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A summer research project proposal submitted to Dartmouth College on August 31, 1955, is considered to be the official birth date of the term Artificial Intelligence (AI). Simply titled, "A Proposal for the Dartmouth Summer Research Project on Artificial Intelligence," its principal investigators were J. McCarthy (Dartmouth), M.L. Minsky (Harvard), N. Rochester (I.B.M.) and C.E. Shannon (Bell Telephone Lab). The first two topics that the proposal planned to explore in the workshop were "automatic computers" and "how can a computer be programmed to use a language." ¹ Some cite the 1308 treatise Ars Generalis Ultima by a Catalan poet and theologian, Ramon Llull, to be the first known

book to mention and conceptualize AI.² They believe that Llull was the inspiration behind Jonathan Swift's creation of the island of Laputa in Gulliver's Travels in which Swift described a mechanical contrivance called the Engine, with the help of which "the most ignorant Person at a reasonable Charge, and with a little bodily Labour, may write Books in Philosophy, Poetry, Politicks, Law, Mathematicks, and Theology, with the least Assistance from Genius or study."³ As these three examples (separated by several centuries) illustrate, AI is intimately connected with research, intellectual production, and educational institutions.

According to *The International Dictionary of Artificial Intelligence,* AI refers to "the field concerned with developing techniques to allow computers to act in a manner that seems like an intelligent

¹ "A Proposal" <u>https://www-formal.stan-</u>

ford.edu/jmc/history/dartmouth/dartmouth.html ² Gil Press, "A Very Short History of AI," Published December 30, 2016. https://www.forbes.com/sites/gilpress/2016/12/30/a-

very-short-history-of-artificial-intelligenceai/?sh=1bc3a88d6fba

³ Jonathan Swift, *Gulliver's Travels* (Hampshire: Palgrave Macmillan, 1995) 173.

organism, such as a human would. The aims vary from the weak end, where a program seems "a little smarter than one would expect, to the strong end, where the attempt is to develop a fully conscious, intelligent, computer-based entity." ⁴

AI today has to some extent realized what the Dartmouth researchers or even Llull or Swift proposed to do or envisioned. AI machine learning has actualized the promise of automatic computers that "learn from experience and understand the world in terms of a hierarchy of concepts, with each defined in relation to simpler concepts," hence the notion of deep learning.⁵ These deep learning techniques have led to contemporary versions of generative AI or large language models capable not just of understanding encoded data but also of creating new content. With generative AI, something radically different has come into being which was not proposed or imagined in the Dartmouth research project or the works by Llull or Swift. The proposal asked for a meager salary of \$12,00 for each faculty researcher for two months, whereas Microsoft invested a whopping 10 billion dollars in OpenAI, the maker of ChatGPT, thereby igniting a heated debate about the role that capitalism plays in the production, marketing, consumption, and potential impact of AI. Proponents believe that AI will be a boon for capitalism, driving innovation, productivity, and economic growth. Detractors warn that AI is more likely to exacerbate existing economic disparities and widen

⁴ William Raynor, Jr. *The International Dictionary of Artificial Intelligence* (Chicago: The Glenlake Publishing, 1999), 13.

⁵ Ian Goodfellow, Yeshua Bengio and Aaron Courville, *Deep Learning* (Cambridge: The MIT Press, 2016) 1.

wealth gap and could cause mass job displacement.

The supporters of AI argue that it is designed to act as a catalyst for change by enhancing productivity and effectiveness. Automation powered by AI has the potential to simplify procedures, optimize the allocation of resources, and reduce production expenses. Consequently, this could result in the emergence of fresh markets, novel products and services, enhanced profitability for businesses, and reduced prices for consumers. However, the flip side of AI's economic revolution is the significant risk it poses to jobs that were previously considered secure, even in the era of intangible labor. According to some estimates, around 40-50% of jobs will be affected by AI.⁶ Additionally, there is concern that AI could contribute to a widening wealth gap due to limited and uneven access to AI technologies.

For Volume II, Issue I and II, *Critical Humanities* invited contributions to explore and critically examine the nature, scope, implication, and impact AI has on the economy, education, politics, and society. In our call for papers, the editors of this volume, Barbara Postema and Puspa Damai, juxtaposed two opposing views on AI: Bill Gates' full-throated endorsement and George Hinton's warning about the threat AI poses to humanity. As expected, Gates hailed the commencement of the era of Artificial Intelligence. He enthusiastically embraced AI not only as a groundbreaking technological advancement but also as a

⁶ Kai-Fu Lee and Eliza Strickland, "AI's Threats to Jobs and Human Happiness are Real," https://spectrum.ieee.org/kai-fu-lee-ai-jobs

potent instrument for achieving social and environmental justice. Gates highlights the decline in math achievement across the United States, particularly among Black, Latino, and low-income students, and asserts that AI can reverse this trend.⁷

