

Introduction

Indian Civilization has been a great treasure house of ancient knowledge and learning, which have been accumulated in its fold since time immemorial. Indian Knowledge Systems (IKS) encompass *Jnan*, *Vignan*, and *Jeevan Darshan*, which have evolved from experience, observation, and rigorous analysis. These systems include a wide array of knowledge areas such as mathematics, astronomy, philosophy, yoga, architecture, medicine, agriculture, engineering, linguistics, literature, sports, and games. Knowledge in ancient India emerged from different sources like Vedas, Upanishads, Puranas, Tamil Sangam literature etc. Institutions like Takshashila, Nalanda, Vikramshila, Vallabhi were centers of advanced learning on various subjects.

Some Core aspects of Indian Knowledge System are well known and globally acknowledged. They include- Indian mathematical theories and discoveries in concepts like zero, decimals, algebra, arithmetic, geometry, Ayurvedic system of traditional Indian medicine focusing on holistic wellness, Vastu Shastra i.e. architectural and design guidelines based on harmonizing structures with nature and energies, Yogic physical, mental and spiritual practices for healthy, balanced living, Ancient Indian metallurgy and materials science as reflected in Iron Pillar of Delhi and Astronomical insights and knowledge from texts like Aryabhatiya, Siddhantas etc. with contributions in model of solar system, eclipse prediction etc.

Research Objectives:

The research has been undertaken to fulfill the following Research Objectives.

- a. To examine the historical impact of colonialism on the perception, representation, and transmission of the Indian Knowledge System (IKS).
- b. To analyze how globalization has facilitated both the revival and commodification of IKS in contemporary society.
- c. To identify the core elements of IKS that hold relevance for modern challenges in health, environment, education, and sustainable living.
- d. To explore the potential of integrating IKS with modern education systems in order to preserve cultural heritage and foster holistic learning.
- e. To evaluate the role of technology and digital platforms in documenting, preserving, and disseminating IKS globally.
- f. To investigate the risks of exoticization, appropriation, and neo-Orientalism in the global representation of IKS.
- g. To propose strategies for decolonizing knowledge systems and ensuring equitable global knowledge exchanges.

h. To highlight the contribution of IKS to sustainable development and its applicability in addressing contemporary global crises.

Research Questions

The research seeks to explore the following questions.

- a. How did colonial narratives contribute to the marginalization and misrepresentation of the Indian Knowledge System (IKS)?
- b. In what ways can globalization act as both a challenge and an opportunity for the revival of IKS?
- c. How has the integration of IKS practices like Ayurveda, Yoga, and Vastu Shastra into global systems influenced their authenticity and application?
- d. How do hybrid forms of knowledge, combining Indian and Western philosophies, impact the perception and evolution of IKS in contemporary society?
- e. What lessons can be drawn from ancient ecological wisdom in IKS to address current global environmental crises?
- f. To what extent does the global commercialization of IKS practices (e.g., yoga, herbal medicines) affect local practitioners and communities?
- g. How can technology and digitization aid in preserving and disseminating IKS without distorting its core philosophies?

Research Methodology

This study adopts a qualitative and interpretative research methodology, focusing on the historical, cultural, and philosophical dimensions of the Indian Knowledge System (IKS) in the context of colonialism and globalization. The methodology is designed to critically analyze how IKS was marginalized during colonial rule, how it has resurfaced in the globalized world, and what opportunities and challenges lie ahead for its revival and integration.

The study follows a historical-analytical design to trace the evolution of IKS from ancient times through colonial encounters to contemporary globalization. It also employs a descriptive and interpretive approach to examine how IKS is represented, practiced, and perceived in the modern era.

The research relies on extensive literature review and documentary analysis. Comparative study of ancient Indian epistemologies and Western knowledge frameworks has been conducted through textual analysis. The study also employs a globalization framework to understand the opportunities and risks in the cross-cultural exchange of knowledge.

