

Methodology and methodological discussion

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In the 18th century, the innovation of the steam engine led to a significant increase in productivity. In the 20th century, the commercialization of the Internet led in the information age and changed people's communication methods. The emergence of the iPhone in 2007 marked the beginning of the smartphone era and changed the way people live and work. Today, the development of AI technology makes it impossible for us to ignore it. Can innovative technology affect the way we create art?

This research aims to explore the impact of AI generated video art on traditional video production. Using interpretive phenomenology as methodological guidance, we provide an in-depth analysis of how video practitioners and audiences perceive and interpret the application of AI technology in video production.

The research used two methods: in-depth interviews and case studies. In-depth interviews allow us to understand the specific impact of AI technology at an individual level, while case studies provide a macro perspective showing the actual effects and feedback of AI technology in specific projects. This refers to the research of Manyu Tang (2024), which analyzes the application of AI in animated character design through a case study, providing a unique perspective to explore the perceptions and experiences of animators and audiences in this context.

This study aims to fill the gap in the existing literature in terms of comprehensive understanding of the practical application and impact of AI technology in the video industry. The following is my methodology and method discussion

Methodology

Theoretical Foundations of Phenomenological Hermeneutics

Phenomenological hermeneutics provides a profound framework for interpreting individual life experiences, particularly emphasizing the unique stories emerging at the intersection of society, science, and technology. Rooted in the phenomenological philosophy of Edmund Husserl, which focuses on the lived experiences prior to any theoretical abstraction , he advocated for a return to the things themselves and an

exploration of how objects are experienced purely through perception (Husserl, 1970), this approach is augmented by hermeneutics as advanced by Hans-Georg Gadamer, who emphasized understanding through the historical and cultural context of the interpreter (Gadamer, 2004). In the context of AI and video art, this methodology allows us to explore how individual artists and viewers perceive and interact with new technologies in creative processes.

in Creative Processes

In exploring AI's role within video production, a phenomenological approach reveals how artists internalize and adapt these technologies within their creative workflows. Edmund Husserl (1939) introduced temporarily setting aside judgments about the external reality of phenomena and focusing on how things are presented to consciousness. For artists, this means that during the creative process, they might temporarily ignore the objective facts of the external world and delve into their personal intuitions and feelings. This approach can help artists capture and express their inner emotions more authentically. By studying and analyzing the thought processes and practical experiences of creators. For instance, David McCormack and Oliver Bown's research into creative agency in artistic domains illustrates how AI can be perceived as an assistant or collaborator, enhancing the creative capabilities of human artists (McCormack & Bown, 2009). Additionally, some research, like Margaret A. Boden (1990)'s in "The Creative Mind: Myths and Mechanisms," discusses creativity as a process of information handling, where AI, as an algorithmic tool, can simulate and generate innovative ideas and artistic forms. Boden highlights the potential of AI in creating new patterns and styles in art (Lustig, R. 1995).

Artists' Reception of AI

The reception of AI among artists provides a critical area for phenomenological inquiry, as the technology's integration brings both opportunities and challenges. Technological anxiety refers to the unease, fear, or concern that people experience in response to technological advancements. Interpreted through the lens of phenomenological hermeneutics, we can deeply explore how individuals experience, interpret, and construct meaning around this anxiety. Martin Heidegger (1971) argued that modern technology leads to a "concealment", where people's understanding of the true essence of things is obscured, focusing only on their functionality or utility. This concealment can trigger anxiety because it deprives people of experiencing a genuine connection with the essence of things, leading to a sense of existential loss and a lack of control. A relevant study by Luke Dormehl discusses how artists employ AI to push the boundaries of creativity while also grappling with fears of obsolescence and loss of control over the creative process (Dormehl, 2018). This juxtaposition captures the dual-edged nature of technology in creative fields, resonating with phenomenological inquiries into how technologies influence human self-understanding and artistic expression.

Audience Perception of AI-Designed Characters

Audience reactions to AI-designed video offer another valuable perspective.

Hans-Georg Gadamer (2004) proposed that understanding is a dialogical process situated within historical and cultural contexts. The way viewers interpret and respond to AI-designed videos can be seen as a form of dialogue with the content, influenced by their own historical and cultural backgrounds.

