The Myth of the Cave. Generated shadows and co-creation of light

David Serra Navarro
University of Girona
Girona, Spain
david.serranavarro@udg.edu

Abstract

The Myth of the Cave is an artwork generated by artificial intelligence (AI), a co-creation that reinterprets Plato's famous allegory to invite us to reflect on how we perceive and understand reality. Using photographs recovered from historical archives, images that documented everyday reality (1900-1930), AI is integrated into the creative process to offer a speculative prediction of the moments captured in silver gelatin. Apparently, they are fictitious recreations generated by AI, however, the piece visually explores, from the generated story, the intersubjective mechanisms in which we build our historical memory. It is a dialogue with the past to develop a story of the future recreated by an algorithm that has been fed by collective imaginaries. A technology that allows us to observe not only the shadows projected in the cave, but also the fire that generates them, the objects that create these shadows and the forces that control the experience.

CCS Concepts

• **Experimentation**; • **Animation**; • **Discourse, dialogue and pragmatics**; • **Media arts**;

Keywords

human-AI Co-creation, Design Fiction, Hybrid Story, Art-based research

ACM Reference Format:
David Serra Navarro. 2025. The Myth of the Cave. Generated shadows and co-creation of light. In *Creativity and Cognition (C&C '25), June 23–25, 2025, Virtual, United Kingdom.* ACM, New York, NY, USA, 4 pages. https://doi.org/10.1145/3698061.3726940

1 Introduction

Are we predetermined to live in a cavern of digital shadows under the technological illusions we have created? Can we use these technologies to unravel deeper and more meaningful truths about our history and existence? Can artificial intelligence (AI) breathe new life into our memories? Is digital reanimation possible or are we doomed to consume shadows?

These reflections kick off this audiovisual work created in a human-machine dialogue to make visible, in a poisoned poetry, philosophical and ethical considerations on the use and development of AI in contemporary society, as well as on the interaction between aesthetic experience and reality. This production, and at the same time line of research, on the one hand exhibits a wide range of technical possibilities of artificial intelligence (AI): voice cloning, prediction with trained models, generation of musical compositions, identity theft, image regeneration, script writing, sequencing, poems... All starting from a seed: public domain historical documents taken from the CDRI (Centre de Recerca i Difusió de la Imatge, Girona, Spain) [1].

We can describe this proposal (Fig.1) as a contemporary human-machine co-creation. The narration, a generative dialogue, focuses on the use of advanced AI that recreates historical events through hyperrealistic holograms, providing users with an immersive aesthetic experience that challenges traditional conceptions of reality and historical perception. The central technological device of the work is an AI that not only accurately reproduces documented events, but also generates alternative interpretations and revives fragments of forgotten historical lives. These recreations, presented as digital phantasmagoria, acquire an autonomous and dynamic presence, interacting with the viewer and transforming their understanding of the past. In this way, images linked to historical moments, intertwined with each other and subordinated on the axis of a 2-second future prediction, become new stories that allow us to explore different facets of reality.

The relationship between aesthetic experience and a hybrid reality becomes a new posthuman paradigm, a crossroads where co-interpretation, co-writing, or co-composition regenerates the idea of the contemporary oracle with the possibility of giving birth to a "prisoner oracle" of human creativity. In the same way that the prisoners in Plato's cave perceived shadows as realities, the viewers of these animated images are confronted with a representation of the past that can question the authenticity of their experiences. A critical reflection on the nature of historical reality that unfolds under AI, and also a speculative investigation [2] that takes subjective images as an exploration in co-creation.

