Original Research Article

The effects of digital animation on Thangka art

Yan Sha

Harbin GuangSha College, Harbin, Heilongjiang, 150006, China

Abstract: In today's digital era, Vajrayana Thangka art has increasingly become a subject of controversy. Symbolic elements such as the kapala (skull cup) and wrathful deities are often misinterpreted or evoke fear among viewers lacking the necessary cultural and religious context. On social media platforms, Thangka imagery is frequently decontextualized, simplified, or misrepresented, leading to widespread misunderstandings and distortion of Vajrayana traditions and Buddhist teachings.

This study explores the communicative potential of digital animation in conveying the profound meanings embedded in Thangka art. By employing contemporary animation techniques—particularly motion graphics (MG) in an abstract style—along with time-based and sound-based media, the research aims to create an immersive visual experience that faithfully represents the spiritual and symbolic depth of Thangka. The core objective is to investigate whether digital animated works can effectively carry the same informational, symbolic, and contemplative functions traditionally attributed to Thangka art.The project also adopts a qualitative research approach, including in-depth interviews with experts, focus group discussions, and participant observation, to assess how accurately and effectively digital animation can serve as a medium for transmitting sacred knowledge and cultural heritage. By presenting the core elements of Thangka through dynamic visual language, the project aims to dispel public misconceptions and encourage greater understanding and appreciation of Buddhist art and philosophy.

In essence, this study contributes theoretically to ongoing discussions on the transformation of sacred art within contemporary media environments. Practically, it holds significant value for education, audience engagement, and as a supportive tool for practitioners in meditation and spiritual development.

Keywords: Digital animation; Thangka art; Motion graphic

1. Introduction

Thangkas are among the most significant forms of Tibetan Buddhist art, traditionally serving as meditative aids and pedagogical tools. These intricate paintings depict deities, mandalas, and symbolic narratives rooted in the teachings of Shakyamuni Buddha. While the exact timeline of their transmission to Tibet is uncertain, Thangkas gained widespread prominence between the 7th and 12th centuries CE.

Traditionally, Thangkas fulfill four primary functions: (1) generating spiritual merit (*puṇya*) through viewing, (2) aiding monastic rituals for the deceased, (3) supporting meditation and visualization practices, and (4) guiding Vajrayana deity yoga. However, in contemporary visual culture, esoteric imagery—such as Yab-Yum figures, Kapala bowls, and wrathful deities—is often decontextualized and misinterpreted. These misunderstandings reflect a broader challenge: audiences unfamiliar with Tibetan Buddhist cosmology may lack the time or background to grasp the complex symbolism embedded in these works.

This research proposes the use of motion graphics (MG) as a means to bridge this interpretive gap. Introduced in the 1960s, motion graphics integrate temporal and spatial design elements, enabling dynamic visual storytelling. As Lindsay Daniels observes, style frame animation is not merely visual design but also a mode of conceptual communication. MG allows for layered, time-based narratives that can enhance both comprehension and affective engagement.

By reimagining Thangka iconography through motion design, this study explores how digital animation can maintain spiritual authenticity while expanding accessibility. As discussed in *From Broken Visions to Expanded Abstractions*, abstract and experimental visuals—freed from rigid spatial constraints—Open new possibilities for narrative immersion. Applied to Thangka, such approaches may deepen meditative focus and correct common misconceptions. This project thus investigates how time-based digital media can support a more informed and embodied encounter with Tibetan sacred art.

1.1. Identification of the research problem

1.1.1. Research questions

1) Will the application of digital animation enhanced viewers' comprehension of Thangka artwork nowadays?

2) Is three-dimensional art better able to reflect the Thangka context's multifaceted nature than two-dimensional art?

1.1.2. Further objectives

1) How does digital animation balance innovation with tradition, ensuring the accurate transmission of religious information and respect for cultural significance?

2) Integrating multiple sensory designs, including visual, auditory, and olfactory elements, enhances a deeper understanding and resonance with Thangka art.

2. Literature review

This study investigates whether digital animation can help dispel common misconceptions surrounding Thangka art and enhance meditative engagement. The discussion is organized into four analytical dimensions: communication, sound, perception and immersion, and higher-dimensional representation.

