



INDIC KNOWLEDGE LANDSCAPE

Ancient wisdom and Contemporary Relevance

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VEDAS

—

the source of
knowledge

ॐ सह नावतु । सह नौ भुनक्तु । सह वीर्यं करवावहै ।
तेजस्वि नावधीतमस्तु मा विद्विषावहै । ॐ शान्तिः शान्तिः शान्तिः ॥

वेदोऽखिलो धर्ममूलं स्मृतिशीले च तद्विदाम् ।

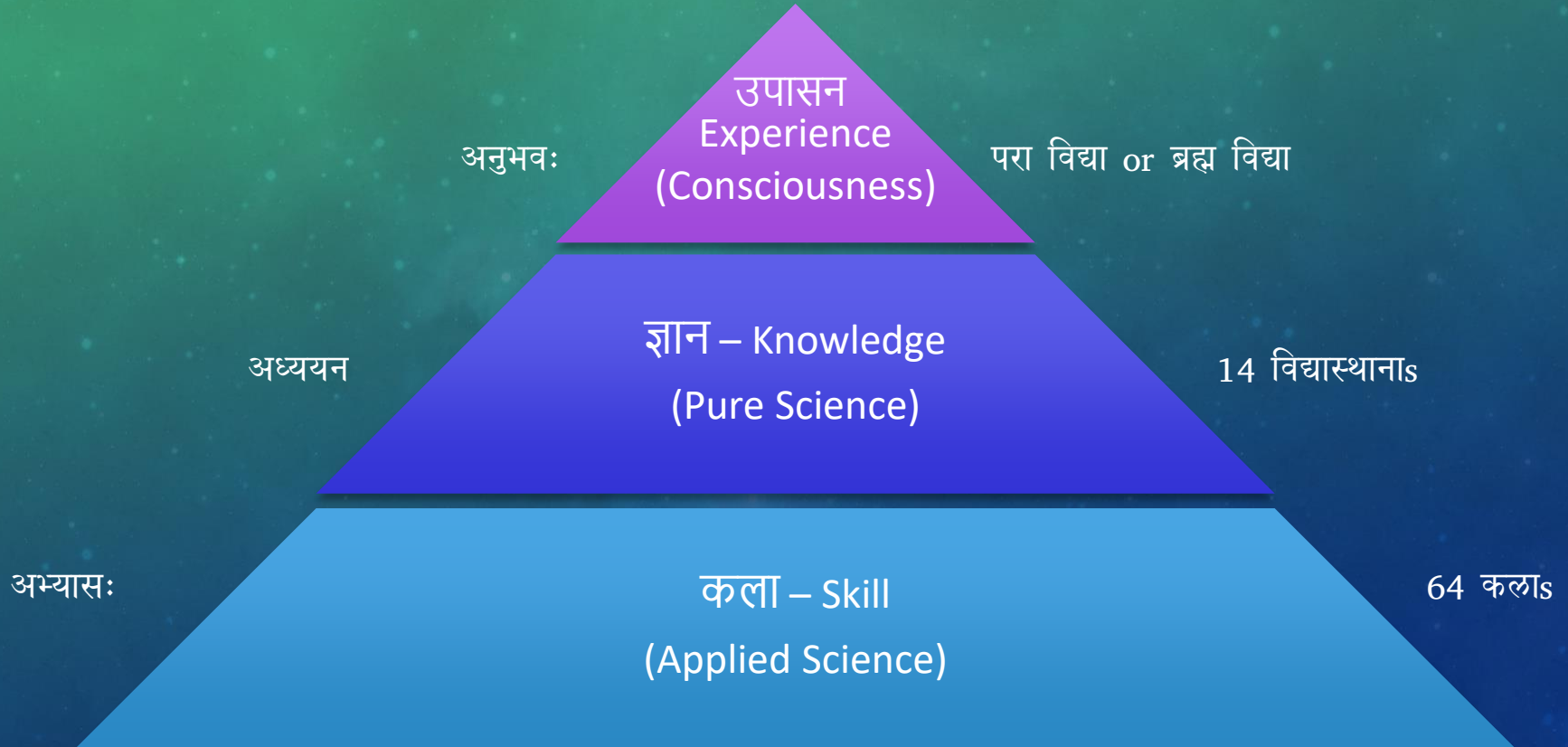
आचारश्चैव साधूनामात्मनस्तुष्टिरेव च ॥

vedo'khilo dharmamūlaṃ smṛtiśīle ca tadvidām |

ācāraścaiva sādḥūnāmātmanastuṣṭireva ca ||

The entire Veda is the root-source of Dharma; also the
Conscientious Recollection of virtuous persons versed in
the Veda, the Practice of Good (and learned) Men, and for
the satisfaction of the inner-self.

INDIC WAY OF LEARNING



UNDERSTANDING THE INDIC KNOWLEDGE SYSTEMS

- ✓ Principles of Vedic living - Purpose of the human life is to realize and know the ultimate truth. 4 Purusharthas. Yajña was central to the Vedic way of life.
- ✓ Working Knowledge of Sanskrit
- ✓ Understanding the Structure of Shaastric Texts - Almost all Shastras Granthas are written in a certain writing format to enable efficient teaching and memorization.
- ✓ *Shastra shikshana padhati* includes one or a few of the following ways of textual structure



CATURDAŚA- VIDYĀSTHĀNAM

अङ्गानि वेदाश्चत्वारो मीमांसा न्यायविस्तरः ।

पुराणं धर्मशास्त्रं च विद्या ह्येताश्चतुर्दश ॥

Angani Vedaschatvaro Mimamsa Nyayavistarah|

Dharmasastram Puranam cha Vidyahyetaschaturdasa||

“Four Vedas; Six Vedangas; Four- Mimamsa, Nyaya,
Dharmasastram, Puranam- these fourteen constitute Vidyas.”

