Study of Vedic Period

Language and Literature

Prem Nagar

Overview

Introduction to the Vedas

Vedic Language

Characteristics of the Vedic Language

Vedic Literature

Contents of the Vedic Literature

Retention of the Vedic Literature

Introduction to the Veda (वेद)

Vedas are believed to be the earliest literary composition of the world!

Text and Contents:

- They are scriptural poetic narratives of undetermined age containing prayers, philosophical dialogue, myth, ritual chants and invocation.
- They helped develop ritualistic procedures, social organization and an ethical code of conduct.
- The language and grammar appear local in origin.

Transmission:

- Composition in chhandas (छन्दः, meters) helped transmission over time.
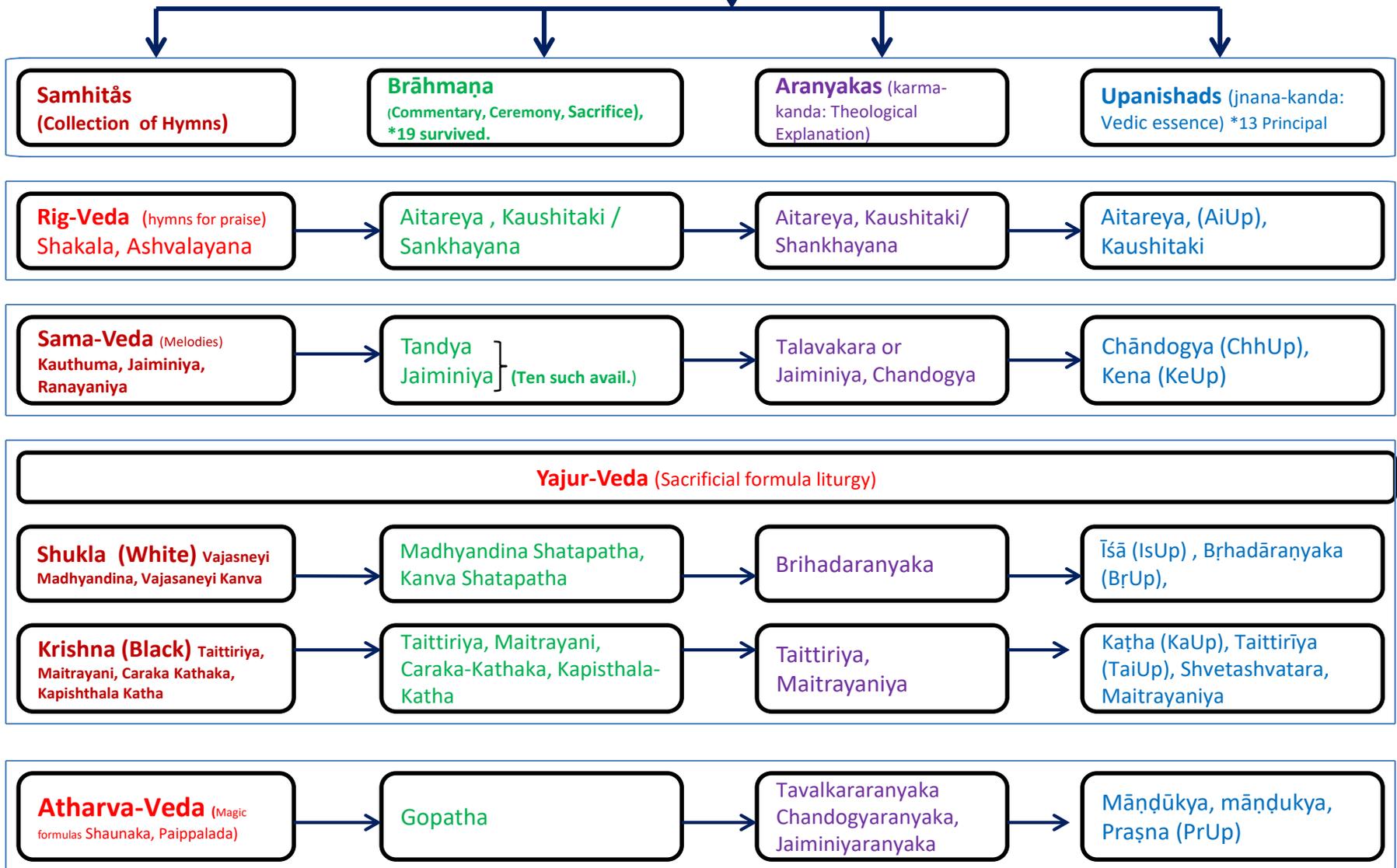
Lasting Impact

