

## REPORT

### **'The Tattvas and their Potential Use in Modern Science.'**

Webinar organized by WAVES

July 1, 2024

WAVES recently hosted Dr. Subhash Kak, a distinguished computer scientist, historian, and author who has been honored with the Padma Shri award, to lead their monthly webinar. During the webinar, Dr. Kak delivered a presentation on the topic of "The *Tattvas* and their Potential Use in Modern Science," exploring the practical application of the *Tattvas* in fields such as consciousness studies, neuroscience, and the development of cutting-edge technologies. The speaker provided valuable insights into how the *Tattvas* could inspire innovative solutions to complex problems.



### World Association for Vedic Studies (WAVES) & Wider Association for Vedic Studies (WAVES)


Invite you to attend

#### WAVES Webinar Series, Talk No. 6

**Monday, 1st July, 2024**


8 PM IST/New Delhi  
10.30 AM US/Eastern  
9.30 AM US/Central

**Register at**  
<https://tinyurl.com/waves1july24>  
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Looking forward to your valuable participation.

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**Speaker**  
**Dr. Subhash Kak**

A distinguished computer scientist, historian and author of over 30 books. Honored with the Padma Shri award in 2019.  
A Regents Professor at Oklahoma State University-Stillwater and member of the Indian Prime Minister's Science, Technology, and Innovation Advisory Council (PM-STIAC).

#### **The Tattvas and their Potential Use in Modern Science**

**“आधुनिक विज्ञान में तत्त्व और उनका सशक्त उपयोग”**

Dr. Kak's talk explores the recent research that shows that *akasa* is not to be considered equivalent to the space of Modern Science. *Akasa* as an active element has the potential to provide new insights into physics and help resolve some fundamental questions of cosmology. These findings will be summarized and further applications of *akasa* and other *tattvas* in science and psychology will be explored.

**Chair**  
**Shri Dharendra A. Shah**

Director & Treasurer,  
WAVES, International,  
USA

YouTube Channel : @wavesblog

Leading into the question of what consciousness is, he cited a line from the Kulgeet of the WAVES organization: "Take us from '*Apara*' to '*Para*.'" In the Vedic tradition, *Apara* represents knowledge of the outer world, including the physical realm and all embodiments.

Conversely, *Parā* knowledge relates to transcendent knowledge associated with the Atman, or consciousness. According to the Vedic perspective, these two forms of knowledge are complementary aspects of reality.

Dr. Kak articulated, "Consciousness is transcendent and lies at the core of the Vedas; it permeates like light, and there exists only 'One' consciousness." Additionally, he conveyed that freedom is attained through becoming cognizant of consciousness and realizing one's identity as *Atman-Brahman*. "*Atman is the microcosm, and Brahman is the entire cosmos, both in a reflexive relationship; this awareness is what separates a two-legged paśu from a four-legged paśu. Manas is how we operate through the world, but the anchor is the Atman.*"

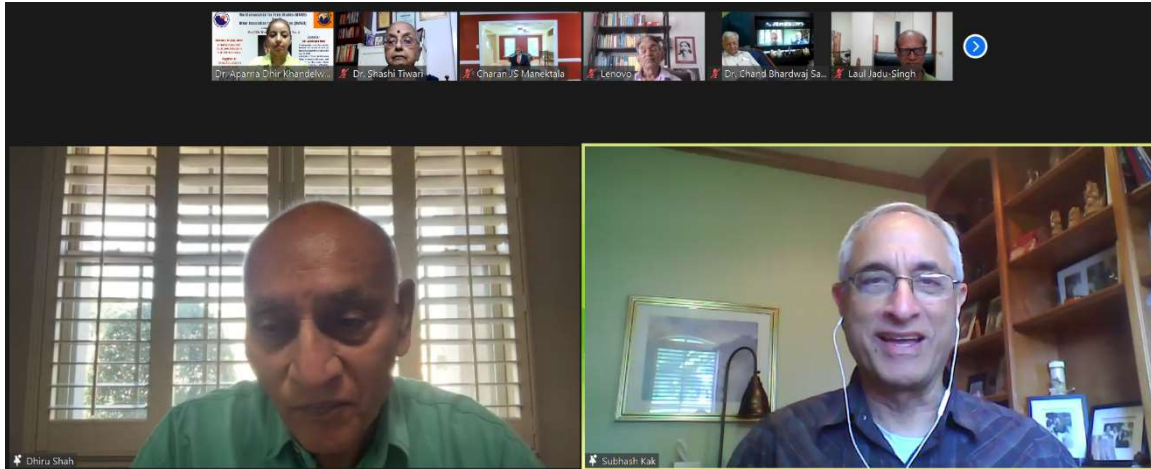
The speaker emphasized that today's predominant focus on the body-centric or *Apara* view of reality, while not inherently wrong, is incomplete and has contributed to global confusion and delusion; when one thinks of oneself solely as a physical body, it becomes natural to view concepts like gender as interchangeable, challenging the foundation of traditional biological norms.



