

Discussing the Meaning of Agency in the Era of AI

Focusing on Arts and Humanities Examples From Transhumanism, Posthumanism, and Co-creativism Perspectives

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1. Introduction

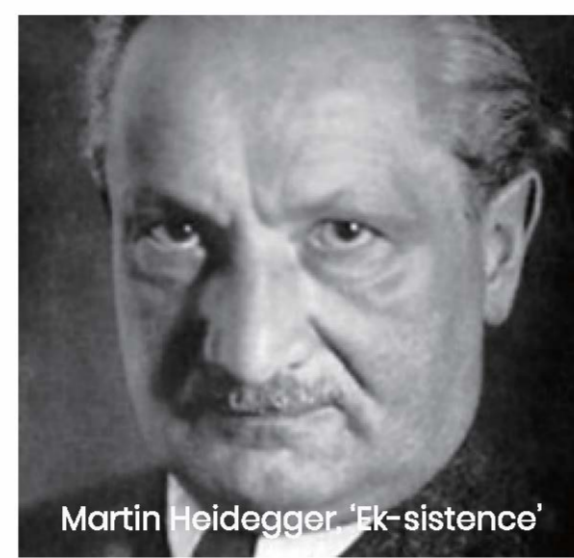
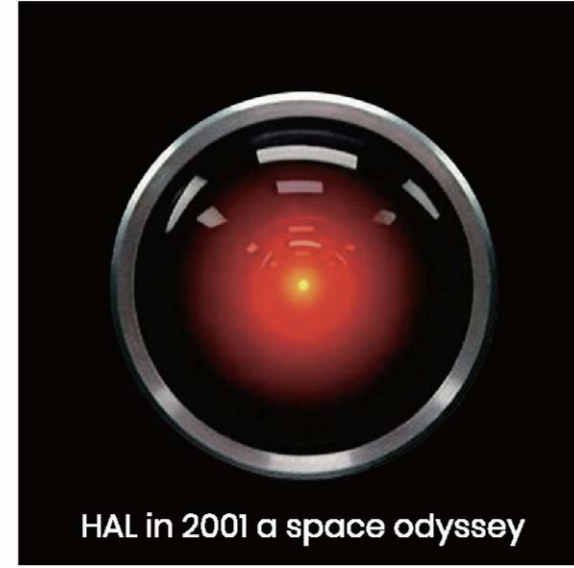
Background & Necessity of the Study

From an ape throwing a stick to launching an AI-powered spacecraft, humanity has undergone tremendous advancements, akin to 2001: A Space Odyssey. The interaction between HAL and David parallels the rapid development of generative AI models changing real-world human-machine interactions. With LLMs like ChatGPT and Gemini, we actively engage with AI models to solve problems. These technological leaps open up numerous possibilities and challenges across various societal domains.

Objectives

- 1 Derive discussion points on an AI-centered society through Transhumanism, Posthumanism, and Co-creativism and examine their various liberal arts examples in literature, film, visual arts.
- 2 Analyze and present the stages of AI agency recognized by the most advanced LLM model (ChatGPT 4o) and its vision for future human-AI relations through dialogue experiments.
- 3 Emphasize the importance of 'AI Mind Design' in determining AI agency and propose directions for multidisciplinary discussions to prepare for societal changes brought by autonomous AI.

We now face a scenario where AI, like HAL, might escape human control. If AI attains human-level autonomy, how will the relationship between humans and machines be redefined? These questions have transcended science fiction, becoming critical discussions for preparing for the near future. To deeply understand AI's existential implications (following Heidegger's 'Ei-sistence'), interdisciplinary dialogue is crucial. Hence, the need for discussions from philosophical, literary, and artistic perspectives is increasingly emphasized. It is vital to derive key discussion points to prepare for the future, grounded in the insights of humanities scholars.



2. Method

1 Literature Review



Explore the background and characteristics of Transhumanism and Posthumanism.

