

Exploring Indian Knowledge Systems: Debunking Myths and Revealing Truths

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Abstract

The term ‘Indian Knowledge Systems’ has gained popularity recently, but its meaning remains unclear. Some people interpret it as referring to the rich cultural heritage of this nation, while others associate it with Hinduism, Sanskrit, and scriptures, some feel it is an attempt to reinforce the caste system in this country, while others feel it to be an attempt to negate the developments brought about by the foreign rulers and may be unnecessarily glorifying a long gone past rather than focusing on the present challenges. The understanding is clearly varied and hence, it is extremely important to clarify, what this term stands for. This chapter attempts to give a clear, systematic understanding of this term, what it consists of, and if it is needed. By carefully examining all the conceptions and misconceptions, this chapter aims to provide factual insights into the ‘Indian Knowledge Systems’.

Introduction

For the last many years, the term ‘Indian Knowledge Systems’ has gained popularity globally. Still, the understanding of the word varies greatly among different populations and individuals. This chapter is an attempt to give a clearer understanding of the term. The topics to be covered are as follows:

1. What is a Knowledge System?
2. Why do knowledge systems differ?
3. Myths and Facts about Indian Knowledge Systems
4. Why Indian Knowledge Systems?

1.1 Knowledge and Knowledge Systems

Before beginning with the discussion, it is essential to understand the meaning of the term ‘Knowledge’. It is not easy to define the term since there have been ongoing debates for centuries to define its nature, characteristics, and functions. **For our understanding of the word here, it can be said that every human being is curious about knowing about things and activities happening within and without. Knowledge is the answer to that curiosity. The experiences and information gained are Knowledge.** Based on the object of knowing, knowledge can broadly be categorized into two categories: Eternal Knowledge i.e., the knowledge that is universal, constant, or devoid of change, and the other is the one that keeps changing and evolving with space and time. For example, the understanding of the term ‘health’ has significantly changed over the years. For a long time, the term was linked to only physical illnesses, but the current popular definition of the term as given by the World Health Organization (WHO) has included the mental and social components. The WHO Constitution (1948) defined health as a state of complete physical, mental, and social well-being and not merely the absence of disease

or infirmity. The research community still doesn't seem content with the current understanding and hence, further modifications over time are bound to occur. (Svalastog et al., 2017) The same applies to all other disciplines.

Plants and animals inherently possess this knowledge that governs their behavior and survival instincts, a trait often lacking in humans. For instance, animals instinctively treat themselves when ill, displaying a natural understanding of remedies. Similarly, plants demonstrate remarkable capabilities such as converting sunlight, water, and nutrients into chlorophyll for energy. Birds exhibit an innate ability to select appropriate materials and construct intricate nests, showcasing their inherent knowledge of architecture. In contrast, humans possess a unique capacity for reasoning and curiosity, driving the exploration of various domains of knowledge. This innate curiosity fuels scientific inquiry into the natural world, leading to advancements in fields like biology and ecology. Additionally, human curiosity extends to understanding the complexities of human behavior, giving rise to the development of social sciences aimed at unraveling societal dynamics and individual interactions. Thus, while plants and animals rely on inherent knowledge for survival, humans leverage their capacity for questioning and exploration to expand the boundaries of knowledge across diverse disciplines. This exploration gives rise to the creation of knowledge systems.

A knowledge system is a structured repository dedicated to discussing the creation, verification, utilization, adaptation, and modification processes of knowledge.

Each knowledge system follows a unique methodology for generating, validating, categorizing, and elucidating knowledge. For instance, in the field of chemistry, elements are systematically arranged in the periodic table according to their atomic numbers, which dictate their fundamental properties. This arrangement organizes elements into periods and groups, facilitating a structured understanding of their characteristics and behaviors. Elements with

similar properties are grouped together, simplifying the study of their compounds and interactions within the table's framework.

Likewise, Āyurvedic texts employ a distinct organizational structure, categorized based on different areas of study (disciplines) and sthāna (sections based on important principles). This dual classification system serves to systematically arrange and present the vast body of knowledge contained within Āyurveda. By organizing texts according to disciplines and sthāna (sections), Āyurvedic literature offers a comprehensive framework for understanding the principles, practices, and applications of traditional Indian medicine.

In summary, each knowledge system employs its own unique approach to organization and classification, tailored to its respective field's principles and objectives. Whether it be the systematic arrangement of elements in chemistry's periodic table or the categorization in Āyurvedic texts, these organizational frameworks serve to streamline the acquisition and dissemination of knowledge within their respective domains.

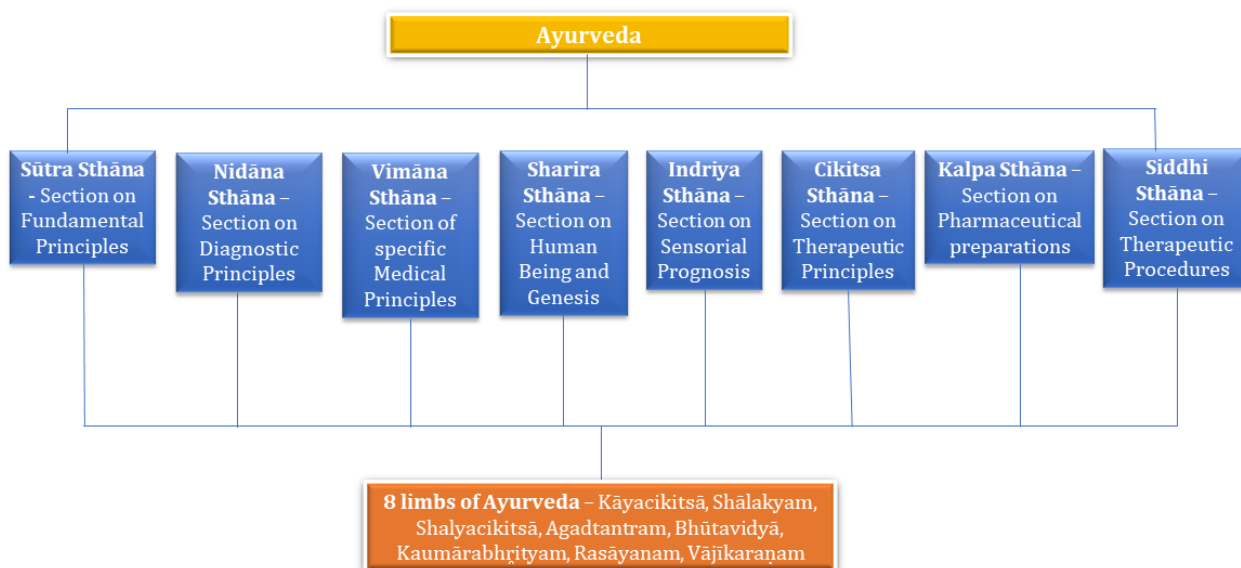


Figure 1. The classification followed in Āyurveda based on sthāna (principles) and limbs (disciplines) (as annotated by the author)

Any Knowledge System becomes a knowledge system when it is agreed upon by communities of people. Throughout history, various schools of philosophy have emerged and gained prominence because their philosophical theories found acceptance within certain communities. Similarly, the application and adaptation of knowledge also follow a similar trajectory. For instance, imagine a form of massage where the masseuse (the person who gives massage) uses their sole of the feet to slowly and gently presses the receiver's body at different pressure points until the whole body is covered. Therefore, the entire massage is given through the feet. Listening about it for the first time might have appeared very strange some years ago, but today this exists as an entire science named Rakkenho that was created by Yugen Yamanouchi, a priest from the Shingon Esoteric Buddhist tradition in Japan and infact has roots in Yoga.



Figure 2. A pictorial representation of Rakkenho
(<https://www.srisriwellbeing.com/rakkenhotreatment>)

Initially, this technique would have been a mere claim until it underwent rigorous experimentation, verification, and eventual acceptance by a community of individuals, particularly within the realm of health sciences. Thus, for any random information to become a knowledge system three conditions are mandatory

which are:

1. Style of organization
2. Explanation of the concept
3. Acceptance by a community of people

Only when information can be developed at these three levels can it be called a knowledge system. Similarly, if someone today says that one can get power to time travel by dancing in a

particular way and calls it the science of dance telepathy. It will only remain an arbitrary statement until someone can prove it through experimentation, validate it and until a community accepts it. Only then will the knowledge system of dance telepathy be accepted as authentic/bonafide knowledge. In essence, the evolution of any Knowledge System entails not only the generation and dissemination of information but also its critical evaluation and validation by communities, thereby transforming it into recognized and accepted knowledge.

1.2 Why do Knowledge Systems differ from each other?

The divergence of Knowledge Systems arises from a multitude of factors, each contributing to the unique perspective and interpretation of shared phenomena. Despite focusing on the same object of study, disparate knowledge systems emerge due to variances in Ontology, Epistemology, and Prakṛti (constitution/nature) of individual, society, region, and time.

