Śāstra** (architectural science). The archaeological sites of Harappa and Mohen-jo-daro were built on these principles,
- **Piṅgala's Chandaḥ-Śāstra** is credited for **binary numbers** in the form of short and long syllables, a notation similar to that of the Morse code. Used the Sanskrit **word śūnya explicitly to refer to zero.**
- **Aṣṭādhyāyī of Pāṇini**, is a mathematical **model that reduces the logical structure of any computing device to its essentials,**
- Additional literature of this period deals with: Rasa-Śāstra, (Chemistry), Bhautika-Śāstra (physics), Jīva-Śāstra (biology), etc.

Ayurveda integrates and balances body, mind, and spirit, to prevent illness and promote wellness.

Religious Literature (Hindu)

Oldest evidence of religious practices in India date back to 5500 BC (Indus)

- **Dharma-Śāstra** (धर्मशास्त्र), a treatise of Hinduism, emerged from Kalpa (Vedanga) of Vedic period
- **Yoga-Sūtra is based on Yoga-Darsana of Patanjali**; deals with individual soul (jiva), intellect (buddhi) and self (atma)
- **Mimamsa-Sūtra** (मीमांसा सूत्र, 300BC-200BC) is ascribed to Jaimini; Emphasizes Vedic rituals that are essential for Dharma
- **Manusmṛti** (मनुस्मृति, 200BC-300AD) has discourses of Manu (Svayambhuva) and Bhrigu, related to duties, rights, laws, conduct, virtues; includes Mānava-Dharma-Śāstra (Laws of Manu).

Birth of Sanātana Dharma (सनातन धर्म), code of conduct: natural, ancient and eternal way

Jaina Literature in Prakrit

Vardhamana (Mahavira)'s principles of Non-Violence, Nirgrantha “Freedom from all ties” and Vegetarianism became the core convictions of Jainism

- **Kalpa-Sūtra (P)** (कल्पसूत्र, 599-527 BC) Bhadrabahu I.
 - ✓ Includes biographies of Jain Tirthankaras: Parshvanatha and Mahavira
 - ✓ Was composed 150 years after the Nirvāṇa of Mahavira
- **Jaina Agamas (P)**: tirthankara Rishabhanatha,
 - ✓ Svetambara sects: Śrutu Jnāna (Jinvani) had 11 angas + 14 purvas,
 - ✓ Digambara sect: 26 Agam-sutras (12 Ang-agams + 14 Ang-bahya-agams)
- **Jain text by Acharya Kundakunda (100BC)**: Samayasāra (Nature of the Self), Niyamasara (Perfect Law), Pancastikayasara
- **Ṣaṭkhaṇḍāgama (षटखंडागम) and Kāsāyapahuḍa (Sh)**: Compiled in 500BC by Jain Acharyas of the Digambara sect.
- **Puranas, Kosh, Sravakacara, mathematics, Nighantus (S)**

**Language: Prakrit (P), and Shauraseni (Sh) Language Literature

Mahavira refined Jainism and experimented on methods to gain human liberation!

Buddhist literature (Pitaka) in Pali

Three Baskets, or Tripiṭaka (Pali) and Tripitaka (Sanskrit)

Buddhist literature: includes vinaya (discipline), sūtra (discourses), and abhidharma (analytical texts)

- **Vinaya Pitaka** (Discipline, first), discipline of the sangha
 - ✓ Suttavibhanga: rules for monks and nuns, Khandhaka: Other rules and Parivara (parivāra): Analysis of the rules
- **Sutta Pitaka (Second) Buddha's teachings, five nikayas:**
 - ✓ Digha (dīghanikāya), Majjhima, Samyutta (saṃyutta-), Anguttara (aṅguttara-) and Khuddaka
 - ✓ Nikāyas, or action in terms of intention or choice (cetanā)
- **Abhidhamma Pitaka (third)**
 - ✓ Has seven books that explain Buddhist doctrines about mind; "systematic philosophy" basket

Law of karma: good actions produce good consequences, and bad actions lead to bad consequences!

Summary

During Classical Period:

- Multiple refined languages with scripts were established: Sanskrit, Prakrit, Pali, Tamil and others
- Language matured for formal basis of literary expression
- Massive educational centers were established: e.g., Taxila
- Deep knowledge was acquired in specific areas of Philosophy, Language, Science, Medicine, Socio-economics and Politics.
- A very high quality of scholarship developed
- The history of linguistics began, not with Plato or Aristotle, but with the Indian Grammarian Pāṇini. (Rens Bod (2013),
- This era is thus termed as a “Period of Rationality”!

Please note: details and dates used are as per the current assessments.

Unresolved Issues about the Classical Period

1. Dating Oral Vedic literature and Other Language and Literature.
2. Dating and details of ancient Dwarka (Dr. SR Rao's work).
3. The mystery of the period from 2000 BC - 1000 BC: what happened, and why is there no written trace?
4. How did Vedic literature survive? Was there a written record created and available?
5. Why did Panini's Alphabets and Grammar survive and became the foundation of the Indian Languages?
6. Sanskrit language was considered divine, and hence comprehensible only to a special class of people – the Brāhmaṇas. How did this status hurt proliferation of this scientific language?
7. Why was such a high scholarship developed and why did it prosper? Did India at this time have an economy of plenty, and was it socially secure and peaceful?

