

CSTS June 2017

Consciousness, Science, Technology, and Society

Shanghai, June 6-10, 2017

CSTS June 2017 will be a five-day event, devoted to the exploration of consciousness in all its aspects, and particularly the intersection between consciousness with modern science and technology, and the social impacts of this intersection. The event will consist of a one-day conference with short TED-style talks and three days of in-depth workshops (described below). Eastern and Western perspectives will be balanced and constructive synergies between these perspectives will be explored. Attendees will also have the opportunity to contribute original ideas toward the design of a second CSTS event that will be held in Shanghai later in the year.

East Meets West: The CSTS Vision

Based in China and hosted by *Crystal Globe*, the CSTS event series will take an Eastern approach toward understanding consciousness and bring together leading experts from the East and West to explore the science that relates mind, body, and behavior. CSTS will showcase new technologies, products, and services that promote mental and emotional well being, ultimately for the benefit of society.

The key difference between Eastern and Western thought is that the core of Western knowledge has emerged from a dualistic understanding of mind and matter while Eastern science and philosophy is nondual (Atman). From the Eastern perspective, all experience finds its origins in consciousness (including first, second, and third person experiences) and consciousness is primary. This approach to knowledge is based upon personal investigation and practices toward direct experiential knowing (e.g., practices such as breathing techniques, meditation, visualizations, chanting, etc.), while the western approach to knowledge is rooted in materialism, focused primarily on observed (third person) experiences, and based upon theories, ideas, and a conceptual understanding.

By taking an Eastern approach, first person experiences are honored (dreams, altered states, psychosis, etc.) and second person research methodologies (inter-subjective engagement, collaboration) become possible. In Asia, there is over 2500 years of experimentation and exploration based upon a nondual foundational premise (Advaita, Dzogchen, Zen, Taoism). Also prominent in the Eastern approach is the role of nature and our relationship with in it.

CSTS will bring together the greatest minds from the East and West to advance the collective field of knowledge toward greater understanding. This event series will encourage the development of new technologies, products, and services with particular focus in the areas of education, mental health, creativity, innovation, entrepreneurship, and management. This kind of cross-cultural knowledge exchange is necessary to address the many thorny problems facing today's global society, and to bring about a shift toward a more harmonious future.

CSTS June 2017: Workshops

Mind and Nature: Eastern and Western Approaches

German Philosopher Karl Jaspers identified the years from the 8th to 3rd century BC as a pivotal 'Axial Age' for mankind, a period when the religions and philosophies that underlie our modern World were first conceived in and shared by Persia, India, China, Greece, Egypt and Rome. With the colonization of the World over the past two hundred years by the West, its advancements in science, materialism, capitalism, and today's globalization enabled by technology, the religions and philosophies of old have lost their true meaning and power.

Globalization can be seen as a natural evolutionary process. However, if it is truly to succeed, it must respect the world's multicultural diversity of thought and knowledge, find common guiding values, and engage in healthy dialogue that permits checks and balances insuring the wellbeing of all people and our planet. |

Every culture has had a guiding story of who we humans are and in what kind of universe we live. According to Joseph Campbell, such a functioning 'mythology' serves four functions. 1) The Mystical Function: To open up a realization of the mystical dimension (realization of a transcendent mystery source behind the surface phenomenology of the World); 2) The Cosmological Function: To understand the material world (an understanding that is consistent with contemporary knowledge); 3) The Sociological Function: To validate and maintain a certain specific social order of the current society; and 4) The Pedagogical Function: To guide individuals harmoniously through the inevitable crisis of stages of life. At the end of his life, Campell called for a myth for the entire world, one for all cultures and our planet Earth.

Today's military and economic conflicts, along with the devastating conflict between man and nature, can all be traced back to the differences between the different core approaches to understanding the world and our role in it. In this workshop, we will explore the differences between Eastern and Western thought toward the development of a contemporary vision of a global society.

As science has replaced religion in the secular societies of today, we will look specifically at how the foundational concepts of our universe and how it can best be understood have differed in the sciences of East and West. Western science for example, posits a material universe that can be studied objectively, with consciousness a late emergent product of advanced nervous systems, while Vedic science posits a participatory conscious universe within which matter forms and evolves as part of the greater Consciousness field. Islamic science posits a living universe and Taoist science focuses on the role of humanity within Nature and Cosmos. Most indigenous cultures developed their own sciences, only now being discovered by contemporary society.