- Prayers and rituals are used for atonement and to alleviate grief.
- Philosophy and prescribed belief systems provided a foundation for culture in India.

What is Veda (वेद)

- Word Veda (वेद) signifies knowledge, traditionally considered eternal.
- The Vedas were handed down orally and are called śruti (श्रुति) literature:
  - Rig-Veda (ऋग्वेद) (RV) - Hymns of Praise (recitation)
  - Sama-Veda (सामवेद) (SV) - Knowledge of the Melodies
  - Yajur-Veda (यजुर्वेद) (YV) - Sacrificial rituals for liturgy
  - Atharva-Veda (अथर्ववेद) (AV) - Formulas
- They fall into four classes of literary works:
  - Samhitås (संहिता): rule-based verses (collection of hymns)
  - Aranyakas (आरण्यक): developed beliefs (theological explanation)
  - Brāhmaṇa (ब्राह्मणम्): explanations of rituals (ceremonies, sacrifices)
  - Upanishads (उपनिषद्): philosophy that has Vedic essence
- The Rig-Veda Samhitås are organized into:
  1. Mandalas (मण्डल, books) consisting of hymns called sūkta
  2. Sūktas (सूक्त) consist of individual ṛcs (stanzas)
  3. Pada (पद) is the unit of verse

TheVeda (śruti, श्रुति) Literature Organization

Shows relationship with assumed creation sequence →

Samhitås (Collection of Hymns)	Brāhmaṇa (Commentary, Ceremony, Sacrifice), *19 survived.	Aranyakas (karma-kanda: Theological Explanation)	Upanishads (jnana-kanda: Vedic essence) *13 Principal
Rig-Veda (hymns for praise) Shakala, Ashvalayana	Aitareya , Kaushitaki / Sankhayana	Aitareya, Kaushitaki/ Shankhayana	Aitareya, (AiUp), Kaushitaki
Sama-Veda (Melodies) **Kauthuma, Jaiminiya, Ranayaniya**	Tandya Jaiminiya] (Ten such avail.)	Talavakara or Jaiminiya, Chandogya	Chāndogya (ChhUp), Kena (KeUp)

Yajur-Veda (Sacrificial formula liturgy)

Shukla (White) Vajasneyi **Madhyandina, Vajasaneyi Kanva**	Madhyandina Shatapatha, Kanva Shatapatha	Brihadaranyaka	Īśā (IsUp) , Bṛhadāraṇyaka (BṛUp),
Krishna (Black) Taittiriya, **Maitrayani, Caraka Kathaka, Kapishthala Katha**	Taittiriya, Maitrayani, Caraka-Kathaka, Kapisthala-Katha	Taittiriya, Maitrayaniya	Kaṭha (KaUp), Taittirīya (TaiUp), Shvetashvatara, Maitrayaniya

| **Atharva-Veda** (Magic formulas Shaunaka, Paippalada) | Gopatha | Tavalkararanyaka Chandogyaranyaka, Jaiminiyaranyaka | Māṇḍūkya, māṇḍukya, Praṣna (PrUp) |

Vedic Language – Possible Origin

Is Vedic language Indigenous?

Were Vedic people indigenous or did they come from outside?

- There is no hint in Vedic literature for population movement beyond the mountains of north India.

- Analysis based on historical linguistics using sound and grammatical transformation do not find any change in the language.

Sárasvatī (सरस्वती) River paradigm in Vedic text

- Vedic composers drew inspiration from river Sárasvatī (RV 2.41.16).