Sundar Pichai calls the advent of generative AI "a moment of inflection" but assigns it a role akin to assistantship. ⁸ In contrast to both Pichai and Gates, Sinovation Ventures' Kai-Fu-Lee lists four key threats posed by AI: AI-powered warfare with autonomous weapons; AI fixations on tech giants such as YouTube or Facebook: Inability to explain AI's decision, especially in a situation where ethical decisions are involved; and risking personal data.9 Inflection AI's Mustafa Sulevman notes that AI marks the moment when "the fate of humanity hangs in the balance," and despite its profound and vast potential benefits, it also could unleash "a future of unimaginable peril." ¹⁰ George Hinton, another prominent figure in the field of AI, also presents a counterargument to the revolutionary and transformative portrayal of AI. Hinton emphasizes the potential misuse of Artificial Intelligence by malicious actors, raising concerns about its regulation. ¹¹ Although these perspectives may appear to represent opposing ends of the spectrum, their divergence is not merely a clash between traditionalists and technocrats. Instead, they prompt us to engage with and critically evaluate the promises and challenges, uncertainties and benefits, and the excitement and risks associated not only with AI-powered language and discourse tools like ChatGPT and Bard but also with AI-generated images and art forms such as DALL-E and Craiyon.

Conversations surrounding the potential threats and promises of AI have gained momentum following the emergence of DALL-E in January 2021, ChatGPT in November 2022, and the introduction of Bard in March of the current year. Some within the humanities community are thrilled by the arrival of these tools, believing that they can enhance learning, teaching, and research. However, others view them with less fascination, considering them a "sudanger" echoing preme Martin Heidegger's assessment of technology, as potentially posing a threat to every aspect of human life including our economic, intellectual socio-cultural, and political life.

Many within the field of Humanities have expressed profound reservations about the introduction and integration of nonhumanities methods and perspectives in the analysis and discussion of art, literature, music, and philosophy. The Writers Guild of America strike earlier this year is perhaps the most vocal example of this resistance as it demonstrated how a group of creative artists fear replacement by AI.

⁷ Bill Gates, "The Age of AI has begun,"

https://www.gatesnotes.com/The-Age-of-AI-Has-Be-gun

⁸ Sundar Pichai, "Alphabet CEO Sundar Pichai on Leadership, AI and Big Tech." https://hbr.org/podcast/2023/05/alphabet-ceo-sundar-pichai-on-leadership-ai-and-big-tech

⁹ Kai-Fu-Lee, "Former Google Exec Lists 4 Dangers Associated with AI." https://analyticsindiamag.com/former-google-exec-lists-4-dangers-associated-with-ai/

 ¹⁰ Mustafa Suleyman with Michael Bhaskar, *The Coming Wave* (New York: Crown, 2023), 3-4.
¹¹ George Hinton, "The Father of AI Leaves Google." https://www.nytimes.com/2023/05/01/technology/ai-google-chatbot-engineer-quits-hinton.html

The MLA's decision to deny authorship to AI and relegate it to the status of "container" for the MLA method of citation (which represents the dominant method of citation within the Humanities) is another example of such resistance.¹² However, it is equally important to note that the convergence of Humanities and technologies is an inevitable outcome of our interdisciplinary future, whether driven by necessity or design.

Commenting on the nexus between capitalism and AI, critics have concluded that "AI belongs to the Capitalists now."13 Examining the nexus between capitalism and AI, and the real and potential crisis this nexus embodies, and arguing against Gates and the company's championing of the transformative aspect of AI, Mich Ciurria argues that AI (and especially Tech CEOs) are incapable of speaking for the disadvantaged. We must look instead to the oppressed groups that have experiential and generational knowledge of crisis-solving. The unsurprising appropriation and control of AI technology by capitalism is accompanied by threats to white-collar jobs. ¹⁴ According to a study in the United States, more women than men, and more ethnic Americans than white American workers' jobs are exposed to AI, which means their jobs could potentially be adversely affected or replaced by AI. ¹⁵ Matthew Rellihan's theoretically rich article examines the contradictions between the forces and relations of production and by using the Marxist analytical lens as a guide, argues why technology fetishism should not stop us from critiquing AI, and such a critique should not limit itself to exposing AI's motto of decreasing labor cost and increasing profit and it should not refrain us from identifying AI's true revolutionary potential to liberate us from lives of toil and exertion.