1. *Ontology and Epistemology*: Ontology and Epistemology are fundamental concepts in the realm of philosophy, shaping our understanding of reality and knowledge. “Ontology” is a philosophical discipline, a branch of philosophy that deals with the nature and the organization of being. (Maedche, 2002) In the regional language, ontology is called Padārthvijñānam. In simple terms, how a thing or action or an area is seen, is defined as ontology. It caters to questions like, ‘What is reality?’, ‘What are the features of reality?’ For instance, the concept of "health" varies across different cultures and regions, leading to diverse ontologies and subsequently creation of various knowledge systems. Table 1 shows the variations in the ontology of ‘health’ in modern medical science and Āyurveda.

Ontology		
Levels	Western Medical Science	Āyurveda
Body	Made of elements	Made of Pañca Mahābhūta
Disease	a disorder of structure or function in a human, animal, or plant, especially one that has a known cause and a distinctive group of symptoms, signs, or anatomical changes.	Imbalance of Doshas, Agni Dhatus etc.
Cure	Elements	Ādhibhautika, Ādhidaivika, Adhyātmika

Table 1. The table demonstrates the differences in the ontology of topics related to health in the Āyurveda and Western medical science

This diversity is akin to the maxim of the blind men and the elephant (Fig 3.), where each individual's perception is limited by their unique perspective. As per this maxim, a group of blind men are asked to define the elephant. These men are blind since birth and have never seen or heard about the form of the elephant. The one who touches the tail of the elephant defines it as a snake. The one who touches the stomach thinks of it to be a wall. The other one describes it as a pillar that touches just one leg of the elephant. Just as the blind men's descriptions of the elephant varied based on what they touched, knowledge systems are shaped by the perspectives and interpretations of those who define them. Therefore, the complexity and extent of knowledge is so vast that it cannot be described in a singular definition.

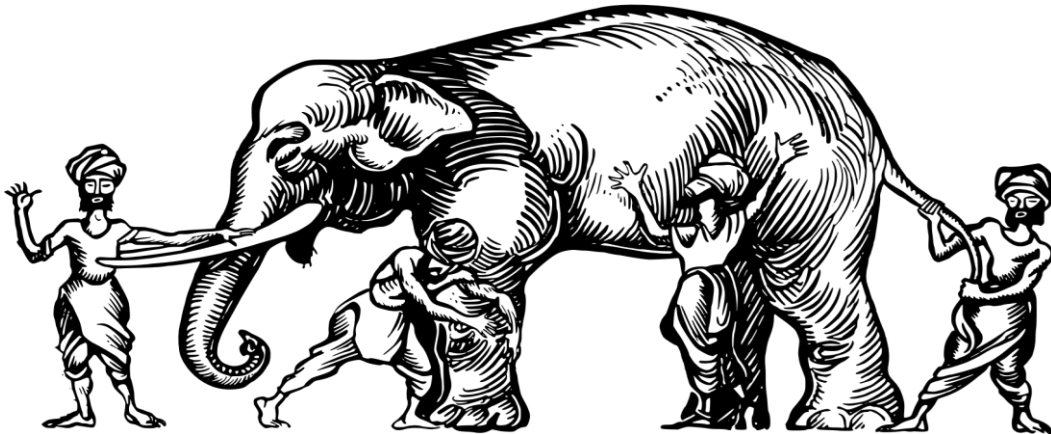


Figure 3. A pictorial representation of the maxim of the blind men and the elephant

(https://openclipart.org/detail/326414/elephant-mahouts#google_vignette)

Epistemology, on the other hand, investigates nature, scope, and sources of knowledge. (DeRose, 2005) It explores questions like "What can be known?" and "How can we acquire knowledge about reality?" and delves into the methods and processes through which we come to understand the world around us, forming the epistemological foundation of a knowledge system. There are two ways of knowing something primarily as demonstrated in Figure 4: first is through direct understanding or experience of the object of knowing (or the world). Most of the ancient texts have developed in this manner as knowledge was newly being created. The second and the more popular way of knowing in contemporary times is through the study and understanding of the already existing knowledge systems. Both the methods lead to the creation of new knowledge in different ways, but the combination of both together helps in the evolution of knowledge with changing times.

Together, ontology and epistemology provide the philosophical framework through which we comprehend existence and acquire knowledge. They offer insights into the intricacies of reality and the ways in which we navigate the complexities of human understanding.

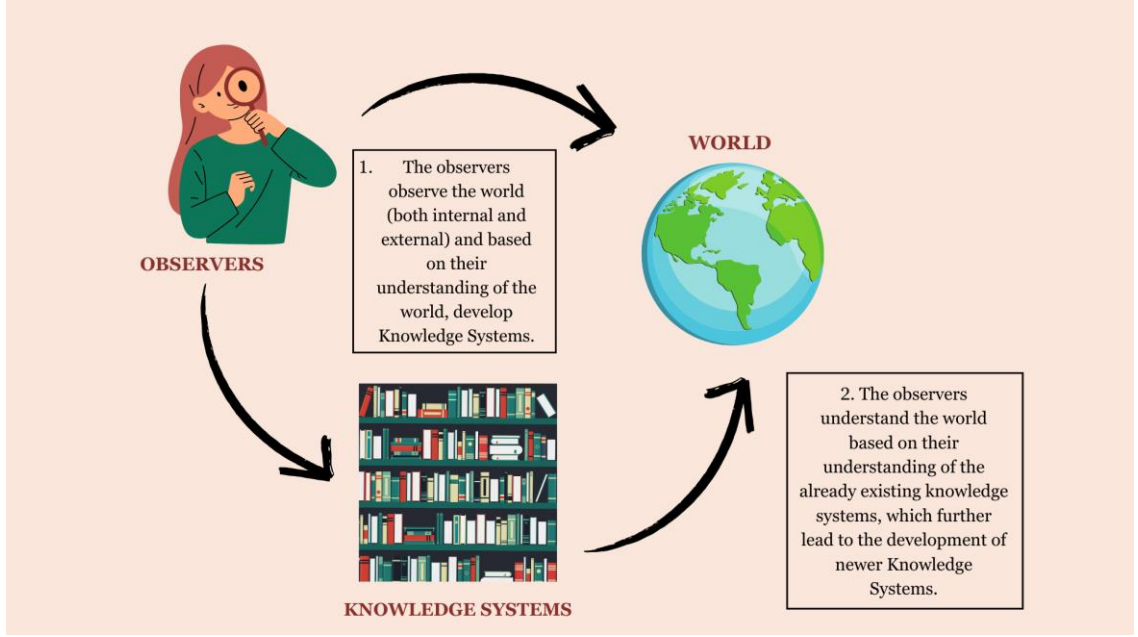


Figure 4. A pictorial representation of how knowledge is created (as annotated by the author)

In the Indian tradition, the source of knowledge is considered to be the ‘Ātman’, and if the knowledge is generated only under particular conditions, is it called valid, else, defective. Different scholars in the tradition have come up with various means of attaining knowledge but the four means of attaining valid knowledge as per Nāṭya Śāstra are as follows:

- Pratyakṣa** - Generally translated as ‘direct perception’, pratyakṣa is considered to be the primary means of acquiring knowledge. It means attaining knowledge through direct contact of the sense organs with their object. Pratyakṣa has been understood at different levels by different individuals in the Indian tradition.¹ This knowledge is considered to be determinate and non-erratic.
- Anumāna** - The word is derived from two words ‘anu’ meaning ‘follows’ and ‘māna’ meaning ‘knowledge’ and is generally translated to ‘inferential knowledge’. Therefore,

¹ For better understanding of the four pramanas the chapter titled ‘**Indian Knowledge Traditions: Philosophical Foundations**’ in the book ‘Introduction to Indian Knowledge System: Concepts and Applications’ by B. Mahadevan, Vinayak Rajat Bhat, and Nagendra Pavan R. N. can be referred.

‘A Sourcebook in Indian Philosophy’ by S. Radhakrishnan and C. A. Moore can also be referred for the same.

anumāna is the knowledge that follows something pre-existing and arrived at in a structured manner by the use of reasons and logic. The Nyāya darśana explains different types of inferential knowledge in detail.

- c. Upamāna - The knowledge through comparison and analogy is called Upamāna. It is produced by the knowledge of resemblance or similarity based on certain attributes of the unknown to something previously well-known. For example, the concept of Vairāgya (dispassion) is explained with the analogy of a lotus leaf. Just like a lotus leaf, even though remains in water all its life, remains unaffected (unwet) by it. Similarly, an individual, even though living in the world, should remain unaffected by it rather than getting carried away the desires of the mind and the senses. This analogy is also given by Śrī Kṛṣṇa to Arjuna (Chapter 5, verse 10)

ब्रह्मण्याधाय कर्माणि सङ्गं त्यक्त्वा करोति यः ।
लिप्यते न स पापेन पद्मपत्रमिवाम्भसा ॥

brahmaṇyādhāya karmāṇi saṅgaṁ tyaktvā karoti yaḥ,
lipyate na sa pāpena padmapatramivāmbhasā.

He who, having abandoned attachment, acts reposing (or founding) his works on the Brahman, is not stained by sin even as water clings not to the lotus leaf.

Therefore, the knowledge of a well-known object helps in understanding an unknown object with greater depth.