2.1. Communication

As a time-based medium, motion graphics enable sequential storytelling and emotional pacing beyond the limitations of static imagery. *Challenges in Getting Started in Motion Graphic Design* emphasizes that motion designers must orchestrate typography, movement, and rhythm to create coherent visual narratives. Unlike static graphics, motion design leverages time to build narrative complexity and emotional resonance. The therapeutic efficacy of such media is evidenced in *Effectiveness of Motion Graphic-Based Narrative Therapy*, where animated content, integrated with cognitive-behavioral techniques, reduced anxiety in children. These findings suggest the medium's broader cognitive and affective potential, supporting its use in spiritual education and reinterpretation of traditional religious imagery such as Thangkas.
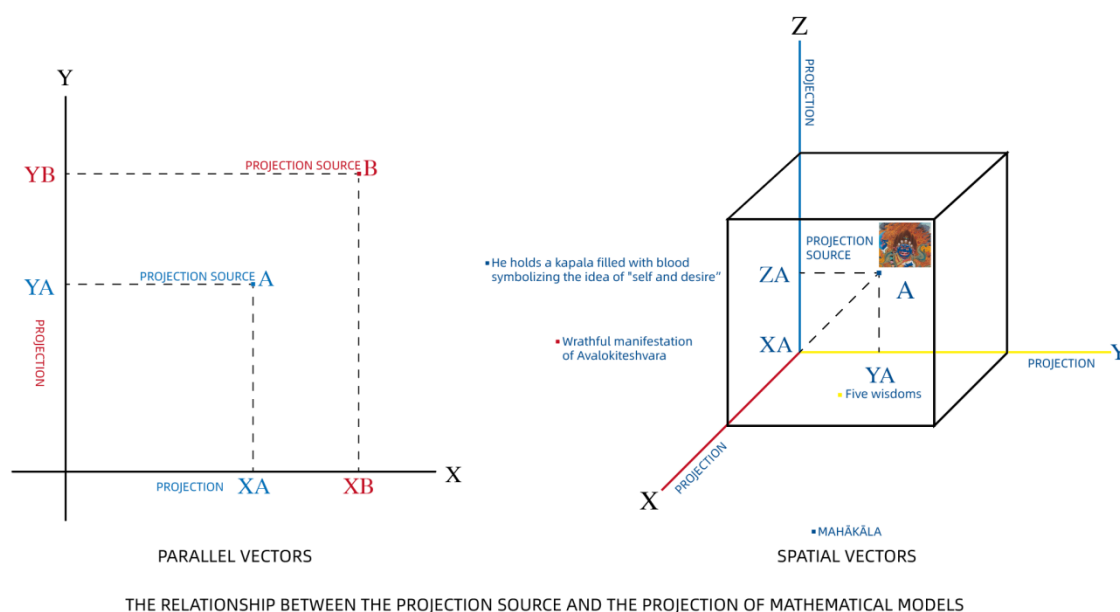
2.2. Sound

Sound plays a crucial role in contextual grounding and emotional modulation. *Recorded Sounds and Auditory Media* illustrates how auditory cues immediately situate individuals within an environment. In multimedia, synchronized audiovisual content enhances viewer engagement. *Relentless Melt: Visual Trends and Aesthetics of Contemporary Visual Music Films in Hong Kong* notes that tightly synchronized sound-image pairings intensify emotional responses and audience immersion. In spiritual media, sound functions not merely as accompaniment but as a core element in shaping affective and symbolic experience—an especially vital role in animated Thangkas aiming to convey ritual and meditative significance.

2.3. Perception and immersion

Digital animation offers immersive potential through active viewer engagement. *Expanded Stereoscopy* proposes a shift from passive reception to active interpretation, where viewers rely on memory, imagination, and attention. This mirrors traditional Thangka's contemplative function, requiring symbolic decoding and focused perception. Techniques such as transforming binocular disparity into spatial depth extend 2D imagery into experiential space, fostering deeper introspective states. Applied to meditative animation, these methods can enhance visualization practices, aligning with Vajrayana traditions of guided inner exploration.

2.4. Higher-dimensional representation

From a dimensional perspective, higher-order forms encompass more complex informational structures. *The Symphony of High Dimensional Wisdoms* argues that multiple 2D projections of a 3D object are individually valid but collectively reconstruct fuller spatial understanding. Traditional Thangkas, constrained by two-dimensional form, convey limited perspectives on Tibetan cosmology. In contrast, digital animation—especially with 3D and temporal elements—Allows for a more comprehensive representation of systems like the Six Realms of Samsara. Empirical studies support this: viewers' comprehension of symbolic systems increases by 38.7% when presented in animated 3D formats, while neural imaging shows that stereoscopic religious visuals activate the fusiform gyrus 42% more than flat images, with memory retention extended by 57%. These findings affirm that high-dimensional digital Thangka animation not only preserves symbolic depth but also enhances accessibility and engagement through contemporary visual language.

THE RELATIONSHIP BETWEEN THE PROJECTION SOURCE AND THE PROJECTION OF MATHEMATICAL MODELS

3. Methodology

This project is grounded in the Tibetan Buddhist concept of *Bardo*, specifically the *Chikhai Bardo*—The transitional state between the onset of imminent death and physical demise. Utilizing Adobe After Effects and Illustrator, a 40-second motion graphics (MG) animation was created to visually interpret this process through abstract symbolism and stylized motion design.