CATURDAŚA-VIDYĀSTHĀNAM

Ṛg Veda

Āyur - veda

Sāma Veda

Gandharva - veda

Yajur Veda

Dhanur - Veda

Atharva Veda

Artha -śāstra

Vedāṅgas

Śikṣa

Vyākaraṇa

Nirukta

Chandas

Jyotiṣa

Kalpa

Purāṇas

Smṛiti

Itihāsas

Dharma Śāstras

Saṃkhya

Yoga

Nyāya

Vaiśeṣika

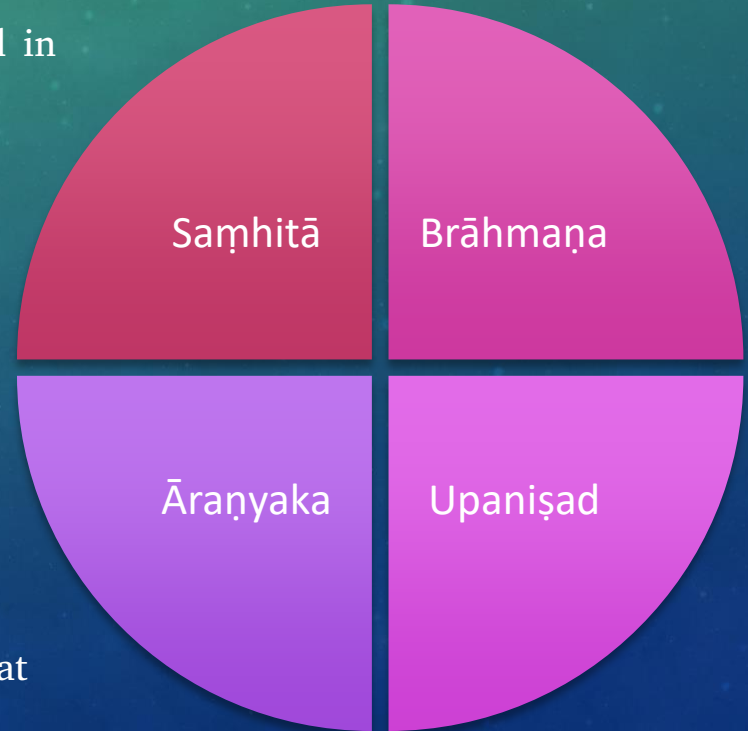
Pūrva-Mimāmsa

Uttara-Mimāmsa

Darśanas

STRUCTURE OF THE VEDAS

- ✓ ***Samhitās*** – The *Mantra* portion of the Vedas, presented in metrical form
- ✓ ***Brāhmaṇas*** – are the ritualistic part of the Vedas that is a collection of knowledge mainly confined to the performance of rituals & rites.
- ✓ ***Āraṇyakas*** – The content appears similar to that of Brahmanas. While Brāhmaṇas approach yajña from perspective of rituals, Āraṇyakas take a philosophical approach while discussing yajña.
- ✓ ***Upaniṣads*** – They are deepest philosophical treatises that contain the essence of Vedic teachings.

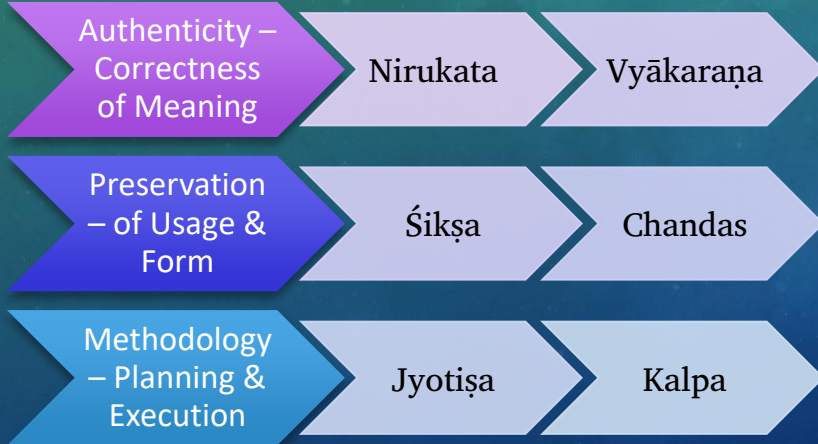


VEDĀNGAS