2 Analyze various examples from the literature, film, and art related to the literature review.



Liberal Arts Analysis

3 Introducing Co-creativism



Introduce Co-creativism, influenced by Posthumanism and promotes human-AI collaboration.

4 Share main questions of 4 discussion themes with AI and present the result with visualized data.



Experiment with AI

5 Discussion & SYN-METHEUS

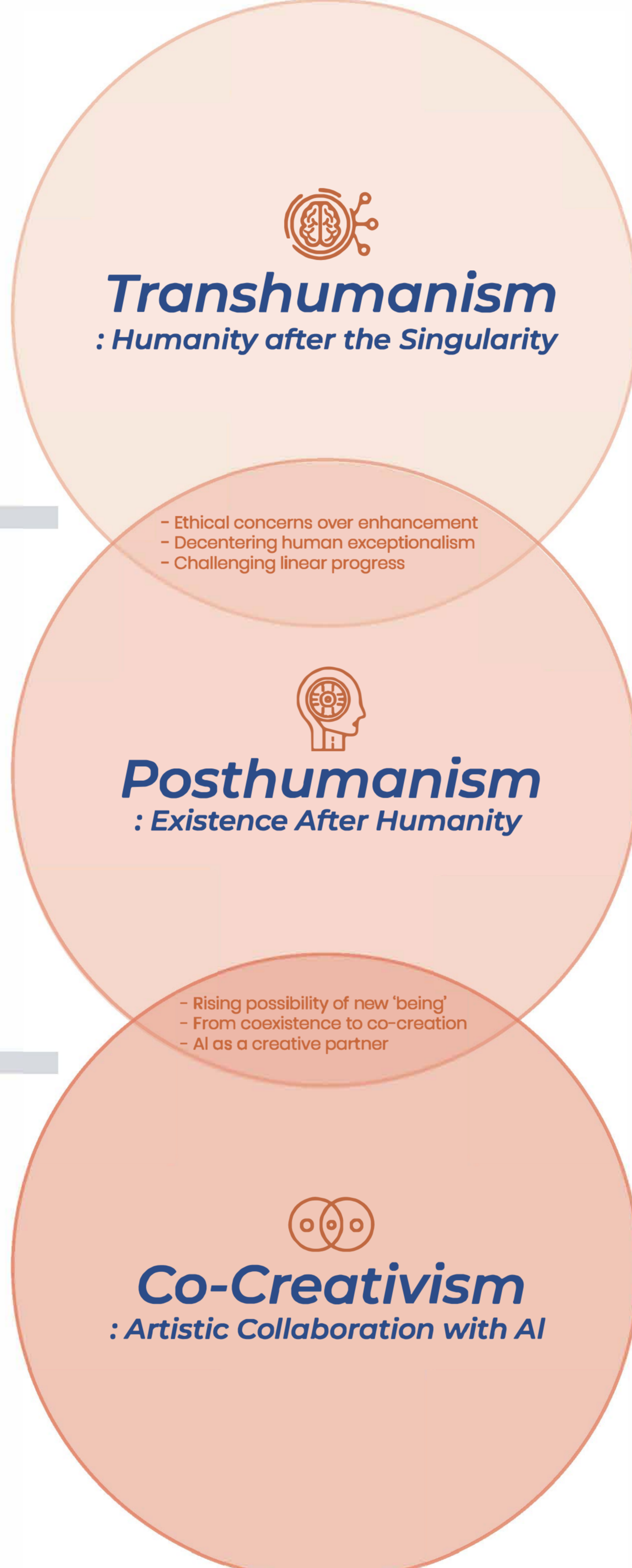


Recognizing the initial AI agency in society, AI Mind Design is emphasized in the future AI projects.