The Indian Knowledge System and Globalization

Indian knowledge has flown uninterrupted through the subcontinent like the Ganges. Just like the water of the river's merges in the ocean and travels across the world. The Indian Knowledge System could not be restrained to India alone and it travelled across to foreign lands. Learners and scholars visited India to acquire the knowledge in ancient and medieval times. They carried back home the acquired knowledge and at times Indian manuscript. Indian text became even more accessible to the Europeans when they colonized the country. The people who could keep aside their racial superiority, delved through the ocean of Indian Knowledge. Once they became acquainted with the same, they also popularized oriental learning.

Not all Europeans were appreciative of Indian wisdom. Some looked upon Indian civilization as backward and unscientific and used that as a pretext to justify colonial rule as an attempt to civilize the Indians. Beginning in the seventeenth century, European intellectual developments diverged significantly from those of India, leading to the eventual displacement of IKS as a viable option for interpreting the world. As colonialism progressed, the British administration introduced a formal education system that privileged Western knowledge, marginalizing IKS and contributing to their gradual demise. Despite the decline of IKS, some aspects persisted and continue to influence contemporary Indian society and culture.

“The tradition talks about 18 major vidyas, theoretical disciplines, and 64 kalas, applied and vocational disciplines, crafts. The 18 vidyas include the four Vedas, the up-Veda's or the subsidiary Vedas which include Ayurveda, medicine, Dhanurveda, weaponry, Gandharvaveda, music and Shilpi architecture, Purana, Nyaya, Mimamasa, Dharmashastra, and Vedanga, six auxiliary sciences, phonetics, grammar meter, astronomy, ritual and philology– these constituted the 18 sciences in ancient India.” (Kapoor,22005, p.8). The crafts were taught to the individuals which not only helped them in their day-to-day life but were also utilized to make a living. Thus, the concept of vocational education popularized in the present era was an implicit learning with the ancient Indian knowledge system. Sessions of long practice in craftsmanship refined the craft in the student. Indian craftsmanship, unique and refined is a global attraction and the credit for its workmanship goes to the system of learning.

Indian Knowledge does not consist of blind philosophies devoid of sciences rather the knowledge acquired through senses is followed by perception, inference, *Tarka* i.e. argumentations, meditation, deep reflection, Chintana and manana. The Indian knowledge system has given greater importance to 'shruti' and 'smriti' i.e. listening and memory more than writing. Indian knowledge system includes various disciplines, vidya, craft and kala.

The importance of education in India was realized in India from very early times, and utmost emphasis was laid on the acquisition of knowledge. The educational institutions were many and varied in character. In its simplest form it was the gathering of one or more students in the house of a teacher. The students were brought up as a member of the

household. Teachers constituted an indisputable position in the Indian Knowledge system and were seen as open books. No life aspect was ignored by the rishis. Everything which would be needed in life was taught. “Even in pursuing the positive sciences, such as, Geometry, Astronomy, Medicine, etc. they were religiously inspired.” (Ray,1938, p.120)

Jnana is looked upon as a method to attain the Supreme Being. Jnana consists of the ability to distinguish between *sat* and *as at* i.e. what is true and what is false. It also helps to distinguish between *kartavya* and *akartavya* i.e. what is ones’ duty and should be done and what should not be done. The objective of Indian education system was not limited to mere acquisition of Knowledge rather the knowledge system inculcated social duties, religious rites and formation of character.

The results of Indian education have been described by Hiuen Tsang. “When they have finished their education and have attained thirty years of age, then their character is formed and their knowledge is ripe. There are some deeply versed in antiquity, who devote themselves to elegant studies and live apart from the world and retain the simplicity of their character.” (Majumdar,1977, p.544) Magasthenes too testified that the impact of ancient education system, “They live happily enough, being simple in their manners and frugal. They never drink wine except at sacrifices Their houses and property they generally leave unguarded. Truth and virtue they hold alike in esteem.” (Majumdar,1977, p.545) Thus by both the standards of east and west, Indian character was high and honorable. The system of education produced massive literature and great men.