शिक्षा कल्पो व्याकरणं निरुक्तं छन्दसां चयः

ज्योतिषामयनञ्चैव वेदाङ्गानि षडेव तु

The *Vedāṅgas* are the tools/instruments by which the Vedas can be understood.



ŚIKṢA - PHONETICS

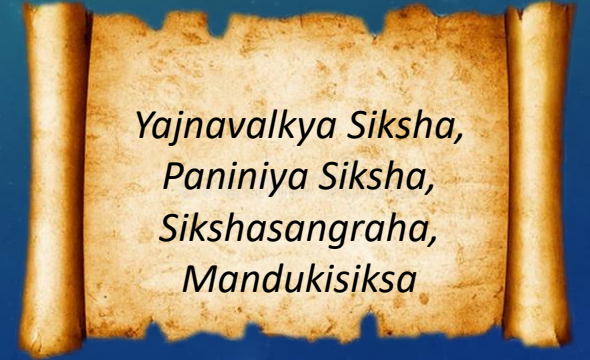
शीक्षां व्याख्यास्यामः । वर्णः स्वरः । मात्रा बलम् । साम
सन्तानः । इत्युक्तः शीक्षाध्यायः



Protection of Vedic pronunciation. Helps in Oral preservation. Deals with sound production, origin, enunciation, tone, duration, pitch, effort, etc.



Origin of the contemporary Phonetics and Phonology;
study of phonation/articulatory phonetics;



*Yajnavalkya Siksha,
Paniniya Siksha,
Sikshasangraha,
Mandukisiksha*

VYĀKARAṆA - GRAMMAR

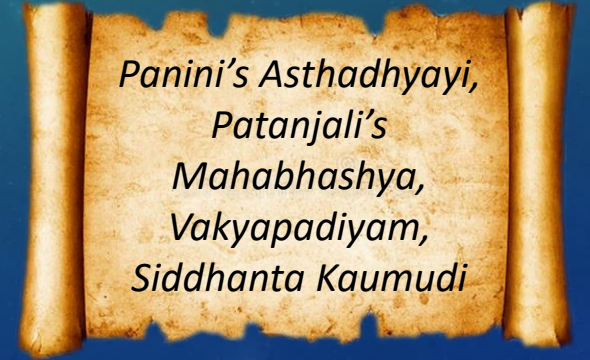
व्याक्रियन्ते विविच्य प्रदर्श्यन्ते अनेन शब्दाः इति व्याकरणम्
rakṣohāgamalaghvasandehāḥ prayojanam



It is discipline that deals with the study & analysis of Language. It helps in analysis & decomposition of words, word formation, root words, providing useful insights into the usage of words.