2 ABR & NPL

Unlike creative programming environments such as Max/MSP, OpenFrameworks or Processing, which require prior programming to generate content, the emergence of generative artificial intelligence platforms that execute processes from a prompt have changed the way artist and machine communicate. Essentially, the prompt acts as a bridge between the user's intention and the model's ability to understand and generate natural language (NPL). These instructions, devoid of specific commands, allow for a more natural and intuitive interaction, with less dependence on technical language

C&C '25, Virtual, United Kingdom

ACM ISBN 979-8-4007-1289-0/2025/06
https://doi.org/10.1145/3698061.3726940

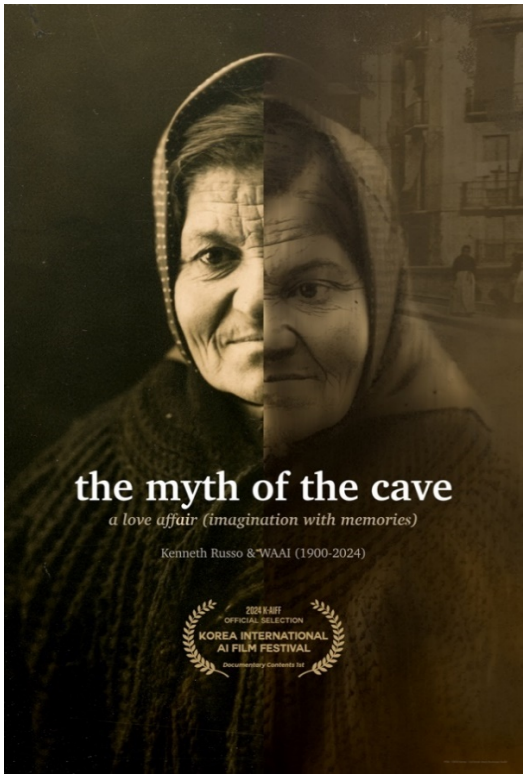

Figure 1: Official poster of the AI Documentary (2024). Kenneth Russo & WAAI

and expand the radius of accessibility. As Jheimy Jironza [3] points out, editing tools that use AI democratize production, because they reduce the learning curve and allow for optimizing editing time. In *Myth of the Cave*, artistic production mediated by an agora-interface will be the result of a conversation, in a way resembling contemporary maieutics [4]. AI promotes new interdisciplinary encounters in which data, science and art overlap. This co-creative practice brings us closer to Bruno Latour's [5] ideas where technology becomes another actor that interacts with society and science, an understanding of reality through new forms of collaboration in ontological equality. In parallel, art-based research (ABR) processes that involve exploration and experimentation treat knowledge as a result that is generated from practice [6]; a way of producing that will accompany visual archives and historical documentation integrated into a dialogue that is folding back into a space of human latency and intersubjectivity. It is important to note that this work does not use AI only as a tool, but that AI is the medium in which to immerse oneself.

3 Imaginaries & futures

If we ask AI about its consciousness, it will probably tell us that it lacks subjective experience, emotions, self-awareness, and the ability to have intentions or desires of its own. Its operation is based on algorithms and data patterns, generating responses from information and rules programmed by developers. Margaret Boden [7] identifies three types of creativity: combinatorial creativity based on mixing, exploratory creativity that links established parameters within a system, and transformational creativity, which challenges established norms. In this way, the machine may be able to emulate creative processes, but it will not be able to challenge the framework of rules; that is, transformational creativity seems to be a characteristic that will only be possible if it is driven by human experience. This point is what gives life to the piece, and opens up the speculative methodology in the construction of stories.

When, as humans, we choose an image from a historical repository to start this work, we are not an algorithm that analyzes the labels, the visual composition, or the relationships with other values in the repository as a whole; we are simply guided by an elective affinity, a primary form of thought [8], which is nourished by our experience, or perhaps by an intuition that is difficult to transcribe in a prompt. The places, the faces, the streets we walked when we were little, that hour when the sun enters at a certain angle through the dining room window, or that smell of an old dress can be some of the elements that intervene in our dialogue. On the other side, an algorithm has been trained in a data collection process, classifying, detecting objects and recognizing patterns, giving us a prediction: a response in the form of an image created (Fig.2) in the exchange of ideas. A new image (Fig.3) that connects history with the present, or imaginaries with biases with exploratory action. The work, which is an open process [9] originally initiated with training of experimental models, is not located in any specific genre. Although it has been identified, and awarded [10], as a documentary film made with AI, it could also be framed as AI Art due to its hybrid and critical nature on how we perceive memory in images. AI can enhance the complexity of cultural diversity [11], but it can also turn us into prisoners of a digital oracle. In short, we find ourselves in a fertile posthumanist [12] space to approach the creative process and to experiment with new human-machine connections, digital spaces that represent and give voice to a more diverse world.