Sherry Turkle's examination of the psychological and social dynamics of technology interaction sheds light on how audiences may perceive AI contributions to art (Turkle, 2011). Her work suggests that technology can simultaneously fascinate and alienate, influencing how audiences engage with and interpret AI-generated content. As a powerful substitute tool, AI's sudden emergence has an impact on the cognition of the entire society. Such changes will be negative and repulsive to some viewers influencing how audiences engage with and interpret AI-generated content. This aligns with phenomenological investigations into the essence of audience experiences and expectations.

Impact of AI on the Animation Industry

The introduction of AI in the video industry has significant implications for production practices and economic structures. Edmund Husserl (1970) highlighted the preconceived background of everyday life and experiences, positing that the richness and subjectivity of the "lifeworld" are aspects that science cannot fully capture. Thus, the task of phenomenology is to directly explore the structure and experiences of the lifeworld, revealing the deeper meanings of human experiences that science fails to reach. The integration of AI technology into the video industry may have altered the structure of this lifeworld, especially in terms of content production and consumption. AI, acting as a mediator, has transformed how content is created and distributed, and impacted economic and social interactions. This has reshaped the economic structure of the entire video industry, influencing both the creation and the reception of content. According to this insight, a phenomenological hermeneutic approach can reveal underlying concerns about industry shifts, such as potential job displacement and changes in creative control, which reflect broader socio-economic trends.

Research Method Design

Qualitative research is a method used to gather in-depth information about a topic or experience from perspectives other than your own. To explore the impact of AI-generated video art on traditional film and television, employing case studies and conducting in-depth

interviews are particularly suitable approaches.

Case Study:

The case study method allows researchers to delve deeply into specific instances, providing a detailed perspective on complex phenomena (Yin, 2003). It is particularly suited for exploring current phenomena, especially when researchers do not have control over the events, and involves dealing with real-time or historical cases where boundaries are unclear and numerous variables are involved. This method is especially applicable to emerging fields such as the application of AI in film and video production, where in-depth analysis of single or multiple cases can reveal the actual effects and challenges of technological applications.

Case studies enable the examination of technology usage in real-world environments rather than abstract or laboratory settings, making the findings more extrapolative and realistic (Stake, 1995). In instrumental case studies, individual cases are used to understand or interpret a broader issue or phenomenon, potentially involving one or multiple cases. Stake (1995) emphasizes understanding a case from various perspectives or the viewpoints of multiple participants. This multi-perspective approach helps to comprehensively understand the complexity of a case. Selecting groundbreaking AI-generated video art projects as cases can aid in systematically analyzing and documenting these projects' design, implementation, impact, and their acceptance within the industry.

Compared to other research methods, such as narrative analysis, which can deeply explore the meanings and impacts of narratives, it may be more limited in handling the specific details of technology and operational processes. Narrative analysis focuses more on interpreting and understanding individual stories rather than analyzing the technology itself and its practical application in business and creation. In contrast, case studies allow researchers to explore issues from technological, cultural, and social perspectives, using different data sources. This integrative nature makes case studies particularly suited for exploring the objective impacts of new technological applications.

Case Selection:

AI Film Festival Award Winners

I will select works that have won awards at international AI film festivals in recent years as case studies. Examples include "The Raven." These works often display remarkable achievements in technological innovation and artistic expression. Strictly speaking, these cases represent the current pinnacle of AI-generated video art production.

AI Video Music MVs by Korean Pop Groups

Over the past year, many Korean artists have adopted AI-generated styles for their music MVs. This trend has progressively influenced audience experiences and popular culture.

Research methods combined with descriptive analysis

I will watch the complete films or MVs to analyze the specific applications of AI technology,

such as editing techniques, image generation, and special effects realization. I will collect official production notes and technical descriptions, media reports, and reviews. I will also gather comments and feedback from online audiences on social media platforms like YouTube and Twitter to discuss the technical details of the works and the feedback from various sources.

In-Depth Interviews:

According to Steinar Kvale's theory, in-depth interviews are one of the primary methods for exploring human experiences, particularly effective in examining the impact of new technologies or cultural phenomena on individual behavior and perceptions (Kvale, 1996). These interviews are essential for revealing participants' inner thoughts, feelings, and motivations, providing necessary firsthand information to understand how technology is accepted and used. This is crucial for understanding how AI technology is changing the film production process and viewer experiences. Interviews allow for flexible dialogue that can adapt to new ideas and in-depth questions as they arise during the conversation, thus enabling a more thorough exploration of complex topics (Rubin & Rubin, 2011).