- Veda speaks of Sárasvatī, as the largest river of the region (RV 7.95.1 - 2).

- Sárasvatī flowed for 2000 yrs (4000-2000 BCE), dried up by 1900 BCE

Contemporary language around Greater Punjab

Origin of the Vedic language

- Vedic geography described is consistent with the greater Punjab:
  - Nadistuti hymn (RV 10.75) mentions the Sárasvatī between Yamuna in east and Sutlej in west
  - Himavanto (RV 10.121.4) are relatively remote but still visible and reachable
- Vedic language, was spread across the whole of Sapta-Sindhu (सप्तसिन्धु) land (land of seven rivers), Doab, Punjab, till Kabul in Afghanistan and Haryana to Ganga-Yamuna
- Multiple vernacular languages existed around the region

Language	Region Spoken
Himalayan Belt	
Brahui	Spoken in parts of Baluchistan,
Dravidian	Spoken in North West including Baluchistan
Balti	Kashmir
Jaunsari	Uttarakhand, Uttar Pradesh, Himachal Pradesh
Western Belt	
Bhili	Gujarat& Rajasthan
Dhanki	Gujarat, Rajasthan & Maharashtra
Wagri	Rajasthan, Gujarat, Andhra Pradesh
Mavchi	Gujarat, Maharashtra
Central Belt	
Gujjari	Haryana, UP, MP, Rajasthan, Gujarat, Punjab,
Gondi	MP, Gujarat, Andhra Pradesh, Maharashtra, Chhattisgarh
Kui, Kuvi, Pengo	Odisha
Dravidian Belt	
Mundari	Jharkhand
North Munda	Plateau of Jharkhand, Chhattisgarh, West Bengal, and Odisha
South Munda	Central Odisha, border between Andhra Pradesh and Odisha
Korku (Munda Family)	MP, Maharashtra
Tulu, Koraga, Kodagu	Karnataka, Kerala

The snap shot of the vernacular languages spoken by the inhabitants around Vedic regions.

Where did the words come from?

What explains the Vedic Words?

- Words in the local vernacular were used in Vedic composition.

- Over 400 Dravidian and Munda words were found in Vedic text.

- Words compounded to create new words.

- Natural vernacular was prākṛta

English	Proto-Munda Words	Sanskrit
To adher or stick	latak , jatak	latkao, letkom, jetkom
Sticky Mud	las, pas	lat, pat
Kind of lute	tumbi-vina	tumba
Witch	saki	dakin
Sword	khadga	khadgahva
English	Dravidian/Dravidian	Sanskrit
Core	Karumam	Karma
King	Arasu, Rasa -Raja -Raj	Arasa, Rasa -Raja -Raj
Water	Neer , nira, ambu	ʻāp,Theer -Theerth
God	Theivam, Deiva	Theiva, Deva
Nest	Kulaya	kulaya
Flower	Pu	Puja

The Vedic Language was a spoken vernacular language that existed in Northwest India!

Vedic words challenges

- Some words and concepts appear common to Vedic, Avesta and Mittani

- Word Ārya (आर्य) is the self-designation of the ancient Iranians and of those Indian (ārya) who spoke Rig-Veda (RV)

- Word devá (देव) means 'god' in the Vedas and 'devil' in Avesta.

- Replacing 's' in a Vedic word with 'h' becomes Avesta.

- Some slokas may be common between the Vedas: RV 10:87:21 and Gatha 17:4 Yashna 53:4) (i)

- A treaty of Hittites and Mitannis circa 1400 BCE calls upon Indara/Indra, Mitras(il)/Mitra, Nasatianna/Nasatya and Uruvanass(il) /Varuna, all known to RV and Avesta