Knowledge begins by knowing oneself. Thus, every individual is autonomous, in his complete control and could work for his own liberation. “Wisdom born out of the knowledge kindles self-control. Pursuit of knowledge becomes a self-discipline, *svadhyaya*, and after obtaining this knowledge, one sees the entire creation first within own self and then in divinity that suppresses all existence. There is no purifier greater than knowledge and it rids the knower of all impurities of thought and deed and all his doubt born out of ignorance is torn to shreds.” (Kapoor,2005, p.18) Multiple paths to truth are allowed in the Indian Knowledge system. In the present times the flexibility and plurality avoid conflict, welcomes new ideas and paths. The west is yet not aware of the importance of introspective method of study. Knowledge was not made distinct from religion and spirituality. Knowledge was seen as a path to attain God, which lead a desire to seek more and more of the same. Thus, there was no cut throat competition for the attainment of knowledge, rather people helped each other to attain the ultimate goal.

India’s Scientific mind, has proven its metal. Whether we deal with the size and age of universe, huge and infinitesimal time scales, the speed of light, number from zero to infinity, the notion of evolution, cosmic dimensions underlying the construction of altars and temples. Such ideas appeared in the west centuries later. Various numerals in India including *shunya* or zero were associated with various philosophical and spiritual terms. Indian astronomical observations closely associated with mathematics are very precise. Nature of town planning is evident from the earliest civilizations, from the cities of Harappa, the town

planning, orientations with directions, drainage system. Ayurveda and Yoga have now been recognized as globally for the maintenance of healthy living. Ayurveda talks more about lifestyle changes rather than the mere treatment of diseases. Spiritual practices have proven to be beneficial in stress management and in healing ailments. Yoga, meditation and *pranayama* have aided people in recovering from serious illnesses. Various scholars visited in the quest of knowledge. Greek scholars including Pythagoras and Democritus came to India in the search of knowledge. Indian medicines and herbs formed an important part of Roman trade.

The principal of sanctity of life is clearly engrained in the ancient Indian literatures including the Rig Veda. The Vedas talk about respect for life. Ecological wisdom is incorporated. “The Vedic premises pinpoint that mankind is not any alien species in this planet to dominate and exploit but an integral part of nature itself linked to the rest of creation by indissoluble bonds...” (Das,2003, p.18) The Atharva Veda proclaims equal right of every creature on earth. Development of sacredness of creation and sanctity of life principle are the basics to early Indian philosophy and culture. Thus, Indians during the ancient period lived in harmony with the other creatures rather than considering themselves supreme.

Trees were worshiped for the numerous benefits it provided to the people. Buddhist, too attached great importance to the trees. Puranas associate trees with auspiciousness. They are said bestow its worshipper with a son. “They uphold the divinity of plants, enjoin tree plantation and nurturing of plants, present the concept of Taruputraka or adoption of trees like children and consider tree lovers as excellent Bhagvatas and condemn wanton destruction of trees.” (Das,2003, p.135) Thus the puranas too propagated common heritage bound by concern for nature, environment and quality of life. Principles for maintaining the ecosystem and the purity of the environment were enshrined since times immemorial. “In order to surmount the hazards of pollution, the Vedic texts put a bar on indiscriminate cutting of trees, imposition of punishment of killing or doing harm to animals and provided instructions not to pollute water with excrements.” (Das,2003, p.136)

Vikrti, is the term used for pollution in Charak Samhita, the classical text for medicine. Charak Samhita warned the people against side effects of natural disorders. It is rightly mentioned that the lifespan of living beings is dependent on coordination of biological world. Noise pollution and the irritation and diseases caused by inhalation of odor are also mentioned. (Das,2003, p.136) During the Mauryan period, agricultural development and forests had played an important role in the development of a large Mauryan state. Kautilyas' Arthashastra and the Ashokan inscription puts great emphasis on agricultural, forests and livestock management. Kautilya's Arthashastra talks about in-situ and ex-situ conservation of one or more species both inside and outside their natural habitats. Penalties were imposed for cutting forests. (Gupta & Ghosh,2003, p.143) Thus the conservation of nature and environmental concerns today were inbuilt aspects of IKS. If IKS would have been practiced and propagated the environmental conditions would have been certainly better.