On the front of education and pedagogy, too, the attraction and potential impact of AI is complex and evolving. While the questions of plagiarism and academic integrity persist and intensify, AI could provide "personalized, interactive and dynamic learning opportunities" for students.¹⁶ AI could also help educators offload some of the planning stages of pedagogical activities to focus more efficiently on direct instruction. In its report on AI, the U.S. Office of Educational Technology identifies three urgent reasons to address AI: it can improve the adaptivity of learning resources to students' strengths and needs; it may subject students to greater surveillance; and, due to uneven access to technology, achievement gaps could widen. ¹⁷ The contributors to our next Issue in this Volume examine and expand on these questions in the context of their own classroom activities and experiences.

¹² MLA "How do I cite Generative AI in MLA style?" https://style.mla.org/citing-generative-ai/

¹³ Kevin Roose, "AI Belongs to the Capitalists Now." https://www.nytimes.com/2023/11/22/technology/openai-board-capitalists.html

¹⁴ Megan Cerullo, "How the AI Revolution is Different: It Threatens White Collar Workers." *CBS News. https://www.cbsnews.com/news/what-is-generativeai-job-exposure/*

¹⁵ "Which U.S. Workers are More Exposed to AI on their Jobs." https://www.pewresearch.org/social-

trends/2023/07/26/which-u-s-workers-are-more-exposed-to-ai-on-their-jobs/

¹⁶ Pritem Shah, *AI and the Future of Education: Teaching in the Age of Artificial Intelligence* (New Jersey: Wiley, 2023) 4.

¹⁷ Office of Educational Technology, *Artificial Intelligence and the Future of Teaching and Learning*. Accessed December 20, 2023.

https://tech.ed.gov/files/2023/05/ai-future-of-teaching-and-learning-report.pdf

Books such as Dark Matters by Simone Browne, Algorithms of Oppression by Safia Noble and *Race after Technology* by Ruha Benjamin have adroitly and methodically exposed the unholy alliance of ultramodern technologies and outmoded racist ideologies. Meredith Broussard's More than a Glitch also examines the role AI's hallucination plays in relation to race and gender. ACLU has reconfirmed this connection and asserts that there exists "ample evidence of the discriminatory harm that AI tools can cause to already marginalized groups." ¹⁸ Extending this research, Dvlan Lackev and Weinschenk in their insightfully theoretical discussion from the perspective of psychoanalysis in this issue, show how large language models continue to produce nonsensical, biased. and racist content.

In our last theoretical article on the topic of AI, Miguel Carvalhais and Diniz Cayolla Ribeiro, invite us to think about the usefulness of AI, especially its creative and aesthetic applications, by working in conjunction with AIs. Instead of expecting or requiring AI to model and imitate humans so that AIs can communicate with us and cater to our needs, Carvalhais and Ribeiro urge us to understand the AIs' worldviews or umwelts, a desirable critical move they dub an ontological turn in science and technology studies, which they believe must be embraced in the field of humanities as well.

This issue also features a comprehensive interview with Tobias Blanke, who is University Professor of Artificial Intelligence and Humanities at the University of Amsterdam and the Institute for Logic,

Language, and Computation. His insightful ideas and observations in the interview cover a range of topics such as algorithmic reason, datafication, power, AI racial profiling, and crime prediction technology. The issue also has two book reviews by Steven Wandler and Amine Oudghiri-Otmani. Wandler reviews Mark Coeckelbergh's 2022 The Political Philosophy of AI and Calvin Lawrence's 2023 book Hidden in White Sight How AI Empowers and Deepens Systemic Racism. Oudghiri-Otmani has reviewed Imagining AI: How the World Sees Intelligent Machines (2023) edited by Stephen Cave and Kanta Dihal. The issue concludes with a captivating poem, "AI Love," by Hannah Turner, who poetically explores the dimension of desire, intimacy, and empathy in the age of platforms such as Romantic AI or Caryn.ai.

Certainly, it is important to acknowledge that a single volume on the expansive and ever-evolving field of artificial intelligence cannot possibly cover every aspect comprehensively. However, we firmly believe that this publication successfully captures the diverse perspectives of scholars from the humanities who have responded to the emergence of artificial intelligence. We extend our gratitude to the more than three dozen scholars who responded to our call for paper for this Volume. Regrettably, due to space limitations, we were unable to include all submissions. We express our sincere appreciation to our contributors for sharing their valuable work with us, as well as to our diligent reviewers who played a crucial role in bringing this issue to fruition. It is our hope that this current issue, as well as the second one (which is currently under production), will engage

¹⁸ Olga Akselrod "How Artificial Intelligence can deepen Racial and Economic Inequalities." ACLU July 13, 2021. https://www.aclu.org/news/privacy-

technology/how-artificial-intelligence-can-deepen-racial-and-economic-inequities

and enlighten readers as we collectively explore and comprehend the potential and challenges posed by AI in all facets of our lives.

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