Linguistics; origin of many modern general linguistic notions such as sandhi, internal and external sandhi, morpho-phonemics, Natural Language Processing.



*Panini's Asthadhyayi,
Patanjali's
Mahabhashya,
Vakyapadiyam,
Siddhanta Kaumudi*

NIRUKTA - ETYMOLOGY

वेदांश्च वेद्यं तु विधिं च कृत्स्नमथो निरुक्तं परमार्थतां च
Mb.12.245.3

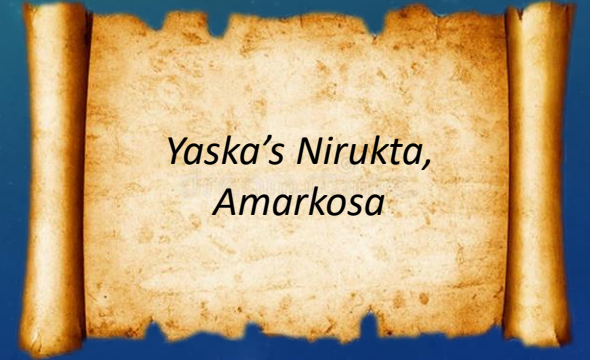
वर्णागमो वर्णविपर्ययश्च द्वौ चापरौ वर्णविकारनाशौ ।
धातोस्तदर्थतिशयेन योग- स्तदुच्यते पञ्चविधं निरुक्तम्



Protection of semantics of Vedas. It explains the reason why a particular word has been used i.e., the meaning of usage.



Origin of many contemporary linguistic ideas, etymologies, theories of origin of words from noun and verb roots, multiple interpretations of the same expression, hermeneutics etc.



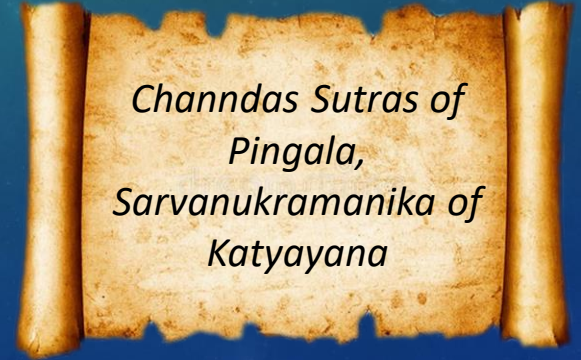
CHANDAS – SCIENCE OF METRES/PROSODY



Protection of Vedic oral text. It provides details on the types of meter used in the construction of various Vedic hymns. Oral preservation and preventing corruption



Mathematics; binary number calculations; origin of zero; combinatronics etc



*Channdas Sutras of
Pingala,
Sarvanukramanika of
Katyayana*

JYOTIṢA – SCIENCE OF LIGHT

यथा शिखा मयूराणां, नागानां मणयो यथा ।
तद् वेदांगशास्त्राणां, गणितं मूर्ध्नि वर्तते ॥



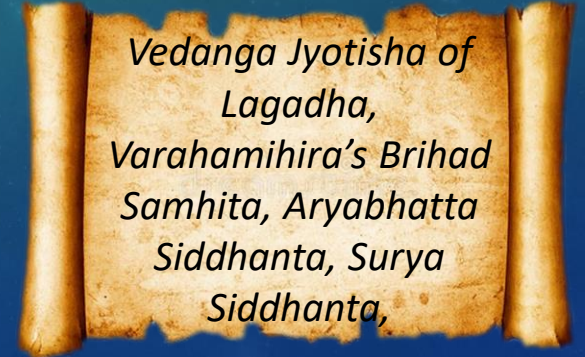
Protection of space and time knowledge in Vedas.
Vedāṅga Jyotiṣa concerns itself with the study and prediction of the movements of celestial bodies, in order to calculate the auspicious time for rituals and ceremonies