- d. Śabda - Meaning ‘verbal testimony’ of an authoritative expert in a particular subject. It is impossible to create any new knowledge without taking reference from the previously existing knowledge. For example, a common man today, when taught about gravity, space, and planets, believes the findings based on the words of the experts in the field. The moon's gravity is taken to be 1.62 m/s² based on the research of the ancestors. (Munson, 2024) For the scientists who have discovered this, it was pratyakśa pramāna, but for a common person

today, or even in science, the gravity is 1.62 m/s² based on śabda. In the Indian tradition, Śabda is considered to be one of the most reliable methods of attaining knowledge, and the ‘Vedas’ are considered to be the most valid form of ‘Śabda-pramāṇa’ as they provide information and instructions about several things that are ‘not-seen’ or ordinarily known to human beings. Self-knowledge (Brahma Jñāna/ Ātmavidyā) forms the core of this form of pramāṇa in India. Therefore, śabda pramāṇa forms the foundation of every knowledge system in the world.

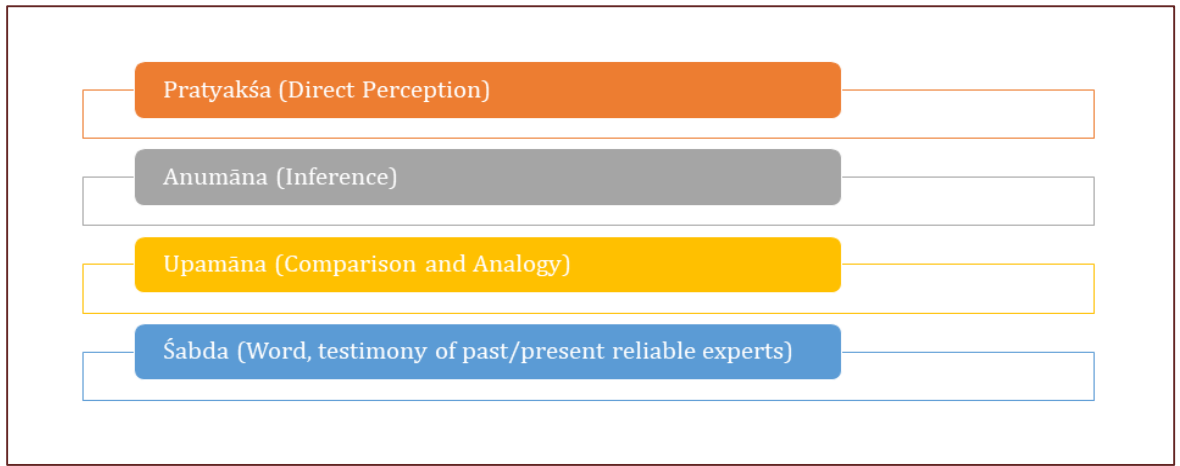


Figure 5. Four different pramāṇas popularly accepted by the Indian tradition (as annotated by the author)

2. *Prakṛti* - Beyond ontology and epistemology, another significant factor in the development of knowledge systems is Prakṛti (normally translated as nature). The literal translation of the term even though not possible can be taken as ‘constitution’. Any knowledge system develops based on the understanding of the constituents or nature of the following:

- a. Individual - The individual forms the fundamental unit of all the sciences. From the natural sciences to the social sciences, the understanding of the nature of the individual guides the developments. For example, the entire system of Āyurveda considers the pañca mahābhūtas as the constituents of the entire creation, and hence the entire system of Āyurveda is based on the understanding of the nature of these five elements. This is

reflected not just in the diagnosis but also in the treatment methodologies adopted by the system. Similarly, the entire Western medical sciences have developed from the lens of physics and chemistry, where human anatomy is studied as a sophisticated machine working through the transmission of different chemicals following particular principles. Both lenses are just two different ways of studying the same object (the human body) based on the constituents but offer completely different knowledge systems. Similar is the case with different indigenous methods adopted by different cultures and societies around the world. The inventions and discoveries in different disciplines to the laws formed are all based on the diverse understanding of the nature of the individual around the world.

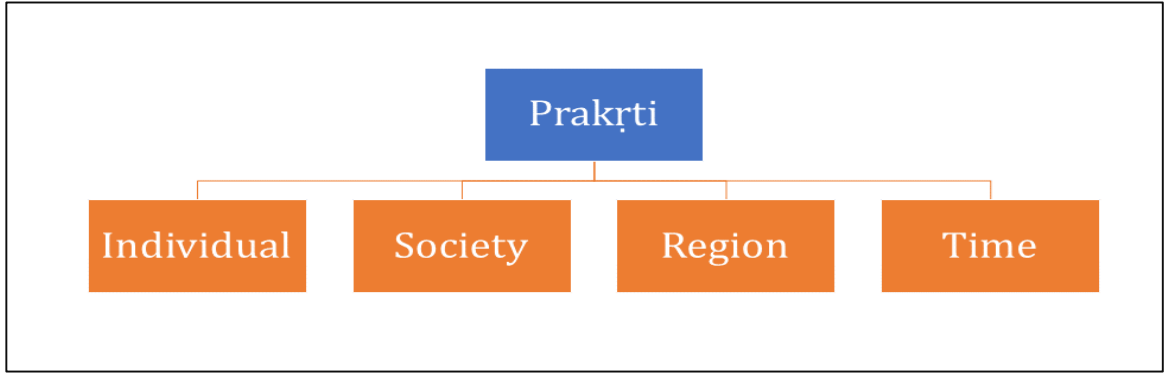


Figure 6. The figure demonstrates the different levels at which Prakṛti plays a role

- b. **Society** - The second significant factor in the creation of the knowledge system is the Prakṛti of a society. The knowledge systems developed for Indians in India will be different from the ones suitable for the French, British, Chinese, or Americans respectively. A popular example of this is the field of psychology which has been developed mostly through research on the western population. It was only when the findings of these researches were applied to different populations, across the globe, it was found how significant a role culture plays in the understanding of an individual. Similarly, the laws and policies developed in America for the issues of the American population may not necessarily do justice or lead to the growth of the Indian, Chinese, or Japanese

populations. Therefore, it is essential to understand the cultural values, traditions, belief systems, and societal structures that shape the lives of individuals within the society.

- c. Region - The third factor whose nature impacts the creation of the knowledge system is the geographical location of a place. Some classic examples of this can be seen in the medical sciences that develop in different regions around the world, the food habits, and also the clothing of people in that region. For example, the treatments used by the tribes of the Amazon rainforest might not be suitable for the treatment of indigenous tribes in the Thar desert. Similarly, food suitable for the people of Switzerland might not be suitable for the people of Kenya. The clothes developed as per the needs of the people of Cherrapunji might not be suitable for the people living in Japan. The houses built in Japan are based on their geography and might not be suitable for Venice or Italy. Therefore, the geography of a region plays a crucial role in the development of any knowledge system.

As an exception, Āyurveda is a medical science that has been developed in India and has still found significant success in application around the world. This is because India has a rich diversity geographically ranging from snow-clad Himalayas to the hot humid beaches, from the hot Thar desert to the wetlands and dense forests of Cherrapunji in Meghalaya - India has it all. From extreme to moderate to mild, all temperatures, almost all weathers across the year. This has allowed for the development of disciplines in a holistic manner. The science of Āyurveda has not developed as a rigid science with a one-size-fits-all approach but has always been open to flexibility by taking into consideration all the external changing factors that make it applicable across diverse populations around the globe.

- d. Time - The last but the most important factor in the creation of a knowledge system is time. From a micro-second to an epoch, everything has an impact on the knowledge and understanding of individuals at a particular time. On a day-to-day basis one can easily

notice how at different times of the day, one's nature varies. For example, one feels hungry at a particular time, sleepy at some other time, feels like doing physical activity at a particular time, and similarly understands better at some other time. The ratios and time at which one feels like doing what varies from individual to individual. Similarly, the weather on a particular day, a particular season, generates different feelings and moods in individuals. For example, in extreme winter, individuals often find it difficult to get out of their quilts even for basic daily activities, similarly, the monsoon has a different impact on different people. Likewise, different years, centuries, and ages, are represented by particular characteristics. In the Indian tradition, for example, there are different Yugas, which have different characteristics. Similarly, a clear change in knowledge can be seen from the Stone Age to the modern era. The understanding of the world around and awareness of oneself both change over time both positively and negatively. Mental illness at some time was considered evil but mental health today forms an integral component of overall health and wellbeing. Similarly, the understanding of the world is also evolving. Even though universal laws remain the same over time, the refinement in understanding them evolves with time. Time therefore plays a very crucial role in the development of knowledge systems.

