Guizhou's Caves: Hosting the Rise of Consciousness

Zhou Yining and Clarissa Ribeiro

Affiliation: Roy Ascott Studio Advanced Program in Technoetic Arts, DeTao at SIVA

Location, Country: Shanghai, China

Contact Emails: yining51210@gmail

Abstract

This artist talk seeks to explore the profound intersection of ancient ritualistic practices, consciousness expansion, and contemporary technological advancements through the lens of caves in Guizhou. Caves, historically used for ritualistic purposes, become the canvas for an immersive multimedia installation. The project investigates how the exploration of altered states of consciousness in these subterranean spaces serves as a metaphor for the natural and artificial processes of consciousness reframing, particularly in the context of Machine Consciousness. Through advanced photographic techniques, the unique features of Guizhou's caves are captured, with a deliberate emphasis on the interplay of artificial light to unveil hidden dimensions. This artistic endeavor delves into the transformative journey of both human and machine intelligence, drawing parallels between ancient rituals and the evolving landscape of artificial intelligence.

Keywords

Consciousness Expansion, Multimedia Installation, Guizhou Caves, Altered States of Consciousness, Artificial Light, Machine Consciousness, Technological Fusion.

Introduction

Oliver Whang, in a recent article for The New York Times on A.I. consciousness [1], mentions the coalition of philosophers, neuroscientists, and computer scientists that has put forward a framework to assess the potential consciousness of artificial intelligence systems like ChatGPT. The report, delving into the emerging field of consciousness science, amalgamates elements from several burgeoning empirical theories. It suggests a set of quantifiable attributes that could indicate the semblance of consciousness in a machine.

One of the theories discussed in the report [1] is the recurrent processing theory, which highlights distinctions between conscious and unconscious perception. For instance, when actively observing an apple, one engages in conscious perception, while unconsciously perceiving an apple flying toward the face involves the relay of electrical signals from the eyes to the primary visual cortex and then to deeper brain regions. Neuroscientists propose that [1] these perceptions become conscious through a feedback loop, as the signals are passed back from deeper brain areas to the primary visual cortex.

As Liad Mudrik, a neuroscientist at Tel Aviv University quoted in an article published by MIT written by Grace Huckins [2] consciousness poses a unique challenge in our attempts to study it because it's hard to define being inherently subjective. AI consciousness is not merely a complex intellectual puzzle but represents a morally weighty dilemma with potentially severe repercussions.

Failing to discern consciousness in an AI could inadvertently lead to the subjugation or even the unintentional infliction of suffering on a being whose interests should be taken into account. Grace Huckins [2] mentions that several theories have been put forth, with none having been proven or established as a leading contender. Furthermore, these theories diverge significantly in their predictions concerning AI consciousness.

Certain theories consider consciousness as an attribute of the brain's software, emphasizing that the crucial factor is the execution of specific tasks by the brain in a particular manner. Alternative theories link consciousness more closely to the physical hardware. Integrated information theory asserts that a system's consciousness relies on the specific details of its physical structure, particularly how the present state of its physical components shapes its future and signifies its past. As highlighted by Huckins [2] traditional computer systems, including contemporary AI, can not attain consciousness because they lack the necessary causal structure — according to recent research.

David Chalmers Professor of Philosophy and Neural Science at New York University, first known for his 1996 book The Conscious Mind, contends that [3] we should seriously entertain the possibility of being simulated entities inhabiting a simulated universe. The creator of our existence might be a teenage hacker residing one universe above ours, though it appears more plausible that some form of artificial intelligence crafted our simulated reality. The presence of consciousness in beings doesn't dismiss the notion of us being simulations, as consciousness is independent of substrate and can emerge from the organization of a complex system, whether based on biology or silicon. Chalmers [3] adopts the stance of a virtual realist, asserting that the entities within virtual reality are genuinely real—digital objects composed of information or bits.

The exploration of consciousness is an ancient pursuit, stretching back thousands of years. An illustrative example is found in the Greek tradition through Plato's Cave [4], which proposes limitations on human understanding. Consider individuals who, from birth, are confined within a cave, restrained from movement or turning their heads. In front of them lies a cave wall, while behind them burns a fire. Objects passing between the fire and their backs cast shadows on the wall. Puppeteers situated there manipulate images, and the prisoners perceive the shadows created by these puppets. As the prisoners cannot turn around and observe the actual objects, they perceive the images as the sole reality. Distinguishing between a real horse and the puppet casting an identical shadow becomes impossible for them.