Astronomy, meteorology etc

Eg. Arundhati – Vasishta Nakshartas (Twin star system), Idea of ecliptes, positions of celestial body

Vedanga Jyotiṣa vs Phalita Jyotiṣa



KALPA – AN OPERATIONS MANUAL

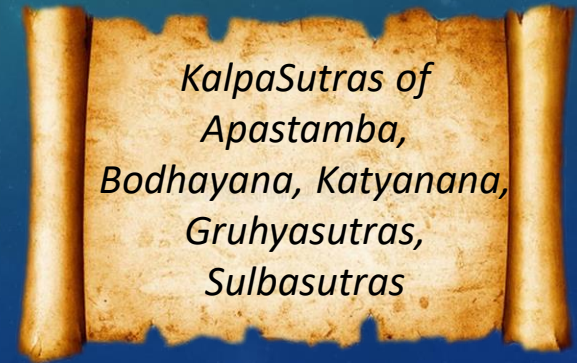


Protection of Yajña procedures – it was an operational manual on how to perform Yajna's



Great mathematical treatises are available in Kalpa, especially Geometry.

Eg. Indians had ~18 Estimates for the value of Pi much ahead of modern mathematicians



*KalpaSutras of
Apastamba,
Bodhayana, Katyanana,
Gruhyasutras,
Sulbasutras*

DARŚANAS

—

Schools Of
Indian
Philosophy

प्रज्ञाविवेकं लभते विभिन्नागमदर्शनैः ।

कियद्वा शक्यमुन्नेतुं स्वयत्नमनुधावता ॥

Prajñāvivekaṁ Labhate Vibhinnāgamadarśanaiḥ |

Kiyadvā Śakyamunnetuṁ Svayatnamanudhāvatā

The one who reads, understands and contemplates on an idea
by looking at it from various perspectives/reasoning, will
develop wisdom and the distinction between right and wrong.
For how much can one learn solely from his experiences?

SCHOOLS OF INDIAN PHILOSOPHY

Āstika-darśanas



Sāṃkhya



Yoga



Nyāya



Vaiśeṣika



Pūrva-Mīmāṃsa



Uttara-Mīmāṃsa (Vedānta)

Jainism

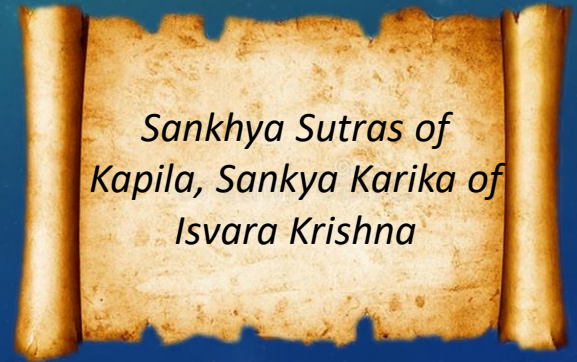
Buddhism

Cārvāka

Nāstika-darśanas

SAMKHYA

- ✓ The word *Samkhya* is derived from *Samkhyā*, which means number. Another meaning of *Samkhya* is *Samyak Khyati* (right knowledge).
- ✓ It's a dualist philosophy that postulates that the universe is consisting of two independent realities, *puruṣa* (consciousness) and *prakṛti* (matter).
- ✓ Samkhya enumerates and analyses the twenty-five principles of evolution of this universe
- ✓ *Prakṛiti* is made up of three *Gunās* – *Sattva*, *Rajas*, *Tamas*
- ✓ It lays the foundation for the systems of health and well being like Yoga and Ayurveda