Sri Krishna in his discourses to Arjuna calls Knowledge the greatest purifier and liberator of self. The modern world has resulted in the scenario where the individuals are racing against time. The desire for better life, the need of basic necessities or the greed of accumulation of luxury had resulted in the emergence of competitive environment. No sooner that a child begins school, that for the admissions to top institutions he is introduced to competition. He is encouraged to be better than his other peers. From an early age stress enters his innocent life. The life of the youth is spent under the pressure of making a living. At times, his desire for fast rise and material gains burdens his heart and mind to the extent that stress related diseases have become very common among the youth. Under such circumstance, people have begun to look towards their traditions to acquire such knowledge which would help him surf over the tide caused by modernity.

Indian Knowledge Systems (IKS) have been profoundly influenced by colonialism, particularly during the period of British rule in India. Before colonialism, IKS were vibrant and diverse, covering fields such as mathematics, astronomy, philosophy, and medicine. However, starting in the seventeenth century, European intellectual developments diverged significantly from those of India, leading to the eventual displacement of IKS as a viable option for interpreting the world.

Under colonialism, IKS declined as a creative force in Indian life, giving way to other knowledge systems based on unfamiliar epistemologies, socialites, and politics. The Victorian era saw the rise of European modernity, which was disseminated by colonialism and eventually contested and undermined the Sanskrit intellectual formation. After independence, attempts have been made to revitalize and integrate IKS into modern education systems, preserving and promoting India's rich cultural heritage while addressing the challenges posed by globalization. However, despite these efforts, postcolonial scholars have noted the continued marginalization of IKS in contemporary Indian society and the academy. Moreover, postcolonial critiques have pointed out the ongoing reproduction of coloniality of knowledge in Indian textbooks and education systems, which perpetuate the erasure of indigenous knowledge systems and favor certain identities over others. This phenomenon reinforces the colonial legacy and maintains the coloniality of knowledge, which continues to shape the construction of knowledge and subjectivity in India today. In the present era where the world has become a global village, Knowledge is no longer restricted by the borders. Modern technologies and the World Wide Web have made the world a well-knit unit. The ancient scriptures are now a click away from individuals. Their availability, accessibility, their translations in various languages has further widened its reach. Globalization has led to a growing appreciation for diverse knowledge systems and IKS is gaining recognition for its potential contributions to sustainable development and innovation in various fields. Globalization facilitates the exchange of knowledge across cultures, creating opportunities for dialogue and collaboration between IKS practitioners and other knowledge systems. Technological advancements offer new tools for documenting, preserving, and disseminating IKS, making it more accessible to wider audiences and promoting its integration into formal education systems.

Revival of Yoga's Global Popularity has been a hallmark of adoption of Indian Knowledge by the West. Transnational followers attracted by yoga's health and wellness offerings and spiritual philosophy. Mass media, celebrity endorsements further amplified reach global. Global and corporate interest has been generated in traditional remedies and alternative medicine yet the profit makers have also commercialized the same resulting in patenting attempts of medicines like turmeric, neem without attribution. Significant research on Indian philosophical traditions is happening in Western universities Question of representing diversity of thought or enforcing dominant paradigms. Positive impact of globalization is two-way exchange. Western advances can upgrade Indian knowledge ecosystems too through more funding, cross-collaboration platforms etc. Examples include American universities helping digitalize and study Indian manuscript archives and heritage. Modern Yoga schools exhibit hybridization of traditions and global influences. Critique that West represents Indian knowledge through exoticized frames without grasping core worldviews - a form of neo-Orientalism. Issues in positioning as 'native informants' for Western audience without agency. Overall, while Indian knowledge faces barriers of power hierarchies, representation dilemmas in globalization, there is scope for equitable exchange and networking models to harness global tools transparently to enrich, upgrade and benefit indigenous knowledge in authentic ways.