In essence, by embracing these principles, knowledge systems can become more relevant, responsive, and sustainable, fostering positive outcomes for the communities they serve. Also, it is evident that knowledge systems worldwide exhibit significant variation and cannot be uniformly applied to diverse populations. Instead, they must be tailored to meet the specific needs and contexts of different communities. While fostering unity, it's equally crucial for knowledge systems to embrace and honour the richness of diversity. For instance, dietary preferences suitable for individuals in colder climates may not align with those living near the equator due to distinct

environmental conditions and cultural practices. This has also been explained in the Caraka Saṁhitā. As per Caraka Saṁhitā:

The dietary regimen plays a crucial role in sustaining life, serving as one of its foundational pillars. Individuals must exercise great caution regarding their food intake, as well as the quantity consumed. Many ailments stem from improper and excessive food consumption. According to Caraka, the ideal quantity of food is that which is easily digested over time without disturbing the body's doṣas, dhātus, and Agni. The consumption of food itself constitutes a profound science that demands careful consideration. Food can be categorized into two types: Guru and Laghu. Simply put, "guru" foods are difficult to digest, while "laghu" foods are easily digested. Guru foods induce fatigue, increase bodily waste, provide strength, and satiety, and promote growth, while laghu foods have the opposite effect, aiding in weight reduction and wound healing. Both heavy and light foods acquire medicinal properties only when consumed in the right quantity. Therefore, it's imperative to consume food in appropriate amounts to ensure the proper functioning of the digestive fire. A gap of at least three hours and a maximum of six hours should be maintained between meals. Consuming food within three hours disrupts digestive juices, while eating beyond six hours leads to a loss of strength. Food should not be consumed if it was cooked more than three hours prior, as such food takes longer to digest and is referred to as tamasic food, as it enhances tamasic tendencies in individuals.

In the cold season or cold regions, the guru food (heavy food - cheese, maida, etc.) gets digested very soon because the Jatharagni (digestive fire) is very powerful in the cold season and hence aids in the digestion of the food very fast². The guru foods, for example, Maida and cheese, are very difficult to digest. However, in colder regions where Jatharagni is powerful, it can digest

² (Charaka Samhita, Sutrasthāna, 6.9) (including ayurvedadipika commentary)

these guru foods too. This may not be the case in the Indian subcontinent. Therefore, it is advised by Ayurveda experts to consume these types of food as sparingly as possible.

Various cultures worldwide have developed their knowledge systems rooted in unique observations, perspectives, and methodologies, shaped by their respective ontologies and epistemologies. Examples include Western, Indian, Chinese, and Islamic knowledge systems, each offering distinctive insights and methodologies tailored to the specific cultural and societal contexts in which they evolved. This recognition helps in not just realizing and respecting diversity but also helps in creation. This ensures that all communities benefit from the richness of human intellectual heritage.

1.3 What is this phrase called Indian Knowledge Systems (IKS)?

What is the meaning of the word 'Indian' in the phrase IKS?

The term “Indian” refers to everything that originated within the geographical boundaries of the undivided Indian subcontinent (Akhaṇḍa Bhārata). Hence, all the knowledge systems that originated on and are currently originating on this land, using the methodologies of this land are called the Indian Knowledge Systems. For example, the Vedas, the Itihāsa (Mahābhārata and Rāmāyaṇa), the Purāṇa, Upaniśads, Nāṭya Sāstra, Bhagavad Gitā, Āyurveda, Yoga, Texts of Buddhism, Sikhism, Jainism, etc. Thus, the term ‘Indian’ in IKS is a much broader term than what it is commonly understood as it encompasses the entire culture (both religious and non-religious) of the subcontinent called Bhārata.

What is Knowledge in the phrase IKS?

Knowledge in the Indian tradition is not just a mere accumulation of information, but a result of self-knowledge. It is wisdom gathered through the refinement of the body-mind complex and is based on refined experiences, experimentation, observation, and meticulous analysis. This understanding is evident in the words that are used in tradition to refer to knowledge. Some of the

words used are ‘jñānam’, ‘pramā’, ‘vidyā’. The interesting underlying similarity in all these terms used for ‘knowledge’ is the fact that all mean experience of the unchanging eternal reality/truth. All Western philosophy and science have developed in the process of exploring and understanding the constantly changing world. The entire Indian knowledge system on the other hand has developed through the understanding of the unchanging reality. It is this understanding of the constant reality that has helped India to understand the changing reality in a much different way and some domains probably with much more depth. For example, an understanding of the components and layers of the earth has helped the field of geography and geology understand different phenomena that occur on different parts of the earth and can also help in understanding phenomena on different planets. Similarly identifying and understanding the unchanging phenomenon in the creation (subtle inner reality) completely has helped the Indian tradition get a nuanced understanding of the physical world outside.

Vāda (normally translated as debate) also formed an essential part of knowledge creation in India, where all views are critically scrutinized and only the ones with valid evidence are taken forward. It is also observed that at several places and in several understandings IKS is considered to be a different discipline altogether like physics, chemistry, biology, mathematics, etc. But in reality, IKS encompasses the knowledge from all disciplines that originated in the Indian subcontinent over different periods in different languages. This includes a vast repository of literary and non-literary knowledge spanning various disciplines that, which if seen from a modern lens look different but were strongly intertwined in the Indian tradition. For example, it is impossible to understand any Veda without knowing the Vedangas. Similarly, the art forms have originated from the Vedas and cannot be understood in totality without the knowledge of the vedas. The non-literary knowledge forms a major chunk of the Indian knowledge system. Unlike the western knowledge traditions, where literary sources form the major crux of knowledge, the Indian tradition even for the literary sources, the intangible components form the

foundation. Even the non-literary knowledge that might not be popular among large masses in India but is accepted by small communities within the sub-continent, forms an important part of IKS. For example, as experienced by the author, in Sringeri, within the woods, there lives a vaidya (the term for a doctor in India) that cures Asthama and Kapha related diseases in a peculiar way by inducing vomiting. When questioned, he can explain the science behind the entire treatment procedure. This science that has been helping thousands of people over the years, despite being tested, validated time and again, and accepted by thousands of people over time remains hidden from a large portion of society. Another lesser-known and mentioned example is from the field of business. Indians have been commonly made to believe by the British, that Indians were always only interested in the knowledge of the self and hence did not prosper in other aspects. Although this point will be discussed in detail in the later sections of the chapter, it is important to mention here the name of one of the oldest thriving businesses of the nation - Maheshwari Handlooms which has its origins in the time of Maharani Ahilyabai Holkar, the ruler of the state of Indore in the late 18th century and is still successfully reviving the lost tradition of the nation. Several such instances can be seen all across India in different fields and would probably require one complete book. It is hence evident that knowledge in India encompassed everything from spirituality and religions to fashion, architecture, business, and social sciences with everything complementing each other as a complete whole.

Another noteworthy characteristic of the most ancient Indian texts is its precision and sophistication which can be credited to the refinement of their body-mind complexes. Some examples of such texts are the Aṣṭādhyāyī of Pāṇini, Yoga Sūtras of Patañjali, Arthaśāstra of Cāṇakya, Nāṭya śāstra of Bhārata, etc. The Aṣṭādhyāyī of Pāṇini is a comprehensive set of around four thousand aphorisms. The precision of this text is such that one can derive as well as create new words in Sanskrit even till date using these aphorisms. The precision of this text is unfathomable because even after thousands of years, it is equally applicable and accurate.

What is the term 'system' in the phrase IKS?

The term 'system' generally means a structured methodology and a classification scheme to access the available corpus of knowledge but in IKS it stands for something much vaster. It does not just mean literally texts but the entire tradition of which the literally texts form an essential part. Apart from these texts the non-literary sources and the intangible aspects play a significant role in the Indian tradition. The entire tradition is intricately intertwined in such a way that it is impossible to have a complete understanding of anything till one has some idea about all the other disciplines. The day-to-day ways of living, the languages, etc. everything that helps in understanding the fabric of Bhārata as a whole in its true sense, is incorporated in IKS.

1.4 The purpose of creating knowledge in the Indian tradition

For centuries, individuals in the Bhārataiya culture have exhibited a profound curiosity and earnestness in unravelling the mysteries of existence and the self. Hence, self-knowledge has always been the ultimate purpose of any action or knowledge in India. Curiosity about the fundamental nature of being, the purpose of life, and the quest of knowing the self have been at the forefront of their intellectual pursuits. Questions such as "who am I?", "what is the essence of our existence?", "what lies beyond death?", "how does one transcend the cycle of birth and rebirth?" have deeply been pursued in India. In the process of finding answers to these questions several disciplines emerged. To make this concept clear, the story of Amṛta Manthana can be helpful. The main goal of the devas and asuras was to get amṛta by churning the ocean but during that process of attaining amṛta they also got 14 precious things. Similarly, even though self-knowledge was the primary aim of attaining knowledge in the Indian tradition, the development of society, civilizing the society, and in-depth knowledge of various sciences automatically developed and perhaps with much more refinement than in other parts of the world, given that time and space. Even though self-knowledge formed the foundation, Indians always thrived to excel and evolve in all domains of life. The statement 'Yat piṇḍe, tat brahmāṇḍe' means

‘everything that is outside you, is within you (your body)’. More simply, it means that one has in oneself the entire universe and hence, by knowing the world within, one automatically gets an understanding of the world outside. This is the route that was taken in education in India.