Words that appears common			
English	Veda	Avestan	Mitannis
gold	hiranya	zaranya	
army	séna	haena	
spear	rsti	arsti	
sovereignty	ksatra	xsaθra	
lord	ásura	ahura	
sacrifice	yajñá	yasna	
sacrificing, priest,	hótar	zaotar	
sacrificing, drink	sóma	haoma	
member of religious community	aryamán	airyaman	
god	devá (god)	daeva (devil)	
Servent	Dasa	Daha	
Week	Sapta	Hepta	
River Sindhu	Sindhu	Hindu	
Main Divinity	Varuna	Ahura Mazda	Uruvanass
God	Indra	Indra	Indara
Deity	Mitra	Miθra	Mitra
Deity	Nasatya	Nasatinna	Nasatinna
Deity	Varuna	Uruvanass	Uruvanass
River	Sarasvati	Haraxvati	
domesticated horse	aśva	ašvà (Lithuanian)	ašuua
horse-drawn chariots or chariot	ratha	rathestha	rattaš

Ref: Michael Witzel, Harvard University, Autochthonous Aryans? The Evidence from Old Indian and Iranian Texts.

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Vedic period challenges

- Horse drawn chariot developed in S. Russia around 2000 BCE with copper/bronze technology (i) Anthony and Vinogradov 1995, or Mesopotamia)

- Use of iron (Black Metal, śyåma) in India about 1200 BCE (ii). (Kak 1994, earliest (Chakrabarti 1979, 1992)

- Greater Punjab possibly did not know iron but knew copper/bronze,(W. Rau 1974, 1983)

- Large City like: Indus civilization was not known to Veda (armaka, Falk 1981) and of small forts (pur, Rau 1976)

- Vedic compositions are rural in character.

- Archaeologists have not found any wave of immigration into the Indian subcontinent after 4500 BCE (Kennedy 1995: 49-54, 2000)

- Avesta:
  - About a quarter of the original Avesta preserved
  - Avestan texts available is post-Zoroastrian
  - Some passages in Avesta is RV style; praise of certain gods (Miθra, Våiiu, etc.)

There are many chronological difficulties envisioned to ascertain where, what and when!

Ref: i). Anthony and Vinogradov 1995, or Mesopotamia), ii). (Kak 1994), earliest (Chakrabarti 1979, 1992, see now Possehl-Gullapalli 1999 for a much later date of c. 1000/900 BCE), iii). Michael Witzel, Harvard University, Autochthonous Aryans? The Evidence from Old Indian and Iranian Texts.

Characteristics of the Vedic language

An oral language that tried to map Universe in Human Voice by various phonetic arrangements and patterns.

- Phonetic rules:
  - In speech, vowels come first and consonants are arranged phonetically
  - Sounds change as a result of adjacent sounds, within and across words
  - Syllable (अक्षर ; Akṣara), Word (शब्द; Sabda), Sentence (वाक्; Vāc)

- Grammar (व्याकरण):
  - Concept of Gender (liṅga लिङ्ग), Vachana (वचन), vibhakti (विभक्ति), Inflection are observed
  - Verbs uses in Tense (Kālá (काल) and Mood (bhāva (भाव)):
    - **Six Tenses:** 1. Present (Vartamāna), 2. Past – imperfect (Anadyatanabhūta), 3. Past – aorist (Bhūta), 4. Past – perfect (Parokṣabhūta), 5. Future – likely (Anadyatanabhaviṣyan), 6. Future-certain (Bhaviṣya)
    - **Four Moods:** 1. Conditional (Saṅketa), 2. Potential (Vidhi), 3. Benedictive (Āśis), 4 Imperative (Ājñā)

- Concept of Anusvāra (Nasal sound), Visarga (multiple sounds) and Upasarga (combination or sandhi)

- Vocabulary and theory existed to create new word

This demonstrates cognitive economy was extensively in use!