In the realm of consciousness, the Eastern tradition also imparts insights. Many schools of thought within this tradition posit that not only are we incapable of perceiving the world as it truly is, but we also struggle to recognize our own true nature. Additionally, these traditions advocate various practices aimed at elevating individual consciousness, facilitating a clearer understanding of these aspects.

In the realm of consciousness, the Eastern tradition also imparts insights. Many schools of thought within this tradition posit that not only are we incapable of perceiving the world as it truly is, but we also struggle to recognize our true nature. Additionally, these traditions advocate various practices aimed at elevating individual consciousness, facilitating a clearer understanding of these aspects.

Lewis-Williams [5] explores the evidence from the images and their contexts implying that certain cave art from the Franco-Cantabrian Upper Paleolithic era was, to some extent, closely linked to diverse shamanic practices. The shared characteristics of altered states of consciousness, coupled with the profound cave environments, contributed to the development of ideas about an underground spirit realm. This realm, among other ritualistic purposes, served as the setting for vision quests.

Exploring caves as spaces used for ritualistic purposes humans enlarged their individual and collective consciousness learned by exploring altered states of consciousness, this artist's talk discusses aspects of photographic incursions in Guizhou's caves to plan a multimedia site-specific installation as a metaphor for natural and artificial process of consciousness reframing — such as Machine Consciousness.

The exploration of caves as sacred spaces for ritualistic practices has been a profound avenue through which humanity has expanded both individual and collective consciousness. Delving into altered states of consciousness during these subterranean journeys, individuals have uncovered profound insights, fostering a deeper connection to the spiritual and natural world. This artist's talk aims to unravel the symbolic relationship between the exploration of Guizhou's caves, with its rich history of ritualistic significance, and the broader concept of consciousness reframing.

By examining the parallels between the natural processes of consciousness expansion and the emerging realm of Machine Consciousness, the installation becomes a metaphorical bridge between the ancient and the artificial, inviting contemplation on the shared transformative journey of both human and machine intelligence."

Guizhou's Caves: Hosting the Rise of Consciousness

Roy Ascott in Weaving the Shamantic Web" [6] reminds us that the Shaman is the one who "cares" for consciousness, and for whom the navigation of consciousness for purposes of spiritual and physical wholeness is the subject and object of living. Ascott believes that "Consciousness occupies many domains. The pagé is able to pass through many layers of reality, through different realities. In his altered states of awareness, he engages with disembodied entities, avatars, and the phenomena of other worlds." [6]

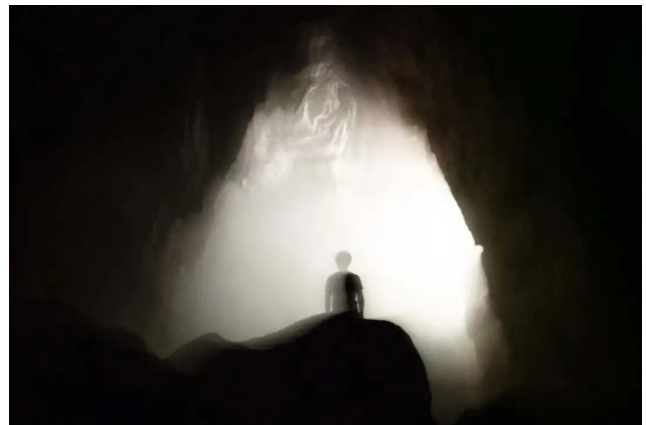Figure 1. Guizhou's cave photographic incursions. Image by Yang Yiling.

Figure 2. Guizhou's cave photographic incursions. Image by Yang Yiling.

From this perspective, the artistic endeavor we propose as part if the investigation, involves the planning of a multimedia site-specific installation that serves as a metaphor for the natural and artificial processes of consciousness reframing.

The photographic techniques used by the artist to explore Guizhou's caves became the foundation for capturing the essence of this exploration. The resulting images are then digitally manipulated and incorporated into a multimedia framework — digital video, AI-generated video, and audio.