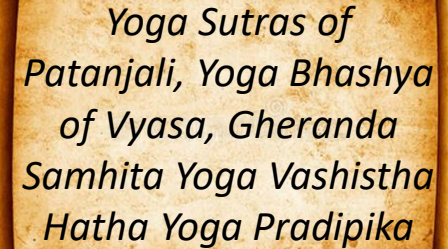


YOGA – VEDIC PSYCHOLOGY

योगश्चित्तवृत्तिनिरोधः - पातञ्जलयोगसूत्राणि

तां योगमिति मन्यन्ते स्थिरामिन्द्रियधारणाम् - कठोपनिषत्

- ✓ Yoga accepts the Samkhya psychology, metaphysics and builds upon it. Accepts Ishvara.
- ✓ There are various types of Yogic Practices – Yama, Niyama, Asanas, Pranayama, Mudras, Bhandas, Dhyana
- ✓ Yoga is an discipline designed to bring balance and health to the physical, mental, emotional, and spiritual dimensions of the individual.
- ✓ Modern day Psychology, study of mind, cognitive thinking, consciousness, etc.

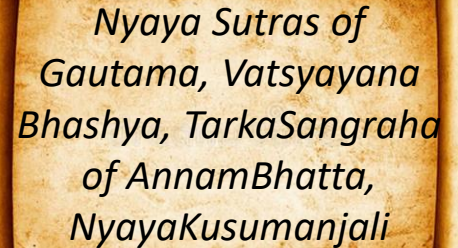


*Yoga Sutras of
Patanjali, Yoga Bhashya
of Vyasa, Gheranda
Samhita Yoga Vashistha
Hatha Yoga Pradipika*

NYĀYA – LOGIC & REASONING

नीयते विवक्षितार्थः अनेन इति न्यायः
प्रमाणैर्यपरीक्षणं न्यायः

- ✓ The *Nyāya Sutra* is also called *Tarka-sastra* and is designed to perform a “critical examination of the objects of knowledge by means of the canons of logical proof”
- ✓ The methodology of the *Nyāya* School focuses on the ways and means to acquire knowledge and does not delve into the nature of knowledge. Logic is offered as the tool that will eliminate false knowledge
- ✓ Metaphysics. Epistemology. Beautiful treatises on Logic and argumentation and establishing evidence.

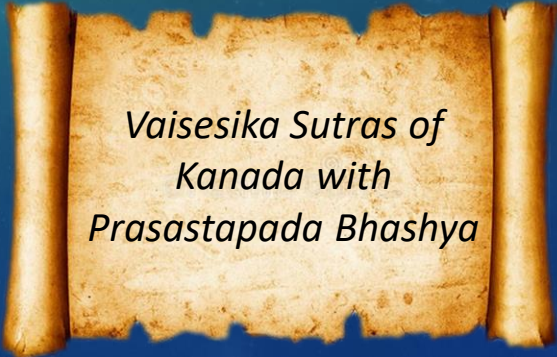
A scroll with a torn, aged appearance, containing text in a serif font. The text is centered and reads: "Nyaya Sutras of Gautama, Vatsyayana Bhashya, TarkaSangraha of AnnamBhatta, NyayaKusumanjali".

Nyaya Sutras of
Gautama, Vatsyayana
Bhashya, TarkaSangraha
of AnnamBhatta,
NyayaKusumanjali

Eg - <http://indiafacts.org/sabarimala-a-tark-vitark/>

VAIŚEṢIKA

- ✓ Vaiśeṣika system deals with ontology - classifying the world into objects, categories, and their relations
- ✓ The term Vaiśeṣika is derived from the term “vishesa”. The Vaiśeṣika system deals with the explanation of Vishesha (particular variety/individuality/specialty) of objects
- ✓ Concepts and topics related to atomicity, space, time, etc are discussed in detail in this Philosophy
- ✓ Modern day Physics, Particle Physics

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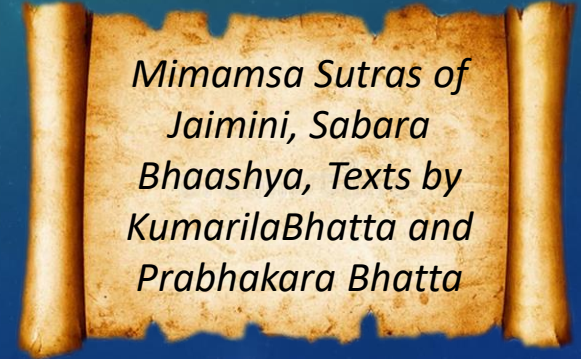
*Vaisesika Sutras of
Kanada with
Prasastapada Bhashya*