He then raised the question, “*How can the concept of Consciousness get integrated with the mainstream science narrative and transform science?*” Dr. Kak spoke of the limitations of mainstream science compared to the insights offered by Quantum Mechanics, aligning with the Vedic tradition and recognizing consciousness as another aspect of reality. He also drew parallels between the Vedas and the Deepest Science. One profound insight is the Vedantic concept of ‘*Shristi Drishti Vada*,’ which asserts that creation occurred through observation. Quantum mechanics has challenged traditional scientific paradigms with phenomena like superposition and observer effects, echoing the notion that consciousness may indeed play a fundamental role in the evolution of the universe.

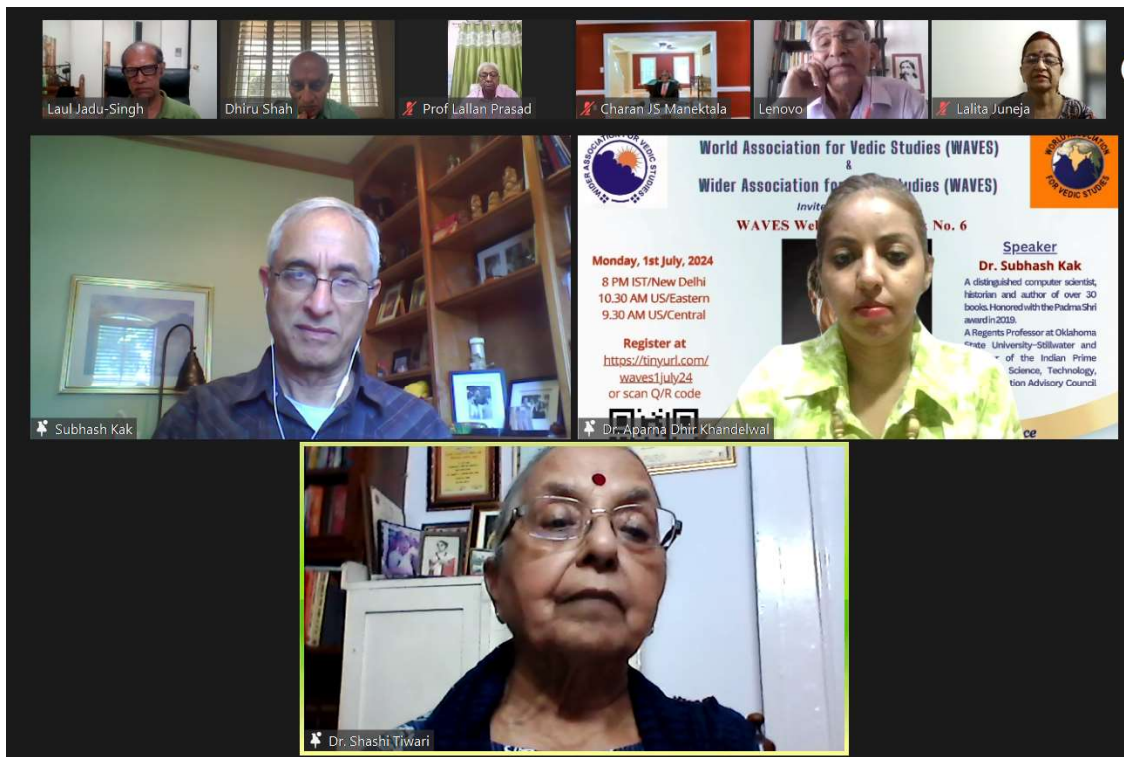
In his research, Dr. Kak discovered a synthesis between the 25 cognitive centers found in neuroscience and the 25 Tattvas in the *Sāṅkhya* system, which forms the foundation of the Vedic understanding of reality. Dr. Kak explained that “the *Ākasa Tattva*, rather than simply representing space, is a vital element. In this 'E-dimensional' space, every point in physical and biological space is *Ākashic*, constantly connected to every other element. *Ākasa* serves as the medium of Consciousness in the Vedic model of the mind.”