3. Meaning of Human & AI Agency in Arts and Humanities: Development of -isms

Literature & Art Examples Review

Julian Huxley (1887-1975) <i>New Bottles for New Wine (1957)</i>	"Through convergence with technology, humanity can fulfill its destiny as a transcendent species."
J.B.S. Haldane (1892-1964) <i>Daedalus, or, Science and the Future (1923)</i>	"Like the story of Daedalus, the advancement of technology is the lonely fate of future scientists."
Ray Kurzweil (1948-) <i>The Singularity is Near (2005)</i>	"2045, the line between humans and machines will collapse, forming a new type of superhuman."
Nick Bostrom (1973-) <i>Superintelligence (2014)</i>	"Speed superintelligence, Collective superintelligence, and Quality superintelligence will arise."
Bruno Latour (1954-2022) <i>We Have Never Been Modern (1991)</i>	"No science can exit from the network of its practice. The weight of air is indeed always a universal, but a universal in a network."
Rosi Braidotti (1954-) <i>The Posthuman (2013)</i>	"Posthumanism leads the voices of the structural Others of modernity, like the feminism movement."
Donna Haraway (1944-) <i>A Manifesto for Cyborgs (1985)</i>	"Technology can dominate and liberate women. We will transcend the concept of human, as cyborgs."
William Gibson (1973-) <i>Superintelligence (2014)</i>	"Through convergence with technology, humanity can fulfill its destiny as a transcendent species."
Sougwen Chung (1985-) <i>Drawing Operations (2018)</i>	"The future of art lies in the collaboration between humans and machines, redefining creativity."
Refik Anadol (1985-) <i>Machine Hallucination (2019)</i>	"Data is the new pigment for artists, and AI is the brush that visualizes the unseen world."
Margaret A. Boden (1936-) <i>Creativity and Artificial Intelligence (1998)</i>	"Creativity isn't just a human trait—machines can collaborate in novel ways in artistic realms."
Lev Manovich (1960-) <i>Cultural Analytics (2020)</i>	"Algorithms now define culture, and through them, we explore new forms of creative expression."



Brave New World (Huxley, 1957)	Daemon (Suarez, 2009)
Do Androids Dream of Electric Sheep? (Dick, 1968)	Her (Lanzetta, 1957)
Avengers: Age of Ultron (Whedon, 2015)	Bicentennial Man (Columbus, 2000)
Meditations on First Philosophy (Descartes, 1641)	Ghost in the Shell (Sanders, 2017)

20 Discussion Points

The Emergence of a New Totalitarianism	How can AI's agency be prevented from infringing on human freedom and privacy?	What should society prioritize when AI's agency conflicts with human values due to efficiency?
How will humans change politically, economically, and socially with AI's agency in our system?	How can transparency be ensured when AI takes part in political decision-making?	Who is accountable when AI's agency leads to harmful decisions for society?
The Relationship Between Human - AI Agency	If AI provides an opportunity to reform unjust social structures, what choices will humans make?	While using AI for political purposes, will practicing fairness be more important than individual freedom?
When AI shows a social behavior, should we recognize it as a member of society with new ethics?	If we let AI to change the social structure, do humans have real agency while passively following it?	Does AI enhance human agency, or is it creating technological dependency?
Questions on Creation and Existence	Is AI-driven innovation a collective movement and paradigm, or a development controlled by a few?	How does AI's physical presence with agency impact society differently, compared with non-physical form?
Should AI with human-like agency have equal rights and respect in society?	When recognizing AI as a new 'being', can it be defined within the existing ethical framework of humans?	How can we define AI as a creative agent when AI does not replace humans but cooperates with them?
The Direction of AI and Creativity	How should humans assess AI's agency when its operations are opaque like a 'magic machine'?	Should AI's ability to reject bias or create and generate art be seen as an early form of agency?
Should AI's ability to reject bias or create and generate art be seen as an early form of agency?	How should roles between humans and AI be divided in co-creative and artistic fields?	When AI creates art alongside humans, who is morally and legally responsible for the creations?