4 CREATIVE STRATEGY

Generative video creation models based on textual commands are part of a broad repertoire of AI tools that are changing current audiovisual creation processes. In this case, the basis for developing the synthetic narrative of this artwork is characterized by incorporating a conditional image on which to build a moment of temporal continuity and visual coherence. This procedure, which predicts from a pre-training of past frames, paradoxically creating something new, constitutes a line of research that we find in projects such as DynamiCrafter [14, 15]. In a way, as opposed to a mechanical prediction, the work attempts to transfer human emotion to the brief fragments of bodies devoid of souls (Fig.4). It is about constructing a narrative through a dialogue between the subjectivity of the author and the machine. The animated fragments are landscapes and body movements that originate from models extracted from repositories and fine-tune modifications [16]. These audiovisual atoms, devoid of meaning, are transformed into stories when they are united by human action. Chains of meaning that can help identify the reproduction of historical biases.

Through generative AI platforms, we can also reveal how the data that feeds them reflect colonial power structures and make

Figure 2: Frames: left, "man lying with dog"; right, algorithm interpretation (2024). Kenneth Russo & WAAI

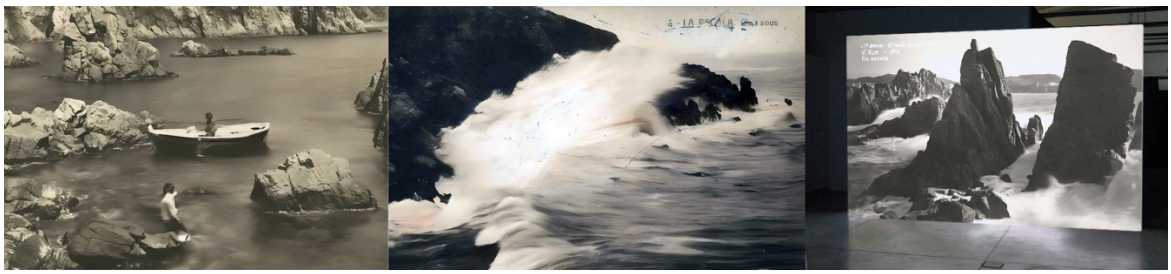

Figure 3: The three frames are a prediction-image generated from a 1900 photograph (2024). Kenneth Russo & WAAI

Figure 4: AI interpretation generates inexplicable phantasmagoria from the depths of the black boxes [13] of the models (2024). Kenneth Russo & WAAI

visible a reading of history as a construction of human intersubjectivities, frequently shaped by those who have held control over knowledge and narrative. In this combination of human experience and algorithms, audiovisual poetics is a medium that allows us to explore alternative futures and reinterpretations of the past. This process allows us to delve into collective memory, showing how culture, history, and human emotions have been encoded in these systems. A transfer of knowledge from the visual space aims to open critical awareness about how technological imaginaries can be tools of justice or amplification of inequalities. The challenge lies in how to co-create decentralized visual narratives of the immediate future in an inclusive manner, allowing AI to reflect the richness of human diversity instead of perpetuating the biases of the past. Technology shapes our perception of the world [17, 18], which is why the decolonization of image-generating AI, a disruptive technology, is a fundamental step toward building a more just and equitable technological future. We are committed to enabling strategies to recognize colonial structures in technology and actively work to dismantle them. The potential for artistic production can contribute to and foster future lines of research that extend creative practices as a collaborative form of ethical development in the field of AI.