Ref: (i). A VEDIC GRAMMAR FOR STUDENTS , By Aethur Anthony Macdonnell, The University of Oxford, The Claredon Press 1916

Vedic Language Structure: Akṣara, Sabda, Vāc

- Akṣara (अक्षर; syllable): Vedic text realizes syllables as basic roots:
  - Akṣara means sound-values, it is the nature of the varnas (syllables) composing (RV 1.164.39)
  - Alphabet is called varṇa-mālā or akṣara-mālā
- Sabda (शब्द; word): is the word manifested by the verbal sound
  - Sabda's sound is the guna (quality) of aksharas, (RV 10.114.8)
  - Sabda once spoken has innate power to convey a particular sense (Artha)
- Vāc: (वाक्; speech): speak, tell, utter, refers to cosmic sound envisioned:
  - Vāc (वाक्), a sentence, is a messaging system that conveys thoughts (RV 10.71.1-4)
  - Vāc (वाक्) as the earliest sounds mentioned in Rig-Vedic thought in RV 10.71.1-4, as the source of a language
- dhātu (धातुः) is a fixed set of words representing ideas

Chhanda (छन्द:)

- Vāc (वाक्) composed with syllabic arrangement and that structure repeats, and rendered with accurate pronunciation, intonation (स्वर) and rhythm, transforms a vāc to chhandas

- The Vedic texts are chhandas

- chhandas is the measurement of number of syllables; 8, 11 or 12 syllables in a pada (पद),

- Syllabic arrangement is known as vṛttaḥ (वृत्तः) (rhythm)

- Metrical unit of verse is the pada (पद; foot)

- Chhanda is the orchestration of Vāc, Inherent Intonation and rhythmic rendering that makes it melodic *

Poetry definition: literature that evokes a concentrated imaginative awareness of experience or a specific emotional response through language chosen and arranged for its meaning, sound, and rhythm. – Encyclopedia Britanica

Rasa (emotion) in some form leads to creativity. Rasa concept was well known to Vedic composers. (RV 1.187.4)*

*Rasas are the unique qualities which bring variety in things created whose source is one and one only. Vedic Poetic Narrative is the manifestation of rasa enjoyed by the Vedic composers!

Chhandas in some form exited before Vedic times. Chhandas gained importance since Veda was an oral poetry,

Ref: *Rasa- Sāṅkhya -Connecting Rasa to Neuroscience; By: Bijoy M Misra1, Prem S Nagar2,Bela Kosaras3, Jaspal Singh4

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Chhanda (Meter, Prosody)

- ṛc, a stanza, typically of three or four padas; a range of two to seven is found
- Rig-Veda has many types of meters: Example
  - Gayatri (गायत्री) meter has 3 verses of 8 syllables (6x4=24)
  - Anustubh (अनुष्टुभ्) with 4 verses of 8 syllables (8x4=32)
  - bṛhatī (बृहती) with 2 verses of 8 followed by 1 each of 12 and 8 syllables (9x4=36)
  - Tristubh (त्रिष्टुभ्) with 4 verses of 11 syllables (11x4=44)
  - Jagatī (जगती) meter with 4 verses of 12 syllables each (12x4=48)
  - Usnih (उष्णिह्) with 2 verses of 8 and 1 of 12 syllables (7x4=28)
  - Pankti (पङ्क्ति) with 5 verses of 8 syllables (10x4=40), etc
- Meters of the same length are distinguished by the pattern of laghu (light) and guru (heavy) syllables in the pada (पद)
- Anunduram Borooah (1850-1889) traced the origin, evolution and development of chhandas:
  - Age of Even Meter has Anustup, Jagati etc., precedence is given to Gayatri
  - Age of Uneven Meters applied to Usnik and Brihati
  - Age of Compound Meters: used for Atishakvari

Rishi (ऋषि, sage-poet-composer) in different Vedic Period might have coined different meters to suit their ideas!

Vedic Literature

- Vedas are called śruti (श्रुति) literature, distinguishing them from other texts, which are called smṛti (स्मृति) literature

- The śruti literature was compiled by self-realized Rishis (ऋषि), who appeared to have heard it in meditation and realize the meaning

- smṛti literature was possibly written in laukika Sanskrit or Sanskrit spoken by people

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śruti: Rig-Veda (RV) - Hymns of Praise

- The Rig-Veda is so called because it is comprised of ṛcs
- Rig-Veda includes 1028 hymns into ten mandalas (Book) and has 10,552 ṛcs, or 39,831 padas