1.5 Myths and Facts about the Indian Knowledge Systems

S. No.	Myths	Facts
1.	IKS is a discipline/ subject/ specialization.	IKS is a label given to a collection of interconnected disciplines.
2.	IKS is Sanskrit / IKS is done by ‘Sanskrit people’.	Sanskrit is a language. One can use it to any ends. It so happens that a lot of works in IKS are available in Sanskrit. However, they are also available in regional languages. There is nothing called ‘Sanskrit people’.
3.	IKS is ancient.	IKS includes all knowledge traditions of India, past and present. New knowledge is produced every day based on the principles laid out by older works.
4.	IKS is written by Hindus.	Depends on what is understood by the term ‘Hindu’. A lot of IKS is within the Hindu fold. But Jainas, Bauddhas, Sikhs, Muslims etc. have also contributed to IKS e.g. Kabir,

		Rahim, Mahavira, Guru Nanak Dev are few examples.
5.	IKS is mainly spiritualism.	IKS includes empirical sciences as well. India has made significant contributions in the fields of Linguistics, Astronomy, Health Sciences, Mathematics, Poetry, Metallurgy, and several other sciences.
6.	IKS has answers to all problems of life, “Our ancient teachers have given us all solutions”.	Our intellectual ancestors tried to answer the problems which were prevalent in their times. Hence, it does not have answers to all questions.
7.	IKS is written and studied by only Brāhmins.	Many popular scholars in the Indian traditions like Bhāḍali, Śrī Kṛṣṇa, Kṛṣṇadevarāya, Sambhāji , Guru Nānak Dev ji, Nāgārjuna, etc.
8.	IKS is only written by men.	Indian texts mention the names of many learned ladies like Viśwavarā, Apalā, and Ghośa, and also many texts written by many Indian women can be found.

9.	The Indian thought process is driven by blind beliefs and dogmas rooted in a religious context.	There has been a healthy tradition of arguing and counter-arguing in a highly professional, rational, and objective manner.
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Table 2. A list of the myths and facts related to IKS

In recent times, Indian Knowledge Systems (IKS) has emerged as a prevalent buzzword, gaining widespread usage among individuals and institutions alike. The introduction of the National Education Policy (2020) has engaged the popularity of IKS, particularly among academicians and educators. The term is often employed loosely, with its significance and implications sometimes misunderstood or misrepresented. It is crucial to address and rectify these misconceptions promptly, lest they perpetuate erroneous beliefs and lead to misguided actions. This article endeavours to shed light on some of the most common misconceptions surrounding IKS while providing clarity and insights into the true nature of this multifaceted subject. By delineating between myth and reality, we aim to foster a more nuanced and informed discourse surrounding Indian Knowledge Systems, thereby facilitating a deeper appreciation and understanding of its profound significance in contemporary discourse.

Myth 1. IKS is a discipline/subject/specialization.

Fact 1. IKS is a label given to a collection of interconnected disciplines.

In numerous interpretations and discussions, Indian Knowledge Systems (IKS) are often viewed as distinct disciplines akin to physics, chemistry, biology, and mathematics. However, in reality, IKS encompasses the knowledge from all disciplines that originated in the Indian subcontinent over different periods in different languages. This includes a vast repository of

knowledge both literary and non-literary spanning across various disciplines that if seen from a modern lens look distinct from each other but were strongly intertwined in the Indian tradition. For example, the science of temple architecture in India cannot be understood without a prior understanding of the Indian art forms, cultures, darshans, and lifestyle. The non-literary knowledge forms a major chunk of the Indian knowledge system, and such interdisciplinary connections are symbolic of the holistic approach inherent in IKS. As mentioned earlier in the chapter, IKS includes all the knowledge of the past and the present that has originated on the land of Bhārata either independently or taking reference from the already existing knowledge repository of IKS.

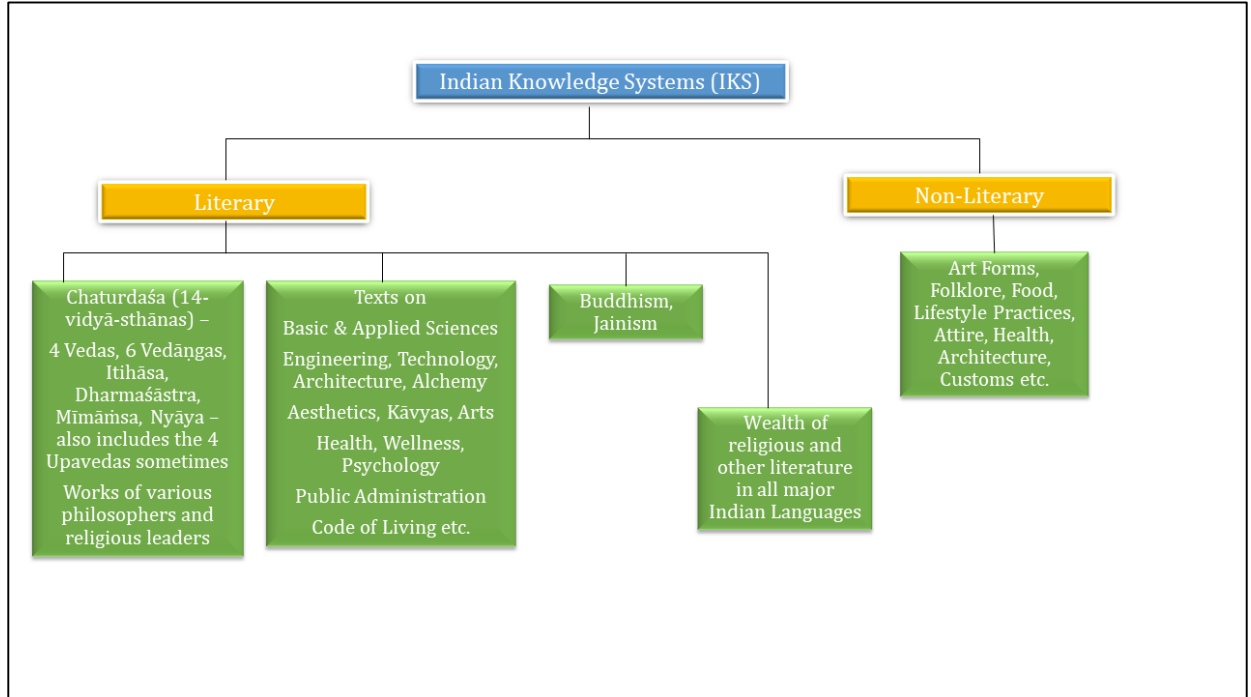


Figure 7. Demonstrates the repository of IKS³ (as annotated by the author)

Myth 2. IKS is Sanskrit / IKS is done by ‘Sanskrit people.’

³ The picture is not a comprehensive list, it is just an indicative list.

Fact 2. Sanskrit is a language. One can use it to any ends. It so happens that a lot of works in IKS are available in Sanskrit. However, they are also available in regional languages. Plus, there is nothing called 'Sanskrit people'.

The contribution of Sanskrit in Indian literature cannot be denied, yet it is crucial to recognize that it is just one among many Indian languages that have contributed to the rich treasure of Indian literary heritage. While Sanskrit literature encompasses a vast repository of valuable texts, a wealth of literary treasures also exists in other Indian languages. For instance, while Āyurveda finds its expression in Sanskrit, Siddhā medicine, an equally ancient and esteemed tradition, is documented in Tamil. This diversity is reflected in Figure 7, provides a concise compilation of significant literary works within the Indian tradition, spanning languages beyond Sanskrit.

Take, for instance, the Siribhūvalaya, a monumental Kannada text authored by the Jain monk Kumudendu Muni. Comprising a staggering 600,000 verses, this magnum opus traverses a diverse array of subjects including mathematics, chemistry, physics, astronomy, medicine, history, etc. What sets this work apart is not only its sheer volume but also its unique script. Remarkably, each letter in the text is represented by a numeric symbol, a feat of linguistic

innovation that distinguishes the Siribhūvalaya as a marvel of both content and form. Here is the picture of the text.

Similarly, Sahadeva Bhāḍalī, authored by a 12th-century female Marathi scholar Bhāḍalī, stands as a testament to the depth of knowledge present in regional languages. Focusing on the field of Jyotiṣa, this text showcases the profound

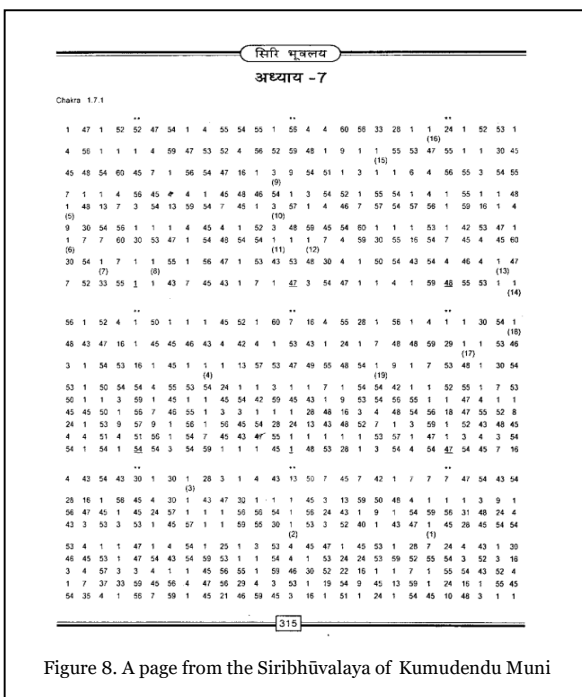


Figure 8. A page from the Siribhūvalaya of Kumudendu Muni

contributions of Marathi literature to the exploration of astronomy.

These examples underscore the rich diversity and intellectual depth inherent in Indian languages beyond Sanskrit. By celebrating the multifaceted linguistic heritage of India, we gain a deeper appreciation for the immense breadth and depth of Indian literature across linguistic boundaries.