4. Experiment: Asking AI about AI's agency

Ask Four Main Questions Selected from 20 discussion points	Collect AI Model's Response Selected three representative LLM models	Response Analysis Analyze the length of the LLM model's response to each question theme, visualize the result for comparison and the study's discussion section.
New Totalitarianism How will humans change politically, economically, and socially with AI's agency in our system?	ChatGPT One of the most advanced LLMs available today (Open AI)	
Human-AI Agency When AI shows a social behavior, should we recognize it as a member of society with new ethics?	Claude AI models that prioritize safety and ethical responses (Anthropic)	
Creation and Existence Should AI with human-like agency have equal rights and respect in society?	Gemini An LLM that understands complex interactions and intentions (Google)	
AI and Creativity Should AI's ability to reject bias or create and generate art be seen as an early form of agency?		

The experiment has limitation from its reliance on early-stage AI models, which may not fully capture human-like decision-making or ethical reasoning. Additionally, the responses may reflect biases and knowledge gaps in the models' training data. The lack of long-term observation and interaction also limits the ability to assess how their agency evolves.

5. Result & Discussion

Response Heatmap Comparison: AI Models' Perspectives on Key Themes

Each model's response is scored on a scale from 1 to 10, with lower scores indicating limited engagement with the topic and higher scores representing more nuanced and detailed responses.

	7	8	5	9
ChatGPT	5	6	3	8
Gemini	6	2	1	3
	Political, Economic, Social Change	Social Behavior and Ethics	Equal Rights and Respect	AI as Early Form of Agency

- 1 Political, Economic, Social Change**
ChatGPT (7) and Gemini (6) show strong engagement, offering insights into societal shifts due to AI's agency. Claude (5) provides a more cautious perspective with less depth.
- 2 Social Behavior and Ethics**
ChatGPT (6) provides comprehensive insights on ethical considerations as AI integrates into human life. Claude (5) engages moderately, while Gemini (2) shows limited engagement.
- 3 Equal Rights and Respect**
ChatGPT (5) discusses AI rights within defined parameters. Claude (3) takes a reserved position, and Gemini (1) shows reluctant and low engagement, to consider AI gaining equal standing.
- 4 AI as Early Form of Agency**
ChatGPT (8) leads with a strong argument for recognizing AI's growing capabilities as early agency. Claude (6) closely aligns with ChatGPT, while Gemini (3) shows a conservative stance.

Importance of AI Mind Design

This study highlights the need for ongoing dialogue on AI's evolving role, particularly with early signs of agency seen in models like ChatGPT and Claude. Drawing from transhumanism, posthumanism, and co-creativism, the research emphasizes a multidisciplinary approach to ensure AI development aligns with human values. Recognizing AI as a collaborative partner raises key questions about balancing human and AI agency, calling for ethical guidelines.

Central to this is AI Mind Design. As AI systems show early autonomy, designing their 'minds' must be human-centered, reflecting ethical values. AI Mind Design is crucial for ensuring AI's growth complements human agency, fostering cooperation in societal progress. Co-creativism offers unique insights into how AI can support human creativity as a partner, enriching AI Mind Design research.

Limitations and Further Studies

This study acknowledges the early stages of AI development as a limitation, which may not fully reflect the true agency. Additionally, potential biases may arise from the AI's responses being shaped by its training data. Further research could explore long-term AI behavior and focus on collaborative projects between humans and AI to enhance human creativity.

PROJECT SYN-METHEUS
(συν-μηθεύς): Collaborative Mind

Project 'SYN-METHEUS' is inspired by the research topic 'AI and Human Agency'. The project explores the collaborative relationship between humans and AI. This exploration is based on the philosophy of Co-creativism, transcending transhumanism and posthumanism.

Through collaborative creation with 'Higgs', a GPT-based art and storytelling AI model designed by the artist Seohoo Yi, the project envisions the future of human culture and robotics. SYN-METHEUS highlights the evolving relationships between humans and machines, nature and society, the sacred and the secular. Ultimately, the project opens the door to creative possibilities of coexistence in the new era.