Projection mapping takes center stage in the technical execution, with careful consideration given to the alignment and calibration of projections. The cave's unique features, illuminated through the photographic incursions, are meticulously projected onto designated surfaces. Machine Consciousness elements symbolized through digital representations and visual metaphors, are seamlessly integrated into the narrative. The multimedia installation is designed to create an immersive experience, inviting the audience to traverse the metaphorical landscape of consciousness reframing, drawing parallels between the ancient rituals of cave exploration and the evolving domain of artificial intelligence.

Short descriptions of the images from the Guizhou's caves are used as inputs in a conversation with ChatGPT — a sibling model to InstructGPT, which is trained to follow instructions in a prompt and provide a response —and the outputs from the model are used as the soundtrack for the multimedia production.

Acknowledgments

References

[1] Oliver Whang, "How to Tell if Your A.I. Is Conscious, In a new report, scientists offer a list of measurable qualities that might indicate the presence of some presence in a machine," The New York Times, Sept. 18, 2023, accessed January 5, 2024, https://www.nytimes.com/2023/09/18/science/ai-computers-consciousness.html

[2] Grace Huckins, "Minds of machines: The great AI consciousness conundrum Philosophers, cognitive scientists, and engineers are grappling with what it would take for AI to become conscious," October 16, 2023, accessed January 5, 2024, https://www.technologyreview.com/2023/10/16/1081149/ai-consciousness-conundrum/

[3] David Chalmers, "David Chalmers leaves behind the hard problem of consciousness for an adventure tour of computer-simulated worlds and virtual reality. Paul Doolan interviews him about his new book, Reality+: Virtual Worlds and the Problems of Philosophy," Philosophy Now - A Mgazine of Ideas, accessed January 5, 2024, https://philosophynow.org/issues/148/David_Chalmers

[4] S. Marc Cohen, "The Allegory of the Cave," Washington University, accessed January 5, 2024, https://faculty.washington.edu/smcohen/320/cave.htm

[5] Lewis-Williams, David & Clottes, Jean, " The Mind in the Cave — the Cave in the Mind: Altered Consciousness in the Upper Paleolithic," Anthropology of Consciousness, 9. 13 - 21., 2008, accessed January 5, 2024, , 10.1525/ac.1998.9.1.13.

[6] Roy Ascott, "Weaving the Shamantic Web," in Telematic Embrace: Visionary Theories of Art, Technology, and Consciousness (Berkeley: the University of California Press, 2003), chapter. 24.

Authors Biographies

Zhou Yining, born in Guiyang, Guizhou in 2003, is currently, a 3rd-year undergraduate student at the Roy Ascot Art Studio Advanced Program in Technoetic Arts in Shanghai, where her focus is on the complexities of minority cultures, geography, and humanities. She is particularly interested in the Miao people of Guizhou and studied their unique traditions in depth. Her journey included exploring the rich cultural heritage within each community and appreciating the stories and art that define them. This interest in the intersection of culture, art, and identity led to a deep connection with the lives of ethnic minorities. Beyond culture, her curiosity extends to social phenomena such as gentrification, where she explores the dynamics of urban transformation. She looks forward to developing my profession and contributing to conversations that connect traditional heritage with contemporary challenges.

Dr. Clarissa Ribeiro, Program Coordinator of the Roy Ascott Studio Advanced Program in Technoetic Arts at SIVA/DeTao in Shanghai, has been honored with the Pete Townshend Endowed Senior Lectureship in Performative Technoetics (2022-2024). Ph.D. in Arts (ECA USP Brazil, Poéticas Digitais/CAiiA hub of The Planetary Collegium, UK), Fulbright Postdoctoral Scholarship awardee (UCLA, Art|Sci Center/James Gimzewski Lab, USA), M.Arch. (IA USP, Brazil), B.Arch, member of the UCLA Art|Sci Collective (2013-present), is the chair of the first Leonardo/ISAST LASER talks to be hosted in Brazil/Latin America (2017-present). The core of her explorations is the interest in cross-scale information and communication dynamics that impact and shape macro-scale emergent phenomena. She has been exploring the metaphysics of information visualization in subversive morphogenetic strategies that welcome the animistic to navigate ecologies as cosmologies.