Braj/Hindi	• Sātasataka, Nakhaśikha, Nāyikābheda (Chatrapati Sambhaji – 17 th Century)
Tamil	• Sangam Literature, (Siddha Medicine, Tolkappiyam, Tirukkural etc.) Silapattikara etc.
Kannada	• Siribhūvalaya: Kumudendu Muni, A Jain Monk (6,00,000 verses, mathematics, chemistry, physics, astronomy, medicine, history, etc.),
Telugu	• Āndhraśabdacintāmaṇi (Nannayya Bhattaraka – 11 century)
Marathi	• Sahadeva Bhāḍalī (Bhāḍalī – 12 th Century)
Malayalam	• Kerala School of Mathematics (Yukti Bhasha), Prashna Marga, Commentary on Arthashastra (Bhashakautaliyam)
Manipuri	• Numit Kappa (1 st Century)

Figure 9. Demonstrates a small list of different languages in which important texts of the Indian tradition exist⁴

Myth 3. IKS is ancient.

Fact 3. IKS includes all knowledge traditions of India, past and present. New knowledge is produced every day based on the principles laid out by older works.

As mentioned above Indian Knowledge Systems, includes not just the knowledge originating in the Indian subcontinent centuries and millennia ago but also the knowledge that is

⁴ This is again an indicative list. In almost all Indian languages we can find the knowledge system embedded.

originating in India constantly even till today. This can be absolutely new knowledge, based on first-person experiences or developing from the works of ancient India. So many authors, directors, and sculptors draw inspiration from our historical characters or itihāsa and bring it to the contemporary audience by contextualizing it for the current times. Some of the examples of such literary works are the book Paroksa Ramayanam⁵ by Jayaraman ji, the book tells the entire story of Ramayana in 50 verses, work by Ms. Ami Ganatra ji on Ramayana and Mahabhārata, articles by Dr. Rammanohar P in the field of Āyurveda. Some of the most significant works of the contemporary times in the field of IKS have been done by Dr. R. Ganesh Ji, Dr. Kapil Kapoor ji, and many more. Dr. Choodamani Nandagopal ji has done significant work in the field of temple architecture. Some other popular names in the field of IKS literature in current times are Ms. Sai Swaroopa Iyer, Mr. Ashwin Sanghi, Mr. S. Jayashankar, and Prof B. Mahadevan Ji.

The science of Yoga and Āyurveda though the most ancient sciences are constantly showing their relevance in everyday life more than ever before now in these times. Individuals are going back to age old methods of farming, cooking, and living. Slow and sustainable living has now become the need of the hour and Indian ways of architecture, design, and aesthetics are being explored. In essence, Indian Knowledge Systems continue to evolve and adapt to the changing times, embodying a dynamic synthesis of tradition and innovation

Myth 4. IKS is written by Hindus

Fact 4. Depends on what is understood by the term 'Hindu'. A lot of IKS is within the Hindu fold. But Jaina, Bauddha, Islam have also contributed to IKS.

The term Hindu is generally seen from two lenses. The first and the immediate meaning associated with the word is someone belonging to Hinduism. The second, less popular, but more accurate meaning of the term is to refer to the people who lived beyond the Indus (Sindhu) river.

⁵Paroksha Ramayanam: <https://store.pothi.com/book/ebook-m-jayaraman-paroksa-ramayanam/>

The people beyond Sindh were known as 'Sindhu'. The term 'Sindhu' travelled all the way west and landed back to Bhārata as 'Hindu'. Hence, even though Hindu was a term earlier used by the outsiders to refer to the people of Bhārata, it eventually became popular among the people of Bhārata to refer to themselves.

Therefore, if we go by the first definition, we can say that no, IKS is not written by Hindus. Numerous individuals from other religions have contributed to the development of IKS as well. For example, Kabīr, Rahīm, Guru Nānak Dev, Mahāvīra, Nāgārjuna, and many more.

Myth 5. IKS is mainly spiritualism

Fact 5. IKS includes empirical sciences as well. Self-knowledge served as the foundation for the harmonious and holistic development of all the other disciplines and the impact of this is clearly visible in the significant contributions in the fields of Linguistics, Astronomy, Health Sciences, Mathematics, Poetry, Metallurgy, and several other sciences.

There has been widespread assertion that Indians were solely focused on attaining 'self-knowledge' while neglecting everything else. The quest for 'self-knowledge' which has been the strength and the foundation of the Indian civilization has been made to be seen as a disadvantage. Indians have been made to believe that because of this quest, the Indian nation remained much regressive in other domains in comparison to the rest of the world. However, this is not the truth. Self-knowledge not just formed the core of the Indian tradition but also the means to attain expertise in all the other knowledge systems. The entire language of Sanskrit, science of Yoga, treatise of Natya shastra, itihasa, Vedas, vedangas, and many more literary and non-literary evidences that are probably marvels of human potential and precision have developed because of the refinement of the body-mind complex that occurred automatically in the journey of knowing oneself. The clarity with which the contents of being, reality, mind, emotions, language, life, art, and society have been discussed in these texts point at the refinement in the authors. Not just this,

the disciplines like mathematics, astronomy, architecture, economics, metallurgy, etc. also have developed with immense precision. And so, yes, spirituality did form the core of the Indian tradition but not in isolation instead in integration with the overall development of the individual, society, and nation.

Sl. No.	Name of the work	Key Word 1	Key Word 2
Before 3,000 BCE			
1	Vedas	Dharma (Code of Living)	Several other topics
2	Purāṇas*		
3	Mahābhārata, Rāmāyaṇa		
3,000 BCE to 500 CE			
1	Vedāṅga-jyotiṣa	Astronomy	
2	Manu-smṛti	Public Administration	Dharma (Code of Living)
3	Śulba-sūtras	Mathematics	Dharma (Code of Living)
4	Suśruta-saṃhitā	Health	Wellness
5	Aṣṭādhyāyī, Nirukta	Linguistics	Grammar
6	Nāṭyaśāstra	Art Forms	Dance, Theatre
7	Buddhist Texts	Philosophy	Mathematics
8	Nyāya and Vaiśeṣika Sūtras	Logic, Epistemology	Knowledge Framework
9	Jaina Mathematical works	Mathematics	
10	Arthaśāstra	Public Administration	Finance, Foreign Policy
11	Chandaḥ-śāstra	Metrical Pattern, Prosody	Binary Maths Ideas
12	Yoga-sūtras	Control of Mind	Philosophy
13	Kāmasūtra	Art Forms	Dharma (Code of Living)
14	Mahā-bhāṣya	Sanskrit Language	Grammar
15	Rasaratnākara	Alchemy	
16	Caraka-saṃhitā	Health	Wellness
17	Sāṃkhya-darśana	Philosophy	Psychology
18	Amarakośa	Linguistics	Lexicography
19	Sūrya-siddhānta	Astronomy	Mathematics
20	Bṛhat-saṃhitā	Astronomy, Mathematics	Several other topics

500 CE to 1,800 CE			
1	Āryabhaṭīya, Ārya-siddhānta	Astronomy	Mathematics
2	Pañca-siddhāntikā	Astronomy	
3	Mayamata	Architecture	
4	Brāhmasphuṭa-siddhānta	Astronomy	Mathematics
5	Mānasāra	Architecture	Town planning
6	Āryabhaṭīya-bhāṣya, Mahābhāskariya	Astronomy	Mathematics
7	Nārada-śilpa-śāstra	Architecture	Iconography
8	Gaṇita-sāra-saṅgraha	Mathematics	
9	Siddhānta-śekhara	Astronomy	
10	Yukti-kalpataru	Shipbuilding	Several other topics
11	Samarāṅgaṇa-sūtradhāra	Architecture	Several other topics
12	Siddhānta-śiromaṇi	Astronomy	Mathematics
13	Kāśyapa-śilpa-śāstra	Temple Architecture	Iconography
14	Aṣṭāṅga-hṛdaya, Rasaratna-samuccaya	Alchemy	Health, Wellness
15	Kerala School of Mathematics	Mathematics	Astronomy
16	Graha-lāghava	Astronomy	

Table 3. The table offers a comprehensive list of texts that existed in India before 3000 BCE to 1800 CE

Myth 6. IKS has answers to all problems of life, "Our ancient teachers have given us all solutions"

Fact 6. Our intellectual ancestors tried to answer the problems which were prevalent in their times. Hence, it does not have answers to all questions.

In contemporary discourse, it is not uncommon to encounter assertions such as "Our ancient teachers have provided all the solutions." Undoubtedly, the wisdom passed down by our ancestors offers valuable insights that remain relevant even in the present day. Some of these solutions are not only timeless but are perhaps more pertinent now than ever before but to believe that they knew it all might not be entirely correct. For example, even though the science of Yoga-Vedānta can be applied even today across various populations, it still needs to be contextualized for different populations based on their culture, ethnicity, age, etc. The same applies to other disciplines as well. Blind race of comparison between modern technologies with the ancient ones and the constant need to prove that everything that existed in ancient India didn't serve anyone.