<https://arxiv.org/ftp/physics/papers/0701/0701077.pdf>

https://www.researchgate.net/publication/281863959_Particle_Physics_and_the_Vaisheshika_System_A_Comparative_Analysis

PŪRVA-MIMĀMSA – HERMENEUTICS

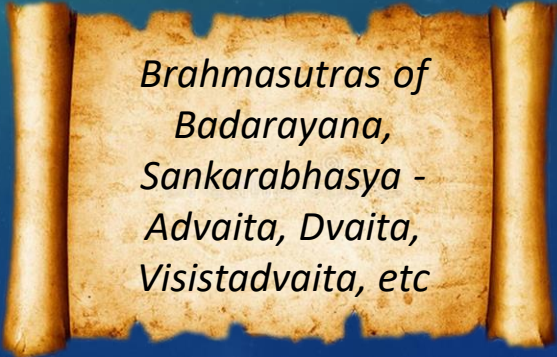
- ✓ The attempt to preserve and interpret the **content** of the Vedic Knowledge gave rise of *Pūrva-Mimāmsa* and *Uttara-Mimāmsa*
- ✓ Although originally they were created for interpreting the Vedas, gradually they came to be utilized for interpreting legal texts and also for interpreting texts on philosophy, grammar, etc.
- ✓ The concept of Adhikarana – viśayah, *sanśeya*, *pūrvapakśa*, *uttarpakśa*, *siddhanta*
- ✓ Science of Interpretation. Discourse Analysis, Hermeneutics.
- ✓ Eg. Use of Mimamsa principles by Retired Supreme Court Judge Markandey Katju



UTTARA-MIMĀMSA – VEDANTA

अथातो ब्रह्म जिज्ञासा

- ✓ The word Vedanta is two-fold – ‘veda’ meaning ‘knowledge’ and ‘anta’ which signifies ‘culmination’. Therefore, Vedanta translates as a “culmination of a process of knowledge” or the ‘highest knowledge’.
- ✓ Various School of Vedanta - Advaita, the school of nondualism of Shankara, Vishishtadvaita or the school of qualified non-dualism of Ramanuja, Dvaita, or the school of dualism of Madhva, Dvaita Advaitam, Suddha Advaita, Achintya Bhedabheda
- ✓ Quantum Mechanics/Physics, Consciousness studies

A scroll with a torn, aged appearance, containing text in a serif font.

*Brahmasutras of
Badarayana,
Sankarabhasya -
Advaita, Dvaita,
Visistadvaita, etc*

UPAVEDAS & OTHERS

अंगानि वेदाश्चत्वारो मीमांसान्यायविस्तरः ।

पुराणं धर्मशास्त्रं च विद्या होताश्चतुर्दश ॥

आयुर्वेदो धनुर्वेदो गान्धर्वश्चैव ते त्रयः ।

अर्थशास्त्रं चतुर्थं तु विद्या ह्यष्टादशैव ताः ॥

-विष्णुमहापुराण, 3.6.27-28;

Aṅgāni vedāścatvāro mīmāṃsānyāyavistarah|
purāṇaṃ dharmaśāstraṃ ca vidyā hyetāścaturdaśa||

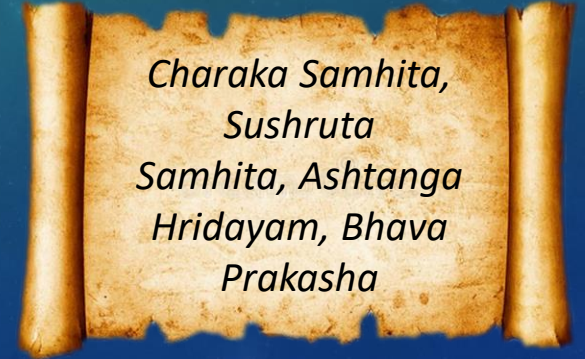
Āyurvedo dhanurvedo gandharvaśceti te trayah|