The basis of this theorem, as expressed by Dr. Kak, lies in the Brihadāranyaka Upanishad; in this text, the sage Yājñavalkya tells Gargi: The *Tattvas* are all entangled; within *Vāyu* is *Ākasa*, *Ākasais* within *Tejas*, they are all within each other and not separate. This concept inspired Dr. Kak's research, marking the beginning of his eight-year journey into exploring these interconnected principles.



Following the conclusion of the presentation, the Chair of the program, Director, and Treasurer of WAVES-International expressed profound gratitude to Dr. Kak and then invited questions from the audience.

Renowned economist and academic Professor Lallan Prasad inquired, "Among the Five *Tattvas*, *Ākasa* take up the most space; it exists both within and outside the body and throughout the entire Universe. Considering this, which *Tattva* came first?" Dr. Kak's response emphasized the complexity and ambiguity surrounding the concept of the primordial *Tattva*, particularly focusing on *Ākasa* and its presence across different elements. "Just as sage Yājñavalkya said, *Ākasa* is also present in the other *tattvas*. Therefore, if one analyzes the physical element - the *Bhautik Tattva* - as most Modern Sciences do, great insights can be extracted from there."





Dr. Shashi Tiwari, President of WAVES, India, praised Dr. Kak for delivering a 'thought-provoking' lecture and posed a question regarding *Ākasa*. "In the Rigveda and other Vedas, various terms such as *Duo*, *Swaha*, and *Diva* are used for *Ākasa*. We commonly understand it as light space, and *Antarāiksha* as aerial space, and *Prithavi* as our space, where we can perceive things. What is the connection between *Duo* and *Ākasa*?"

Dr. Kak, in his response, mentioned the correlation between the Five *Tattvas* and the Five *Indiras*. Additionally, he noted that *Prithavi* is connected to the sense of smell, while *Ākasa* is associated with hearing. He clarified that *Ākasa* is not directly linked to sound but rather to the message carried by the sound wave. Dr. Kak emphasized that transcendent knowledge is conveyed through *Akasa*, serving as the medium through which *Jivatman* or *Manus* connects with the Higher 'Cosmic' Reality. However, he highlighted the need for further examination of this matter.



After the engaging Q&A session, Shri Dharendra A. Shah officially announced the dates for the upcoming 'WAVES 2024' conference at the Hindu University of America (HUA), Orlando, Florida, September 13-15. Dr. Kak is set to present his paper aligning with the conference theme. Concluding the webinar, Dr. Aparna Dhir Khandelwal, the moderator, expressed gratitude on behalf of WAVES to Dr. Kak and all the attendees for their unwavering support and active participation.

Overall, the webinar was highly interactive, with a knowledgeable audience of scholars and academics actively participating. Attendees posed thought-provoking questions to Dr. Kak. The session facilitated a rich exchange of ideas and insights.

Several attendees shared their sincere thoughts following the event:

“Attended presentation by a US university professor of Physics and Computer Sciences, expanding on Tattvas, and importance of Aakash... He is published in the Nature magazine journal, a journal where potential Nobel Laureates publish, and is a recipient of Padma Shri award from India.” by Shri Charan Manektala, USA.

“It was a wonderful lecture given by Prof. Subhash Kak; it has enlightened much as it is very close to my humble effort to explore the mystery of the origin of the universe.” by Dr. A.R. Tripathi.

“A very enlightening lecture by Dr Subhash Kak with Vedic references and modern scientific research. Learned audience and high-level discussion made the session lively. Thanks to Dr Subhash Kak for accepting WAVES request.” commented Dr. Shashi Tiwari in the concluding hour in the chat box.

YouTube Link of the Talk:

<https://www.youtube.com/watch?v=-OSYpDuVqlw&t=2428s>

Information about ‘WAVES 2024’ Conference:

<https://thewavesinternational.com/>

*Report by:*

**Supriya Chopra**