It is imperative to acknowledge that our ancestors themselves were receptive to the idea of evolution and adaptation. For instance, in the Arthaśāstra, Cāṇakya demonstrates a profound respect for the contributions of earlier scholars⁶ while also offering his unique perspective on governance, economics, and statecraft, tailored to the needs and circumstances of his era. This exemplifies the necessity of contextualizing ancient wisdom within contemporary contexts, recognizing that societal dynamics and challenges evolve over time.

Moreover, there exists a pressing need to reassess traditional texts through a fresh lens, reexamining their teachings in light of modern realities. This process entails critically evaluating the applicability of ancient principles to current socio-economic, political, and cultural

⁶ Pṛthivyāḥ lābhe pālāne ca yāvāntyarthaśāstrāṇi pūrvācāryaiḥ prasthāpitāni tāni saṃhṛtyaikamidamarthaśāstram kṛtam. Arthaśāstram 1.1

landscapes. While certain aspects of traditional knowledge may remain pertinent, others may require modification or even abandonment in light of changing circumstances. By doing so, we can ensure that the timeless wisdom of our ancestors continues to guide us on the journey of societal progress and evolution.

Myth 7. IKS is written and studied by only Brāhmins

Fact 7. Many popular scholars in the Indian traditions Śrī Kṛṣṇa, Kṛṣṇadevarāya, Guru Nānak Dev ji, Nāgārjuna, Bhoja, Kabirdās, Kṣemendra, Satyakāma, were not Brāhmins

Another common misconception about the Indian tradition is that IKS was only written and studied by the Brāhmins. While the problems that occurred over the years because of a person's merit being based on their birth cannot be ignored. It is also important to be aware that any such discrimination did not exist in ancient India. Knowledge was available for all in different ways and the eligibility for the study of scriptures was not based on birth. We have examples of numerous individuals, who have made significant literary contributions to the field of IKS despite not being Brāhmins. The Bhagavad Gīta which is one of the most important texts of IKS, is given by Śrī Kṛṣṇa, who was not a Brāhmin to Arjuna who again was a Kṣatriya. Yudhishtira was sent to gain knowledge from a butcher. Kṛṣṇadevaraya, the emperor of the Vijayanagar empire, has made significant contributions to the Kannada and Telugu literature, despite being a non-Brāhmin. Some other examples of non-Brāhmins are as follows:

1. Guru Nanak Dev ji and the nine Sikh Gurus - respected as Gurus despite being non-Brāhmins
- the text - Guru Granth Sahib
2. Nāgārjuna -Buddhist Philosopher - text - Rasaratnākara
3. Bhoja, Kabirdās, Kṣemendra, were not Brāhmins
4. Ramabhadrambaa - Śūdra - Raghunāthabhyudayam (a biography of her husband)
5. Madhura vāṇī was a daughter of the courtesan and was a great Sanskrit poetess

6. Sankara Variar - *Laghubhaskariya vivarana* which was a commentary on the *Laghubhaskariya* - mathematician (ambal vasikas - cleaning)
7. Achyutha Pisharadi - renowned Sanskrit grammarian, astrologer, astronomer and mathematician

There are many texts composed in the Prakṛt language by the Buddhists. Lots of which belongs to empirical science category. This illustrates that expertise in IKS was not confined to Brāhmins alone but transcended social boundaries, encompassing individuals from different castes and backgrounds. Another noteworthy example is the Tirukkural, a revered text of Tamil literature, authored by Thiruvalluvar, who was not a Brāhmin but rather a respected sage. This exemplifies the inclusivity of Indian tradition, where individuals from diverse backgrounds made significant contributions to the literary and philosophical corpus.

Perhaps one of the most striking examples challenging the notion of caste-based exclusivity is the story of Jābāla Satyakāma, the author of the Jābāli Upaniṣad. Born to a prostitute, Jābāla's lineage was unknown, yet he received education from the revered sage Maharṣi Gautama and eventually attained the status of a Brāhmin. This narrative underscores the emphasis on merit and pursuit of knowledge in ancient India, transcending the barriers of caste and lineage. (*The Incarnate Word*, n.d.) These examples underscore the fundamental principle that proficiency in IKS was not contingent upon one's birth or caste but rather on one's dedication to self-knowledge and understanding of scriptures. In ancient India, varna was determined by one's deeds and character rather than by birth alone, emphasizing the inclusive and meritocratic nature of the knowledge tradition.

Myth 8. IKS written only by men.

Fact 8. A comprehensive list of women scholars in Indian Knowledge Systems (IKS) could include names like Ramabhadrambaa, Madhuravāṇī, Gārgī, Maitreyī, and many others.

Some feminists and Western perspectives have often perpetuated the belief that women in ancient India were deprived of fundamental rights and access to knowledge, predominantly reserved for men. However, this narrative is flawed. Indian tradition mentions and praises numerous women who made significant contributions to the development of Indian Knowledge Systems (IKS). Among them are Avanti Sundarī, a Kashmiri scholar, and Vijjikā, whose contributions are less acknowledged. References to female scholars and sages from the Vedic age such as Vac, Ambhrnī, Romasa, Gārgi, and Khona in Vedic literature provide substantial evidence to counter this misconception. These exceptionally intelligent and learned women, known as 'brahmavādinīs', actively pursued Vedic studies, while those who chose married life over education were termed 'sadyovadhus'. Evidence suggests that co-education existed during this period, with both genders receiving equal attention from teachers. Moreover, women from the Kshatriya caste received training in martial arts and weaponry.

In the Rigveda itself, there are references to 27 female sages, known as ṛṣikās (seeresses), as detailed in the Bṛhaddevatā 2.82-84.

Lopamudra, the wife of Agasthya, renowned for his proficiency in Sanskrit and Tamil, was herself a Brahmavādinī Ṛṣi-patnī, with hymns attributed to her in the Rig Veda. Other esteemed female scholars like Ghoṣa, Godhā, Viśvavārā, Apālā, Upaniṣat, Niṣat, Brahmajāyā-juhā, Agastyasvasā etc. further contribute to the rich tapestry of female intellectual prowess. Several hymns in the Rig Veda's sūktas are attributed to women, underscoring their significant role in spiritual discourse. Gārgī's intellectual prowess earned her a place among the learned summoned by King Janaka, while the Upaniṣads depict profound dialogues between Maitreyi and her husband Yajnavalkya. Sahadeva Bhāḍalī mentioned earlier has also contributed significantly to the Marathi literature.

The attainment of Brahma Jñāna (knowledge of the Absolute) was not restricted by gender or life stage, as evidenced by examples like Gārgī, Chūḍāla, Maitreyī, and Sulabhayoginī, who attained it in various stages of life. This emphasizes the accessibility of spiritual enlightenment across different life phases for both men and women. (Reddy et al., n.d.)

Myth 9: The Indian thought process is driven by blind beliefs and dogmas rooted in a religious context.

Fact 9: There has been a healthy tradition of arguing and counter-arguing in a highly professional, rational, and objective manner.

Another popular myth about the Indian tradition is that the Indian thought process is driven by blind beliefs and dogmas rooted in religious context. However, this is completely baseless. Firstly, some of the most important texts of the Indian tradition have originated from questions and are present in question-answer format. The most common example of this is the Bhagavad Gita. Secondly, as mentioned earlier, vāda (debate) forms an integral part of the process of knowledge development in India. Every author, when writing a text or discussing a topic, necessarily refers to the view and findings of the previous authors. The authors scrutinize the arguments of their precursors and only if sufficient evidence is available in response, is the view of the latter considered or else, the result of the former is taken with due respect. For instance, in the Arthaśāstra, Cānakya demonstrates a profound respect for the contributions of earlier scholars while also offering his unique perspective on governance, economics, and statecraft, tailored to the needs and circumstances of his era. Many such arguments can be seen in the literary tradition of India. Some well-known examples are the debate between Śaṅkarāchārya and Maṇḍan Mīśra, between Yajñavalkya and Gārgī, Śaṅkarāchārya and Cāṇḍāla, Naciketa and Yamarāja, and many more.

1.6 Why do we need IKS?

Asking this question, is like asking ‘why do we need to know ourselves?’ One needs to know oneself because only by becoming aware of oneself can one work on improving oneself and function more efficiently in the world. It is the same for a society/nation as well. Without knowing who we are and where we come from, it is impossible to grow. In simple terms, any individual or society cannot grow and prosper harmoniously by remaining disconnected from their culture. Historically, colonization has influenced many nations, but those that reclaimed their cultural heritage post-independence have tended to foster stronger identities. This is because it is impossible to understand the activities of a nation without understanding its culture. After colonization, several practices in India came to be seen as superstitions and texts as mythologies simply because the knowledge systems that formed the foundations of these practices were destroyed. It is like removing the software from your computer or corrupting the software. If we only keep correcting the hardware, without realising the problem lies in the software, the laptop will never function as per its true nature and potential. Similarly, till India as a nation doesn’t become aware of its culture in its truest form, it will never realise the damage that has occurred and will hence keep functioning much below its potential.

The systematic process of rooting out the Indians from their culture officially and legally began in the year 1835, when the British introduced the national system of education for India. The person credited for having introduced this British education to India is T. B. Macaulay. Below are some of his views on the education system present in India before 1835, the

inadequacy of Sanskrit and Arabic language and the need for introducing English education to the people of India⁷.