  अग्निमीळे पुरोहितं यज्ञस्य देवं ऋत्विजम् | होतारं रत्नधातमम् || Rig Veda 1.001.01
    Gayatri
    - First eight books have hymns of praise of Deity: Agni (अग्नि), Varuṇaḥ (वरुणः), Indraḥ (इन्द्रः), Uṣā (उषा), Sūryaḥ (सूर्यः), and Maruts (मरुतः), etc.
    - RV 6.61 is entirely dedicated to Sárasvatī,
    - Seventh book has some secular hymns, Frog (7.103) and Dice (10.34)
    - Ninth book has Soma ritual
    - Tenth book has verses of wisdom, rituals for social wellbeing, etc
    - Meters used were Jagatī, Gåyatrī, Trishtubh, Anushtubh, etc

Predominantly discusses: Philosophy and more than half the hymns invoke gods of the moment: Indra (250 hymns), Agni (200 hymns), and Soma (over 100 hymns)

śruti: Sama-Veda (SV) – Melodies

- Sāma -Veda (SV) has sāman (song); Melodic arrangements of hymns of RV and others for chanting

- Sāmagāna (recitation in public) was the purpose of SV

- Uses intonation: high pitch udātta (उदात्त), low pitch anudātta (अनुदात्त), normal pitch svarita (स्वरित), example:

     3 1 2   3 1 2   3 12 3 2 3 1 2   1 2   3   1 2
  अग्निमीळे पुरोहितं यज्ञस्य देवं ऋत्विजम् | होतारं रत्नधातमम् ||

- Sama-Veda has two major parts
  - First includes four melody collections (*gāna*) and
  - Second has three verse "books" (*ārcika*).
    - A melody in the *gāna* (song) books corresponds to a verse in the *ārcika* books

- Vīṇā (lute, वीणा) is mentioned in RV, SV, Shatapatha Brahmana and Taittiriya Samhita

Sama-Veda is the "storehouse of knowledge of chants"!

The portion of the first song of Samaveda illustrates the link and mapping of Rig-Vedic verses into a melodic chant:

Sama-Veda transformation (Jaiminiya manuscript):
o gnā i / ā yā hi vā i / tā yā i tā yā i /

Translation: O Agni, come to the feast.
— Samaveda 1.1.1,
Translated by Frits Staal

Vina (lute)

The classical Indian music and dance tradition considers the chants and melodies in Sama-Veda as their roots.

śruti: Yajur-Veda (YV) – formula for liturgy

- Yajur-Veda has yajus (prose Mantra) and compilation of ritual offering formulas

- Two major branches of the Yajur-Veda found:
  - Krishna Yajurveda (Black) implies; the un-arranged and unclear verses
    - Krishna YV recensions has:1) Taittriya, 2) Kathaka, 3) Maitrayani, 4) Kapisthala-Katha

    इषेत्वोर्जेत्वांवायवंस्थोपायवंस्थदेवोवंस्सविता-प्रार्पयतुश्रेष्ठंतमायुकर्मण् आप्यांयध्वमग्नियादेवभागमूर्जस्वती:पयंस्वती:प्रजावंतीरनमीवा अंयुक्ष्मामावंस्तेन ईंशतमाऽघश सोरुद्रस्यंहेति:परिंवोवृणक्तु-ध्रुवास्मिनगोपंतौस्यातबह्रीर्यजंमानस्य पुशून्पांहि ॥ १ ॥ ॥ १.१.१ ॥

  - Shukla Yajurveda (White) implies; the well arranged and clear verses
    - Shukla YV recensions has: 1) Madhyamdina, 2) Kanva
    - Shukla YV 18.12 list the types of crops considered important in ancient India.