When we acknowledge this rich diversity of understanding from the Axial Age until now, we see humanity poised on the brink of a new maturity in which hostilities can give way to harmonies with apparently limitless creative potential if we shift our attention and resources to building a world that works for all.

Personal Development, Mental Health, and Human Potential

Our experiences shape the beliefs that motivate our actions. Although we do not fully understand the mechanisms of how experiences encode beliefs within the body, it is clear that the mind and body are interrelated. A newborn baby acts from innate behaviors and gradually develops a sense of a "separate self," and a mental (symbolic) model of reality. Ultimately, the mechanisms for constructing and acting from this mental model are physiologically based. Early experiences such as childhood trauma can have a profound impact on personal development, and mental health.

The East and West look at the mind-body relationship very differently. In the West, Wilhelm Reich first identified that five different personality types correlated to different physical postures and body shapes. Symptoms are primarily addressed either chemically with pharmaceuticals, or via psychotherapy. In Traditional Chinese Medicine (TCM), emotions are associated with different organs of the body. Emotional trauma leads to a stagnation of "qi," or life force and energy, and addressed in a more holistic manner. The recognition in Taoist science of matter, energy, mind/heart/soul (jing, qi, shen) as the integral human, as well as all nature is clearly distinguished from the western view that mind emerges from matter at advanced stages of evolution.

Although society rewards high-achievers whether it is in academics, sports, musicianship, or entrepreneurship, there are many people who, through their unique experiences in life, have developed ed skills that stretch our understanding of the human potential. Superior autobiographical memory, synesthesia, non-symbolic states of consciousness, pain management, and temperature control are just a few of the abilities that have been reported and studied.

This workshop will explore the mind body relationship from the perspective of personal development, human potential, and its relationship with mental health. We will also explore methods for personal transformation and healing, from Eastern and Western perspectives.

Artificial Intelligence and Consciousness

AI systems are achieving more and more in the practical world, and the grand quest to create Artificial General Intelligence is being taken more and more seriously. The risks and benefits of advanced AI for human society are also being hotly debated in all quarters.

But what about machine *consciousness*? If a digital computer is created with a human-like cognitive architecture and human-like intelligence, will it have human-like consciousness? What if instead it is a quantum computer, or a synthetic-biology computer, or a brain-machine hybrid computer? What will we be able to learn about the nature of consciousness by creating and studying synthetic systems and connecting them to human brains and bodies? Should we think about the consciousness of an engineered system in a reductive, materialist way or otherwise? And how closely connected are the questions of machine consciousness and machine ethics? Can an AI without human-like consciousness truly empathize with people? Might deep empathy with humans be part of the path to human-like machine consciousness?

The Workshop on AI and Consciousness will consider these issues and more, from a variety of perspectives.

The workshop will open with a keynote by Ben Goertzel (from the AGI Society, the OpenCog Foundation and Hanson Robotics), titled "**Can AIs Feel Compassion?**". This will be followed with a series of talks including one by Shuo Chen reporting his PhD work on the structure of reflective consciousness and subjective awareness in humans and AIs.

After lunch will be a session on Non-Reductive Machine Consciousness. There will be three speakers: Peter Bolduc (Co-Editor of the International Journal of Machine Consciousness, current editor of the APA Newsletter on Philosophy and Computers), Kevin O'Regan (Sorbonne) and Jun Tani (KAIST), followed by a panel discussion and a moderated discussion with audience participation.

Meaningful Media and Transformational Technologies

Traditional entertainment such as film, television, and music as well as new entertainment forms such as computer games and virtual reality have tremendous power to engage, educate, and transform their audience and users by creating unique experiences. However, in the modern hyper-saturated media landscape individuals are increasingly turning to screens and headphones as a means of distraction and momentary escape. The fundamental question facing a growing number of conscious content creators is how to use digital media to cultivate greater somatic awareness and reconnect human beings with the innate wisdom within their bodies. Those individuals who are spearheading this movement are exploring the use of fixed and interactive media to create experiences that facilitate inner exploration towards a deeper understanding of the self. Virtual and mixed reality applications are proving beneficial in enabling individuals shift their perception and overcome limiting beliefs, and new biometric technologies are provide users with a more nuanced understanding of their physiological state in real time. These advances when taken as a whole signal a nascent paradigmatic shift toward meaningful media.