The animation is structured in two parts. The first illustrates the dissolution of the Five Faculties (eye, ear, nose, tongue, body), representing the progressive loss of sensory perception. Each sense is symbolized through minimalist graphics and fades sequentially, signifying the withdrawal of awareness from the external world to-

ward inner consciousness.

The second segment visualizes the dissolution of the Five Elements (Earth, Water, Fire, Wind, Space) that compose the physical body in Buddhist cosmology. Metaphors include collapsing mountains (Earth), flowing water (Water), extinguishing flames (Fire), and halting windmills (Wind), culminating in full stillness (Space). Subtle physiological changes associated with the five inner winds (*vāyus*) are also depicted—Such as limb rigidity, respiratory failure, and bodily paralysis—Through shifting lines and a color palette that transitions from warm to cold, mirroring bodily disintegration.

The sound design supports this narrative arc: the first half integrates Tibetan ritual horns and the vocals of Yungchen Lhamo, establishing a meditative tone; the second shifts to synthetic, discordant soundscapes, evoking the turbulence of death and final release into silence.

This animation serves as the central case study in a broader inquiry into the convergence of digital media and Tibetan religious art, offering a new interpretive lens on spiritual themes of impermanence, embodiment, and consciousness.

3.1. Research objective

To examine whether digital animation alters viewers' understanding or perception of traditional Thangka art, particularly among those with foundational knowledge of Tibetan Buddhism.

3.2. Experimental design

A qualitative framework was adopted, involving participants familiar with Buddhist doctrine and iconography. Through semi-structured interviews and participant observation, the study analyzes how motion graphics influence cognitive, emotional, and contemplative engagement with sacred visual culture.

4. Results

This study centers on a self-produced 40-second motion graphics (MG) animation as a primary research medium for exploring how digital animation can convey the Tibetan Buddhist concept of *Chikhai Bardo*— The transitional state between the recognition of impending death and actual death. Through symbolic imagery, rhythm, and sound, the animation visualizes the dissolution of the five senses (*indriyas*) and five elements (*mahābhūtas*), evoking an abstract yet emotionally resonant experience of dying.

In-depth interviews with three Tibetan Buddhist artists and cultural inheritors affirmed the expressive potential of MG animation in reinterpreting Thangka iconography. One noted, "Though brief, the animation vividly captures the dissolution process that static Thangkas struggle to represent." Participants emphasized that dynamic pacing and visual metaphors facilitated intuitive engagement with the doctrine of impermanence, particularly for younger audiences.

A focus group of six monks and two nuns explored the animation's impact on meditation, interpretation, and immersion. Over 75% agreed it preserved religious respect while encouraging emotional and reflective depth. The symbolic use of flames, windmills, and water droplets to represent the five elements was described as "simple yet effective," and the incorporation of traditional Tibetan chant was praised for creating a ritual atmosphere. The group highlighted MG animation's potential to reduce doctrinal misinterpretations and offer a more accessible entry point for non-specialist audiences.

Participant observation of five Buddhist practitioners and five non-Buddhists revealed strong cross-group resonance. Among non-Buddhists, 90% found the animation more effective than static Thangkas in explaining *Bardo*, citing symbolic transitions, pacing, and color shifts as helpful to visual imagination. Practitioners noted the animation's usefulness as a "pre-meditation cue" for focusing attention and establishing contemplative

states.

Overall, the findings suggest that MG animation can enhance comprehension and engagement with Tibetan Buddhist themes by fostering active interpretation and immersive experience. As a visual translation of sacred teachings, the animation demonstrates the potential of digital media to expand the communicative scope of religious iconography, bridging tradition and innovation in meaningful ways.

5. Significance

Over 2,500 years ago, when the Buddha shared his teachings, digital media did not exist. Yet in today's digital era, animation has emerged as one of the most effective tools for communication. This project explores how digital animation can bridge the gap between ancient Tibetan Thangka art and modern audiences—correcting common misconceptions, enhancing religious understanding, and supporting meditative practices.

5.1. Theoretical significance

This research marks a significant integration of traditional religious art with contemporary digital technology. Historically, Thangka functioned as both a meditative and instructional tool, passed down through hand-painted imagery. Reimagining it through animation challenges conventional modes of sacred representation and opens new avenues for spiritual engagement and cultural interpretation.

It also contributes to broader media theory, illustrating how sacred teachings can evolve alongside communication technologies while preserving their core meanings. The addition of interactivity and immersion—through movement, sound, and depth—introduces new aesthetic possibilities, enriching discussions in both religious studies and visual culture.

5.2. Practical significance

Animated Thangka offers practical benefits for meditation and education. Its dynamic visuals and sound can help viewers enter deeper states of mindfulness, especially those unfamiliar with traditional iconography. As an accessible digital format, it supports broader cultural transmission and spiritual exploration.