- YV has largest collection of primary Upanishads: Brihadaranyaka, Isha, Taittiriya, Katha, Shvetashvatara and Maitri

- Yajur-Veda formula and chhandas uttered during sacrificial fire (yajna)

- Each verse must accompany an action in sacrifice

śruti: Atharva-Veda (AV) - Magic formulas

- Atharva-Veda comprises of ṛcs and Yajus

- Atharva-Veda (AV) considered second oldest text and includes incantations and spells

   सं वो गोष्ह्ठेन सुषदा सं रय्या सं सुभूत्या ।
   अहर्जातस्य यन्त्राम तेना वः सं सृजामसि ॥ १॥ AV 3.14.1

- AV has two recensions (śākhā, शाखा), the Paippalāda (पिप्पलाद) and Śaunaka (शोणक)

- Paippalāda text exists in Kashmir and Orissa version

- AV is a late extension of "Three Veda"

- Some parts of the Atharva-Veda may be older than the Rig-Veda though not in linguistic form

- Spells for healing, removal of demons, love spells, and speculative hymns forces of the cosmos, etc.

- Unlike the other three Vedas, the AV is low on sacrificial rituals

Rig-Veda Authors

Families and Main composers

Traditionally, a ṛṣi (composer) is associated with each ṛc and most sūktas are attributed to a single family of composers. Main Families and authors credited are :

Mandala	Poems in Mandala	Composer Family	Poems by Family (ii)	Deity	Main Composer	(i) No. of Composers
1	191	**Angiras**	32	Indra, Agni	Kutsa Angiras	20
		Maitravaruni	27	Indra, Marut	Agastya Maitravaruni	
		Aucathya	25	Agni	Dirghatamas Aucathya	
		Rahugana	20	Agni	Gotama Rahugana	
		Kanva	19	Agni	Medhatithi Kanva	
		Vaisvamitra	17	Agni, Varun	Madhucchandas Vaisvamitra	
2	48	**Saunahotra**	36	Agni, Inndra, Others	Grtsamada Saunahotra	5
3	62	**Gathina**	48	Agni, Vishvedevas, Indra	Visvamitra Gathina	10
		Vaisvamitra	7	Agni, Vishvedevas	Prajapati Vaisvamitra	
4	58	**Gautama**	58	Agni, Ghrta	Vamadeva Gautama	1
5	87	**Atreya**	65	Agni, Indra, Mitra-Varuna, Ashvin, Visvedevas	Svasti Atreya	40
		Atri Bhauma	14	Agni	Atri Bhauma	
6	75	**Barhaspatya**	62	Agni,Pusan, Indra	Bharadvaja Barhaspatya	8
		Bharadvaja	5	Visvedevas, Indra, weapon	Rjisvan Bharadvaja	
7	103	**Maitravaruni**	103	Agni,Indra,Vasistha,Parjanya,Frogs	Vasistha Maitravaruni	3
8	103	**Kanva**	55	Indra, Varun, Adityas, Ashvins	Sobhari Kanva, Pragatha Kanva	70
9	113	**Kasyapa**	34	Apris, soma	Asita Kasyapa, Devala Kasyapa	60
		Angiras	24	Soma	Ayasya Angiras,Ucathya Angiras	
10	191	Angiras	17	Visvedevas,Dream,Dawn,King,Dakshina, Liberality,Agni, Brhaspati,Jnanam	Ayasya Angiras, Brhaspati Angiras	130
		Aindra	14	Indra	Vimada Aindra	
		Ailusa	5	Water	Kavasa Ailusa	

Notes: i). More than 347 families composed Vedic texts.; ii). Main Comoser Family highlited having 10% or more by a family

Source used: The Vedas An English-only, indexed version of the 4 Veda Samhitas in one document Issue 1, Draft 2 Compiled by the Dharmic Scriptures Team November 24, 2002

Contents of Vedic literature

Types of Hymns - Philosophical speculation on creation

- Cosmology and origin of the universe (Nasadiya Sukta) (RV 10.129)
- Rig Veda speculates about the origin of the cosmos. In Hiraṇyagarbha Sūkta, (RV 10.121), Hiraṇyagarbha is the manifested cosmos in Vedic philosophy. Suggesting a single creator deity (Rigveda (RV 10.121. 8) that is identified in the hymn as Prajāpati (creation of the World, RV 10.121.10)
- The concept of the golden womb is mentioned in the Vishvakarman Sūkta (RV 10.81 and also 82)

