

Title	原型的特徴の特定および心的イメージの強化を通じたシャーマニズム無形文化遺産の持続可能性の促進
Author(s)	, 航
Citation	
Issue Date	2026-03
Type	Thesis or Dissertation
Text version	none
URL	https://hdl.handle.net/10119/20569
Rights	
Description	Supervisor: KIM, Eunyong, 先端科学技術研究科, 博士

氏名	SUN, Hang		
学位の種類	博士 (知識科学)		
学位記番号	博知第 409 号		
学位授与年月日	令和 8 年 3 月 25 日		
論文題目	Promoting Sustainability of Shamanic Intangible Cultural Heritage through Identifying Archetypal Features and Enhancing Mental Imagery		
論文審査委員	KIM, Eunyoung	JAIST	Assoc. Professor
	NISHIMURA, Takuichi	JAIST	Professor
	YUIZONO, Takaya	JAIST	Professor
	GOKON, Hideomi	JAIST	Assoc. Professor
	RUZINOOR Che Mat	UUM	Assoc. Professor

論文の内容の要旨

Intangible Cultural Heritage (ICH) represents a vital repository of human history, spirituality, and cultural values, and contains profound emotional and symbolic meanings. However, the rapid advancement of globalization and modernization has gradually eroded the depth and emotional authenticity of many ICH practices, thereby reducing their effectiveness in sustaining cultural continuity and fostering a sense of identity in the community. This doctoral research uses Shamanism as a case study to explore the psychological features activated by archetypal symbols in cultural experiences. By applying design thinking, a targeted psychological intervention approach using mental imagery enhancement techniques (MIETs) has been proposed to strengthen cultural identity and promote the sustainability of ICH.

The main research objective (MRO) of this doctoral dissertation is to propose a psychologically oriented design method that aims to promote the sustainability of ICH by enhancing the psychological experience of archetypal symbols in Shamanic rituals. To achieve this goal, two specific sub-objectives were established. The first sub-research objective (SRO1) seeks to identify and analyze the characteristics of archetypal symbols in shamanic rituals that significantly influence altered states of consciousness (ASC) and explore their functions and underlying psychological features. The second sub-research objective (SRO2) builds upon the identified psychological features to construct a MIETs model using design thinking, and evaluate its effectiveness in improving cultural identity and supporting ICH sustainability.

To achieve SRO1, Study 1 adopted an established combination of structured ritual and psychological assessment to systematically analyze the effects of archetypal symbols on participants' ASC. The study was conducted in Northeast China from August to November 2022, involving 75 participants (Total N = 75, 41 males and 34 females) aged between 24 and 51 years, all of whom had varying levels of belief in Shamanism. This study employed a mixed-methods design that incorporated symbolic image presentation and ritual practice, combined with guided imagery exercises. Data collection integrated psychological assessments using the Revised Paranormal Belief Scale (RPBS), Ego Dissolution Inventory (EDI), and the Aussergewöhnliche Psychische Zustände (APZ) subscales for altered states; semi-structured interviews; and statistical analyses to identify the psychological functions and underlying psychological features of archetypal symbols

within shamanic rituals. Building on the findings of Study 1, Study 2 constructed and systematically evaluated a mental imagery enhancement design prototype incorporating design thinking. The study was conducted in Northeast China from March to May 2023. Sixty participants (27 males and 33 females, aged 21-35 years) were randomly assigned to a practice group and a control group. Both groups subsequently underwent a pre-defined ritualized practice process. The practice group completed MIETs before the ritual, while the control group performed a neutral reading session of equal length or no preparatory exercise. Subsequently, based on the psychological feature structure identified in Study 1, the effectiveness of the constructed mental imagery enhancement design prototype was statistically and qualitatively evaluated using pre- and post-test questionnaires (Phenomenology of Consciousness Inventory (PCI) Scale and Cultural Identity Scale) and interview data.

The results of Study 1 show that archetypal symbols used in shamanic ritual contexts were associated with marked changes in participants' states of consciousness, including experiences consistent with ego attenuation and a departure from ordinary waking awareness. Notably, during the Visionary Restructuralization (VUS) stage, archetypal elements were especially salient in participants' subjective reports, frequently co-occurring with illusory reconstruction and shifts in ego-related experience. In addition, the findings suggest that the effects of shamanic archetypal symbols on ASC experience are not adequately captured by a single linear description. Instead, the data consistently reflect three recurring experiential patterns, namely symbolic, repetitive, and imagery-inductive features. Together, these features characterize the transition from ordinary consciousness toward deeper and more immersive experiential states.

Based on the psychological features identified in SRO1, the results of Study 2 confirmed that a MIETs model significantly enhanced participants' state of consciousness and cultural identity, and alleviated negative affect to a certain extent. By translating psychological features into practical design strategies, this study preliminarily validated the potential of psychological-driven design approaches for enhancing mental imagery. Furthermore, different design approaches showed different effects in guiding experiential engagement. A multisensory integration approach that emphasizes sensory inputs such as vision and hearing was more effective in inducing an immersive state of consciousness; whereas a cultural symbolic approach centered on symbolic imagery was more conducive to evoking emotional resonance and cultural memory. Based on these findings, this study proposes the "MIETs Model for ICH," which begins with archetype identification and, through modeling and design implementation, aims to activate and sustainably transform cultural identity, thereby providing a psychologically grounded systemic pathway for the deep transmission of ICH.

This doctoral study makes significant contributions to theoretical understanding and practical approaches to ICH conservation, psychologically oriented design methods, and cultural experience enhancement. By integrating Jungian archetype theory, mental-imagery techniques, and innovative design-thinking approaches, it proposes a MIETs-based psychological strategy that offers a new framework for strengthening cultural sustainability and identity, filling a notable gap in current ICH approaches. However, this study also has some limitations that deserve attention. The small sample size and the cultural context are limited to Northeast Asia, so the ecological validity and generalizability of the results require further cross-cultural and field validation. This study provides

practical strategies for researchers, designers, and policymakers committed to the sustainability of ICH.

Keywords: ICH, archetypal symbols, shamanic rituals, ASC, mental imagery, MITEs, design thinking, sustainability

論文審査の結果の要旨

This dissertation proposes a psychological intervention approach using Mental Imagery Enhancement Techniques (MIETs) to promote cultural identity and sustainable development of intangible cultural heritage through various shamanic symbols. It adopted interdisciplinary approach combining cultural heritage studies, psychology, and design thinking.

The integration of Mental Imagery Enhancement Techniques (MIETs) with design thinking represents a novel approach to cultural heritage preservation. It identified three core psychological features - symbolic, repetitive, and imagery inductive - that facilitate the transition from ordinary awareness to deep cultural immersion, and highlighted that digital interactive designs are particularly potent for sensory activation.

Through integrating Jungian archetype theory with design thinking, he demonstrated how archetypal symbols in shamanic rituals function as mediators for inducing altered states of consciousness.

This is an excellent dissertation and we approve awarding a doctoral degree to SUN, Hang.