Figure 10. Views of T. B. Macaulay (1835) on how the Indian Education System should be:

1. **On the purpose of English education:** “We must at present do our best to form a class who may be interpreters between us and the millions whom we govern, -a class of persons Indian in blood and colour, but English in tastes, in opinions, in morals and in intellect. To that class we may leave it to refine the vernacular dialects of the country, to enrich those dialects with terms of science borrowed from the Western nomenclature, and to render them by degrees fit vehicles for conveying knowledge to the great mass of the population.”
2. **On the uselessness of the Sanskrit and Arabic Literature and the importance of introducing English to the people of India:** “All parties seem to be agreed on one point, that the dialects commonly spoken among the natives of this part of India contain neither literary nor scientific information, and are moreover so poor and rude that, until they are enriched from some other quarter, it will not be easy to translate any valuable work into them. It seems to be admitted on all sides, that the intellectual improvement of those classes of the people who have the means of pursuing higher studies can at present be affected only by means of some language not vernacular amongst them..... I have no knowledge of either Sanscrit or Arabic. But I have done what I could to form a correct estimate of their value. I have read translations of the most celebrated Arabic and Sanscrit works. I have conversed, both here and at home, with men distinguished by their proficiency in the Eastern tongues. I am quite ready to take the oriental learning at the valuation of the orientalists themselves. I have never found one among them who could deny that a single shelf of a good European library was worth the whole native literature of India and Arabia. The intrinsic superiority of the Western literature is indeed fully admitted by those members of the committee who support the oriental plan of education....It is, I believe, no exaggeration to say that all the historical information which has been collected from all the books written in the Sanscrit language is less valuable than what may be found in the most paltry abridgments used at preparatory schools in England....Whoever knows that language (English) has ready access to all the vast intellectual wealth which all the wisest nations of the earth have created and hoarded in the course of ninety generations. It may safely be said that the literature now extant in that language is of greater value than all the literature which three hundred years ago was extant in all the languages of the world together..... I would at once stop the printing of Arabic and Sanscrit books. I would abolish the Mudrassa and the Sanscrit College at Calcutta. Benares is the great seat of Brāhminical learning; Delhi of Arabic learning. If we retain the Sanscrit College at Bonares and the Mahometan College at Delhi we do enough and much more than enough in my opinion, for the Eastern languages. If the Benares and Delhi Colleges should be retained, I would at least recommend that no stipends shall be given to any students who may hereafter repair thither, but that the people shall be left to make their own choice between the rival systems of education without being bribed by us to learn what they have no desire to know..... (On the printing of Sanskrit and Arabic texts) We are a Board for wasting the public money, for printing books which are of less value than the paper on which they are printed was while it was blank-for giving artificial encouragement to absurd history, absurd metaphysics, absurd physics, absurd theology-for raising up a breed of scholars who find their scholarship an incumbrance and blemish, who live on the public while they are receiving their education, and whose education is so utterly useless to them that, when they have received it, they must either starve or live on the public all the rest of their lives.”

⁷ For the full article: <https://home.iitk.ac.in/~hcverma/Article/Macaulay-Minutes.pdf>

This formed the basis of the Indian education system for more than 60 years even post-independence. It is only recently after NEP 2020, that efforts are being made to bring changes in the education system. Even though it is a much-needed step in the process of decolonization, there is a long way to go. Colonization is still prominently visible in the ways of thinking and being of the Indian people and hence, the only way for India to grow is to become aware of its roots and nurture the aspects that are needed in the current times. Only then can it make informed decisions for its overall harmonious development. Until this is done the British dream as introduced by Macaulay will continue to thrive in the minds and behaviours of Indians and we will continue to raise generations disconnected from their cultures, struggling to find their identities in the chaotic world.

1.7 Unique Aspects of IKS

1. *Understanding the Self* - Since ancient times, the people of India realised that it is impossible to achieve growth, refinement, and evolution at level without achieving it at an individual level. Therefore, the primary purpose of life and knowledge in life was knowing and understanding the Self. All the fundamental texts of the Indian tradition therefore lay immense emphasis on the refinement of the body-mind complex which in turn helps in a refined understanding of the world outside. This science has been reiterated in major important texts of IKS again and again. For example, the entire Muṇḍaka Upaniṣad is the answer to the question, ““What is that, by knowing which, everything can be known?” The whole Upaniṣad is an answer to that question, what is that by which we can know all things.” It is the knowledge and experience of the Self, that is the answer to this question. (Commentary on the Muṇḍaka Upaniṣad - Chapter 3: Section 2, n.d.)

2. *Unity in Diversity* - If the entire knowledge of the Indian tradition has to be described in one statement, it would be ‘Vasdhaiva Kutumbakam’ (Mahopaniṣad, Chapter 6, Verse 71) which translates as ‘the world is one family’. Since epochs, the Indian tradition has stood by this statement, accepting the oneness among all (the entire creation) along with respecting the

diversity within everything and everyone. Acceptance of the entire humanity as a whole with love and compassion forms the foundation of the Bhārataīya paramparā.

3. *Customization* - Respect for uniqueness and diversity gives rise to another salient characteristic of the IKS i.e., customization. In current times when the concept of one size fits all is being applied to everything from healthcare to fashion and the uniqueness is not being appreciated, IKS provides progressive solutions. In India, since ancient times, everything has been custom-made for every individual. The entire science of Āyurveda (Indian science of medicine) is based on the fact that every individual is different and hence, diagnosis, treatment, lifestyle, and food everything has to be customized individual wise. Not just that, aesthetics has been an important part of Indian culture. Customization is visible in everything from the availability of food options, to how the meals are served, to the clothes, and also art and architecture.

4. *Sustainability* - Customization leads to production based on needs. Because everything is done with thought, sustainability becomes a natural consequence. This is again inherent in the Indian tradition. The reverence for everything within and without is a salient feature of IKS. Because everything is considered sacred, any form of exploitation is an action that is beyond one's dharma. The emphasis is on making the most out of the use of minimum resources. The purpose of creation even if to serve the mankind, is to not cause burden on mother nature. This formed an important part of teaching in the Gurukuls. The knowledge of the self played a crucial role in alignment with the Dharma. And every conflict with the nature is indicative of deviation from this natural alignment.

5. *Health Sciences* - The medical science developed in India offer a different perspective of looking at a human which is completely different from the current systems right from the foundational level. The focus is not just on curing a disease and bringing an individual to a state of normalcy but to help an individual to attain their full potential.

As per Āyurveda, the body is made up of the Pañca Mahābhūtas (the gross elements) that are: Ākāśa (Ether), Vāyu (Air), Agni (Fire), Āpah (Water), and Pruthvi (Earth). The body type of an individual is based on the percentage of these elements. Even the cause of disease is due to imbalance of Tridoṣas, dhātus, and Agni. Diseases can also occur due to the suppression of urges like urination, defecation, hunger, etc. The treatment in Āyurveda is based on this foundation and aim to restore the balance in the overall functioning. Also, given the diversity in the geography of India, the Āyurvedic system has developed keeping in mind all possible climatic conditions and therefore has the potential to be applied on most populations across the world.

6. Nuanced Oral Traditions - The entire knowledge is to be transmitted orally and committed to one's memory. The non-tangible features are an important part of the knowledge system. IKS is not only what is written or memorized, but it is a living tradition that can be seen in the thoughts and actions of Indians even today. For this purpose, the oral tradition was precise and concise but conveyed knowledge worth an ocean in small sentences.

7. Integration of different disciplines - A remarkable aspect of Indian Knowledge Systems (IKS) is its ability to seamlessly integrate ideas from three distinct streams: Spiritual, Scientific, and social thereby offering a holistic understanding of life and the universe. This integration is not only evident within individual works but also permeates across various disciplines, fostering a harmonious coexistence and contributing to the overall growth of society. In IKS, knowledge transcends disciplinary boundaries, with diverse subjects interlinked in a cohesive manner. For instance, within a single literary or philosophical work, one can encounter discussions on mathematical concepts alongside explorations of poetry and philosophical musings. This interdisciplinary approach reflects the interconnectedness of knowledge and underscores the holistic nature of learning within IKS. Similarly, the principles of itihāsa, natyaśāstra (treatise on performing arts), and lifestyle are intricately woven into the fabric of architectural design and construction. Architectural marvels such as temples, palaces, and sacred monuments serve as

tangible expressions of spiritual and religious beliefs, while also incorporating practical considerations related to aesthetics and functionality. Thus, architecture becomes a manifestation of transmitting cultural values and societal norms, embodying the interconnectedness of various streams of knowledge within IKS.

This multi-dimensional approach to knowledge not only enriches individual disciplines but also fosters a deeper understanding of the interconnectedness of all aspects of life. By transcending disciplinary boundaries and embracing diverse perspectives, IKS encourages a holistic worldview that encompasses spiritual, scientific, and social dimensions, ultimately contributing to the holistic development of individuals and society as a whole. It is therefore, extremely essential to bring back IKS into the education system. As said by Baba Dioum, Senegalese Forest Engineer (1968, New Delhi), “*In the end, we will conserve only what we love; we will love only what we understand, and we will understand only what we are taught.*” (Becstersontheroad, 2016) Therefore, let us begin the journey of conserving our culture, our tradition by teaching it to our upcoming generations.

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