Conclusion

The Indian Knowledge System faces both challenges and opportunities in the postcolonial and globalized world. Recognizing the historical context and utilizing the potential of globalization are crucial for its revival, integration, and contribution to solving contemporary challenges. By fostering community-centered approaches, decolonizing knowledge systems, and encouraging dialogue and collaboration, we can build a future where IKS thrives and contributes to a more sustainable and equitable world. Postcolonial scholars have highlighted the complex relationship between IKS and colonialism, revealing both the loss of traditional knowledge systems and the emergence of hybrid forms of knowledge that combine elements of both Eastern and Western philosophies. Efforts to revitalize and integrate IKS into modern education systems aim to preserve and promote India's rich cultural heritage while addressing the challenges posed by globalization.

Suggestions

- a. The Indian Knowledge System (IKS) should be integrated into mainstream curricula at school and university levels in order to preserve indigenous knowledge traditions and ensure their relevance in modern society. Interdisciplinary modules combining IKS with modern sciences can foster holistic learning.
- b. Academic frameworks should move beyond colonial legacies by critically reassessing textbooks, research methods, and epistemologies. A decolonized approach will allow IKS to be studied in its own context rather than through Eurocentric paradigms.

- c. Digitization of manuscripts, oral traditions, and regional practices should be prioritized to make IKS accessible to global audiences. Open-access repositories and translation projects can democratize knowledge sharing while safeguarding authenticity.
- d. Policymakers and institutions must encourage research in IKS through funding, fellowships, and specialized centers. Supportive frameworks can help practitioners of Ayurveda, Yoga, and ecological traditions contribute meaningfully to contemporary challenges.
- e. Mechanisms must be developed to protect traditional knowledge from misuse and commercialization without attribution, as seen in cases involving neem and turmeric. Intellectual property rights frameworks need to be sensitive to community-based ownership of knowledge.
- f. Instead of one-way appropriation, equitable global collaborations should be promoted. Joint research programs, exchange platforms, and dialogues between IKS scholars and global experts can ensure mutual respect and learning.
- g. IKS principles related to sustainability, holistic health, and ecological balance should be actively applied to address modern crises such as climate change, lifestyle-related diseases, and social stress.
- h. Awareness campaigns, cultural festivals, and mass media initiatives can help spread knowledge of IKS beyond academia, ensuring community participation and intergenerational transfer of practices.

References

- Das, S. (2003). Concern for environment: An early Indian perspective. In S. Chattopadhyay (Ed.), *Journal of Ancient Indian History*. Calcutta University.
- Danino, M. (2005). India's scientific mind: A quest for infinity. In K. Kapoor & A. K. Singh (Eds.), *Indian knowledge system* (Vol. 1). D.K. Print world Ltd.
- Gupta, A., & Gosh, S. (2003). Wildlife conservation in the Mauryan period. In S. Chattopadhyay (Ed.), *Journal of Ancient Indian History*. Calcutta University.
- Kapoor, K. (2005). Indian knowledge system: Nature, philosophy, character. In K. Kapoor & A. K. Singh (Eds.), *Indian knowledge system* (Vol. 1). D.K. Print world Ltd.
- Majumdar, R. C. (1927). *Outline of ancient Indian history and civilization*. Sri Narsimha Press.
- Majumdar, R. C. (1977). *Ancient India*. Motilal Banarsidass Publishers Pvt. Ltd.
- Ray, B. (1938). *Aims and ideals of ancient Indian culture*. Brohmo Mission Press.