Hymn of Creation: It is concerned with cosmology and the origin of the universe. (Nasadiya Sukta):	
Deity	**Chhanda (Transliteration)**
Nasadiya Sukta (Creation) RV 10.127.1	nā́sad āsīn nó sád āsīt taḍấnīṃ nā́sīd rájo nó víomā paró yát kím ā́varīvaḥ kúha kásya śármann ámbhaḥ kím āsīd gáhanaṃ gabhīrám
Prajapati Hiranyagarbha sukta RV 10.121.	hiraṇyagarbháḥ sám avartaťāgre bhūtásya jātáḥ pátir éka āsīt sá dādhāra pṛthivī́ṃ dyā́m utémā́ṃ kásmai devā́ya havíṣā vidhema

Contents of Vedic literature

Types of Hymns – Rituals

- 10th Mandala – Rituals:
  - Against disease (RV 10.161, 163)
  - Against miscarriage (RV 10.162)
  - Conception (RV 10.183)
  - Successful birth (RV 10.184)
  - Wedding (RV 10.85)
  - Against rivals (RV 10.166)
  - Against witchcraft (RV 10.155)
  - Funeral (RV 10.14–16)
  - Safety of cattle (RV 10.169)
- Hymns for Ushas, Parjanya, Surya, Dream, Dawn, King, Dakshina and others
- Kalpa (Rituals' instructions): focused on standardizing Vedic rituals associated with life events, onduct and duties

Vedic prayers and rituals are used for atonement and to alleviate grief.

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Retention

- Vedic composers were generating knowledge and wisdom in Oral poetry form and they needed to preserve it.
  - Writing system in a reasonable form was nonexistent, though expression in the form of carvings and paintings existed
  - Storing and retrieval mechanism was only human memory
- Vedic composers had to rely solely on human memory function.
- They had to find ways and means to memorize texts in such a manner that the 'text and the meaning' could remain intact when passed on to the next generation
- They found Vedic chhandas structure that include orchestration of accurate pronunciation, Intonation and rhythm
- This possibly eased the memorization, retention and reproduction.

Chanting of Vedas proves memory power with perfect ability of recollection and rendition, (2015, Verbal memory specialists)

Vedanga (Pedagogy) - six disciplines

Vedanga is the pedagogy to teach and learn Vedic texts, and represents Sutra literature and has six disciplines to study:

1. **Shiksha (Phonetics, phonology, pronunciation):** alphabet, accent, quantity, stress, melody and rules of euphonic combination of words at Vedic recitation

2. **chhandas (Meter: chhandas, prosody):** on poetic meters, including based on fixed number of syllables per verse, and fixed number of morae per verse

3. **Vyakarana (Grammar; vyākaraṇa, linguistic analysis):** rules of grammar and linguistic analysis to establish words and sentences to properly express ideas

4. **Nirukta (Etymyology, nirukta, explanation of words):** words of archaic and ancient uses with unclear meaning, establish meaning in given context

5. **Kalpa (Rituals instructions, kalpa):** focused on standardizing Vedic rituals associated with life events; birth, wedding and death

6. **Jyotisha (Astronomy, jyotiṣa):** Auspicious time for rituals, astrology and astronomy.

Study of these helped in proper utilization of the vedas!

Traditionally the idea of Vedanga is:

मुखं व्याकरणं तस्य ज्योतिषं नेत्रमुच्यते ।
निरुक्तं श्रोत्रमुद्दिष्टं छन्दसा विचितिः पदे ।
शिक्षा घ्राणं तु वेदस्य हस्तौ कल्पान् प्रचक्षते ॥

Mukham vyakaranam tasya jyotisham netramucyate |
Niruktam shrotramuddishtam cchhandassa viciti pade
Shiksha ghranam tu vedasya hastau kalpan pracakshate ||

Vyakarana is the mouth of Vedas, Jyotisha is eye, Nirukta is ear, chhandas is leg, Shiksha is nose and Kalpa is hands. Thus, they are the angas (body parts) of Vedas. Hence they are known as Vedangas.

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In summary:

Thank you

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