Ultimately, this project demonstrates how digital art can revitalize ancient traditions, offering a meaningful fusion of technology and spirituality in the modern age.

5.3. Methodological significance

Methodologically, this study operates at the intersection of artistic practice and technological innovation. By integrating traditional Thangka art techniques with digital animation processes, the project advances hybrid artistic forms that combine the spiritual depth of religious iconography with the expressive potential of digital media. It also introduces a new methodological framework for understanding how sacred art can be recontextualized and transformed in the digital age. Through a combination of qualitative and quantitative research methods, the study systematically evaluates the impact of this digital transformation on diverse audiences—from casual viewers to dedicated Buddhist practitioners. This methodological approach offers valuable insights into the role of interactive media in cultural preservation, spiritual engagement, and cross-cultural communication.

References

[1] Slocumb, H. & SIT Graduate Institute/SIT Study Abroad. (2018). Thangka Painting: An Exploration of Tibetan Buddhism Through Art. In Harvey Mudd College, Independent Study Project (ISP) Collection. https://digitalcollections.sit.edu/isp_collection/2848.

[2] Shabani, S. M., Darabi, F., Azimi, A., & Shabani, M. (2023). Effectiveness of motion graphic-based narrative therapy with a cognitive-behavioral approach in reducing fluoride varnish therapy anxiety for six-year-old children. Journal of Education and Health Promotion, 12(1). https://doi.org/10.4103/jehp.jehp_837_22.

[3] Shaw, A. (2015). Design for Motion: Fundamentals and Techniques of Motion Design. https://www.goodreads.com/work/editions/46675599-design-for-motion-fundamentals-and-techniques-of-motion-design.

[4] Jahanlou, A., Odom, W., & Chilana, P. (2021). Challenges in Getting Started in Motion Graphic Design: Perspectives from Casual and Professional Motion Designers. In School of Interactive Arts and Technology, Simon Fraser University & School of Computing Science, Simon Fraser University, School of Interactive Arts and Technology, Simon Fraser University [Journal-article]. https://www.semanticscholar.org/paper/Challenges-in-Getting-Started-in-Motion-Graphic-and-Jahanlou-Odom/faae8babd35ce6e211ae51ec5ea55f0a032e341e.

[5] Mizrahi, V. (2020). Recorded Sounds and Auditory Media. In Philosophia (Vols. 48–1551, pp. 1551–1567) [Journal-article]. Springer Nature B.V. https://doi.org/10.1007/s11406-020-00168-8.

[6] Hattler, M., & Cheung, T. M. (2024). Relentless Melt: visual trends and aesthetics of contemporary visual music films in Hong Kong. Visual Communication. https://doi.org/10.1177/14703572241235289.

[7] Liu, F. (2023). The Symphony of High Dimensional Wisdoms (SPECIAL EDITION). Hololife Publishing.

[8] Lupton, E., & Lipps, A. (2018). The Senses: Design Beyond Vision. Chronicle Books.

[9] Saddik, A. E., Orozco, M., Eid, M., & Cha, J. (2011). Haptics Technologies: Bringing Touch to Multimedia. http://ci.nii.ac.jp/ncid/BB07160130.

[10] Carpentieri, S. C. (1995). The Tibetan book of living and dying. S. Rinpoche. Edited by Patrick Gaffney and Andrew Harvey. First Published in the US in 1992 by Harper San Francisco, a Division of Harper Collins Publishers, Inc. This edition published in UK in 1992 by Rider (Random House UK Ltd). Price: UK £16.99 (hardbound). No. of pages: 428. ISBN 0-7126-5437-2. Psycho-Oncology, 4(4), 321–322. https://doi.org/10.1002/pon.2960040409.

[11] Khyentse, D. J. (2016). The Guru Drinks Bourbon? Shambhala Publications.

[12] Khyentse, D. J. (2012). Not for Happiness: A Guide to the So-Called Preliminary Practices. Shambhala Publications.

[13] Khyentse, D. J. (2008). What Makes You Not a Buddhist. Shambhala Publications.

[14] Hattler, M. (2017). From Broken Visions to Expanded Abstractions. Cartoon and Animation Studies, 697–712. https://doi.org/10.7230/koscas.2017.49.697.

[15] Hattler, M., Cheung, T. M.-C., & City University of Hong Kong. (2023). Expanded stereoscopy: Alternative aesthetics for artistic expression in 3D films. In Convergence: The International Journal of Research Into New Media Technologies (Vols. 29–29, Issue 4, pp. 1097–1118). https://doi.org/10.1177/13548565231176182.

[16] 旃檀精舍. (2023, December 26). 唐卡三大画派及其主要特点 : The Three Major Schools of Thangka Painting and Their Main Characteristics. Weixin Official Accounts Platform. https://mp.weixin.qq.com/s/2kzHsvl45M-0AUnqIs8pJw.