Arthaśāstraṃ caturthañca vidyāaṣṭādaśaivatāh||

ĀYURVEDA – SCIENCE OF LIFE

समदोषः समाग्निश्च समधातुमलक्रियः ।
प्रसन्नात्मेन्द्रियमनाः स्वस्थ इत्यभिधीयते ॥

- ✓ The term Ayurveda consists of two words, ayu (life) and veda (knowledge) and deals with health and well-being. *Ayu* is derived from the Sanskrit root 'in gatau' or Gati, which means movement.
- ✓ The term Ayurveda is not limited to medicine, cure or therapy, rather it implies an approach to life and living, and is guided by the *praneshana* (desire to live a long healthy life), *dhaneshana* (desire to gain wealth), and *paralokeshana* (desire to secure happiness after-life)
- ✓ Health & Wellness, Medicine, Nutrition, Biology.



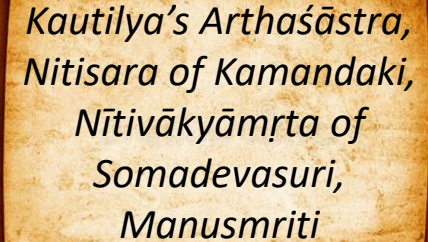
Charaka Samhita,
Sushruta
Samhita, Ashtanga
Hridayam, Bhava
Prakasha

ARTHAŚĀSTRA – ECONOMICS, POLITICS & ADMINISTRATION

धनधान्यप्रयोगेषु विद्यासंग्रहणेषु च ।
आहारे व्यवहारे च त्यक्तलज्ज सुखी भवेत् ॥

प्रथमे नार्जिता विद्या द्वितीये नार्जितं धनं ।
तृतीये नार्जितं पुण्यं चतुर्थे किं करिष्यति ॥

- ✓ Kautilya's *Arthaśāstra* is the most important work on Public Administration in Ancient India. Unfortunately, the writings were not discovered until 1905 by Shamashastri.
- ✓ Kautilya's *Arthaśāstra* discusses the principles of Public Administration, the machinery of government, its personnel and the economic ideas for a welfare state.
- ✓ Economics, Public Administration, Politics, Taxation, Law and Order, Trade, Warfare.



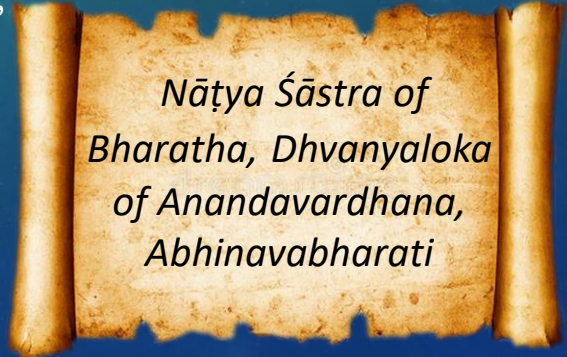
*Kautilya's Arthaśāstra,
Nitisara of Kamandaki,
Nītivākyāmṛta of
Somadevasuri,
Manusmṛiti*

VEDIC AESTHETICS

अपरे काव्यसंसारे कविरेकः प्रजापतिः ।
यथास्मै रोचते विश्वं तथेदं परिवर्तते ॥

- dhvanyaaloka

- ✓ There are exhaustive works in Sanskrit literature about the principles & components of beauty, aesthetic experience, style, process of creativity.
- ✓ Dhvani Theory, Rasa, Flash, Rasa theory, Dhvani theory, Rīti theory, Alaṅkāra theory, Aucitya theory, Vakrokti theory
- ✓ Relevant across modern art forms like - Nāṭya(Drama), Kāvya/Kavitva(Poetry), Nṛtya(Dance), Nāṭaka /Rūpaka(Plays), Saṅgīta(Music), Śilpa(Sculpture)/Vigrahanirmāṇa, Citralekhana (Painting)

A scroll with text, likely representing a classical text. The text is in Sanskrit and English.

*Nāṭya Śāstra of
Bharatha, Dhvanyaloka
of Anandavardhana,
Abhinavabharati*



THANK YOU