In-depth interviews can uncover hidden perceptions and motivations that may not be easily captured through surface-level surveys or quantitative research. For example, through in-depth interviews, one can understand how technology influences the creative decision-making process or challenges traditional artistic standards. Simple surveys might only yield basic satisfaction ratings and fail to delve into the underlying reasons and emotional responses.

Target Participants:

The participants will include AI technology developers, film production personnel (directors, scriptwriters, editors), film critics, and viewers. These participants can provide perspectives covering the entire spectrum from creation to consumption.

Interview Design:

The interviews will be semi-structured with open-ended questions designed to explore participants' views on AI technology, their experiences using it, its impact on their creative work, and their attitudes towards changes in traditional film and television craftsmanship. Interviews can be conducted face-to-face, over the phone, or via video conference. Each interview is expected to last between 60 to 90 minutes.

Conclusion

In my research, the methodology focuses on observing the video industry affected by technological innovations. By adopting an interpretative phenomenological approach, the

study analyzes the application of AI in video art. This methodology emphasizes the importance of gathering information from multiple perspectives. In-depth interviews allow us to explore how individuals experience and interpret the specific impacts of AI technology, while case studies analyze these technologies' applications from a broader sociocultural perspective. This mixed-method approach ensures that the research does not just skim the surface of technology but delves deeper into how technology changes artistic expression and cultural understanding.

In the future, this methodology could be extended to more AI-related artistic fields, such as music, performing arts, and digital media arts. In these areas, interpretative phenomenology could help researchers better understand how technology interacts with different artistic forms and cultural practices. Additionally, as AI technology rapidly evolves, applying these research methods to cross-cultural studies would be extremely valuable. Future studies should consider samples from a wider geographical and cultural scope to provide a more comprehensive perspective. Considering the rapid evolution of AI technology, future research should also focus on the long-term effects of technological updates on artistic creation and audience experience.

Reference list

1. Dormehl, L., 2018. *The Formula: How Algorithms Solve All Our Problems... and Create More*. Penguin, London.
2. Gadamer, H.G., 2004. *Truth and Method*. 2nd rev. ed. Continuum, London.
3. HEIDEGGER, MARTIN, and Kenneth R. Maly. "The Turning." *Research in Phenomenology*, vol. 1, 1971, pp. 3–16. JSTOR, <http://www.jstor.org/stable/24654417>. Accessed 26 Apr. 2024.
4. Husserl, E., 1970. *The Crisis of European Sciences and Transcendental Phenomenology: An Introduction to Phenomenological Philosophy*. Northwestern University Press, Evanston.
5. Kvale, Steinar. (1996) *InterViews: an introduction to qualitative research interviewing*. Thousand Oaks, Calif. ; Sage.
6. McCormack, J. and Bown, O., 2009. 'Life's What You Make: Niche Construction and Evolutionary Art', in *Proceedings of the 10th European Conference on Artificial Life: Reframing Intelligence, Redefining Life*, pp. 528-535.
7. McCloud, S., 1993. *Understanding Comics: The Invisible Art*. HarperPerennial, New York.
8. Turkle, S., 2011. *Alone Together: Why We Expect More from Technology and Less from Each Other*. Basic Books, New York.
9. Lustig, R. (1995) "Margaret Boden, the creative mind: myths and mechanisms," *Artificial intelligence*,

79(1), pp. 83–96.

10. Rubin, H.J. and Rubin, Irene. (1995) *Qualitative interviewing : the art of hearing data*. Thousand Oaks: Sage.
11. Stake, R.E. (1995) *The art of case study research*. Thousand Oaks,CA ; Sage.
12. Tang, M. and Chen, Y., 2024. AI and animated character design: efficiency, creativity, interactivity. *The Frontiers of Society, Science and Technology*, 6(1).
13. Van Manen, M., 1990. *Researching Lived Experience: Human Science for an Action Sensitive Pedagogy*. State University of New York Press, Albany.
14. Yin, R.K. (2014) *Case study research : design and methods*. Fifth edition. Los Angeles: SAGE.