References

References:
Majumdar RC & A D Pusalker (eds.) (1951) The History and Culture of Indian People Vol II: The Age of Imperial Unity by R.C. Majumdar, et ed. ...Publisher: Bhartiya Vidya Bhawan, Mumbai, 400 007
The cultural Heritage of India, Volume II. Author, Ramakrishna Mission. Institute of Culture. Contributor, Sir Sarvepalli Radhakrishnan. Edition
A critical edition of the Nighantu and the Nirukta was published by Lakshman Sarup in the 1920s
Lipi References:
Jack Goody (1987). The Interface Between the Written and the Oral. Cambridge University Press. pp. 110–124. ISBN 978-0-521-33794-6.
Richard Salomon (1998). Indian Epigraphy: A Guide to the Study of Inscriptions in Sanskrit, Prakrit, and the other Indo-Aryan Languages. Oxford University Press. pp. 8–10 with footnotes. ISBN 978-0-19-535666-3.
Takao Hayashi (2008). Gavin Flood, ed. The Blackwell Companion to Hinduism. John Wiley & Sons. p. 365. ISBN 978-0-470-99868-7
Monier Monier Williams (1899), Lip, Sanskrit-English Dictionary with Etymology, Oxford University Press, page 902
Salomon, Richard; von Hinüber, Oskar; Falk, Harry (1995). "On the Origin of the Early Indian Scripts". Journal of the American Oriental Society. 115 (2): 271–279. JSTOR 604670. doi:10.2307/604670. http://www.ancientscripts.com/sa_ws.html
Epigraphy section of the Department of Archaeology of Tamil Nadu. Aksharamukha - Asian Script Converter.
Rens Bod (2013). A New History of the Humanities: The Search for Principles and Patterns from Antiquity to the Present.
Vedic Literature References:
Klaus Klostermaier (1994), A Survey of Hinduism, Second Edition, State University of New York Press, ISBN 978-0791421093, page 67,
Jan Gonda, Dutch Indologist and first Utrecht professor of Sanskrit,claims:"final codification of four Vedas, Brahmanas, Aranyakas and early Upanishads, in pre-Buddhist times (600 BCE)
A critical edition of the Nighantu and the Nirukta was published by Lakshman Sarup in the 1920s.
Science and Technology References:
- Vāstu, Astrology, and Architecture: Papers Presented at the First All India Symposium on Vāstu. Motilal Banarsidass Publications. 1998. p. 74.
(2010, Journal of Anatomy) Anatomy in ancient India: a focus on the Susruta Samhita, By: Marios Loukas,1 Alexis Lanteri,1 Julie Ferrauoli,1 R Shane Tubbs,2 Goppi Maharaja,1 Mohammadali Mohajel Shoja,3 Abhishek Yadav,1 and Vishnu Chellapilla Rao1; 1Department of Anatomical Sciences, School of Medicine, St George's University, Grenada, West Indies; 2Section of Pediatric Neurosurgery, Children's Hospital, Birmingham, AL, USA; 3Tuberculosis and Lung Disease Research Center, Tabriz University of Medical Sciences, Tabriz, Iran; Dr Marios Loukas, Department of Anatomical Sciences, St George's University, School of Medicine, Grenada, West Indies. T: 473 444 4175 x2556; F: 473 444 2887; E: ude.ugs@sakuolm
Scripts:
(Courtesy: Devanagari - Development, Amplification and Standardisation. Published by Central Hindi Directorate Ministry of Education & Social Welfare 1977)
Language Evolution – A Speculation
Paradigms of Knowledge and Instruction, S. Farnham-Diggory First Published September 1, 1994 ; S. FARNHAM-DIGGORY is H. Rodney Sharp Professor of Educational Studies and Psychology, Emeritus, University of Delaware, Newark, DE. She specializes in educational psychology, cognitive development, and reading.
Others:
vedāṅga jyotiṣaḥ (वेदाङ्गज्योतिषः) by Lagadha
Śulbasūtram (शुक्लसूत्रम्) by Baudhayana
Śulbasūtram (शुक्लसूत्रम्) by Apastambha
Nirukta (निरुक्त) by Yaska
Aṣṭādhyāyī (अष्टाध्यायी) by Panini
Chandaḥśāstra (छन्दःशास्त्र) by Pingala
Arthaśāstra (अर्थशास्त्र) by Kautilya
Carakasamhitā (चरकसंहिता) by Charaka
(recompiled by Agnivaesha in 4 th century AD)
Suśrutasaṁhitā (सुश्रुतसंहिता) by Suśruta
(translation by Bhaskar Govinda Ghanekar 1936)
Various works on Pratiśākhya and Upaniṣad literature



Thank you for your attention!