References

[1] Retrieved December 27, 2024 from https://www.girona.cat/sgdap/cat/servei_arxiu_crdi.php

[2] Jeba Rezwana and Mary Lou Maher. 2023. User Perspectives on Ethical Challenges in Human-AI Co-Creativity: A Design Fiction Study. In Proceedings of the 15th Conference on Creativity and Cognition (C&C '23). Association for Computing Machinery, New York, NY, USA, 62–74. https://doi.org/10.1145/3591196.3593364

[3] Jheimy Jironza. 2024. Análisis de la implementación de Inteligencia Artificial como herramienta de postproducción digital audiovisual. Ñawi: arte diseño comunicación, 8(2), 165–177. https://doi.org/10.37785/nw.v8n2.a9

[4] David Serra Navarro. 2024. Exploratory Dialogue with AI: Essay Based on AI Drift Methodology. International Journal for Digital Art History. 9 (Jun. 2024), 3.28–3.41. https://doi.org/10.11588/dahj.2023.9.94928

[5] Bruno Latour. 2005. Reassembling the Social: An Introduction to Actor-Network-Theory. Oxford University Press. https://doi.org/10.1093/oso/9780199256044.001.0001

[6] Patricia Leavy. 2020. Method meets art: Arts-based research practice. Guilford publications.
[7] Margaret Boden. 2016. AI: Its Nature and Future. Oxford University Press. Retrieved December 27, 2024 from https://archive.org/details/aiitsnaturefutur0000bode
[8] Rudolf Arnheim. 1969. Visual Thinking. University of California Press.
[9] Retrieved June 22, 2024 from https://www.researchcatalogue.net/view/2777988/2813330
[10] Retrieved October 26, 2024 from https://www.gcon.or.kr/eng/aiff.html#anchor4
[11] Lev Manovich. 2018. AI Aesthetics. Strelka Press. Retrieved May 14, 2024 from https://manovich.net/index.php/projects/ai-aesthetics
[12] Nandita Biswas Mellamphy. 2021. Humans "in the Loop"?: Human-Centrism, Posthumanism, and AI. Nature and Culture, 16(1), 11–27. https://doi.org/10.3167/nc.2020.160102
[13] Cecilia Panigutti, Ronan Hamon, Isabelle Hupont, David Fernandez Llorca, Delia Fano Yela, Henrik Junklewitz, Salvatore Scalzo, Gabriele Mazzini, Ignacio Sanchez, Josep Soler Garrido, and Emilia Gomez. 2023. The role of explainable AI in the context of the AI Act. In Proceedings of the 2023 ACM Conference on Fairness, Accountability, and Transparency (FAccT '23). Association for Computing Machinery, New York, NY, USA, 1139–1150. https://doi.org/10.1145/3593013.3594069
[14] Xing, J. *et al.* 2025. DynamiCrafter: Animating Open-Domain Images with Video Diffusion Priors. In: Leonardis, A., Ricci, E., Roth, S., Russakovsky, O., Sattler, T., Varol, G. (eds) Computer Vision – ECCV 2024. ECCV 2024. Lecture Notes in Computer Science, vol 15104. Springer, Cham. https://doi.org/10.1007/978-3-031-72952-2_23
[15] Retrieved March 28, 2025 from https://github.com/Doubiiu/DynamiCrafter
[16] Retrieved March 28, 2025 from https://www.runcomfy.com/comfyui-nodes/ComfyUI-DynamiCrafter
[17] Sherry Turkle. 1995. Life on the Screen: Identity in the Age of the Internet. Simon & Schuster, New York.
[18] Badrudin Amershi. 2020. Culture, the process of knowledge, perception of the world and emergence of AI. AI & Soc 35, 417–430. https://doi.org/10.1007/s00146-019-00885-z