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### Artificial Intelligence, Posthumanism, and New Directions of Humanities Education

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Submitted: 02 July, 2025; Reviewed: 16 August, 2025; Accepted: 19 November, 2025; Published: 29 December, 2025

Abstract: Humanism-Renaissance established humans as the center and measure of everything. This view is now being deconstructed amid the rapid development of artificial intelligence (AI) technology, which has the capacity to 'think', innovate, and act (make decisions). According to Rosi Braidotti, this situation marks the emergence of a new era in thought, namely the posthuman era. This article aims to explain the key theses of posthumanism. Specifically, this article seeks to explore the implications of the posthumanist perspective on humanities education. This qualitative study uses secondary data analysis methods. The research finds that posthumanism is characterized by the decentralization of humans and the blurring of boundaries between humans and non-human entities. This has implications for the deconstruction of traditional benchmarks in humanities education, which are based on values and principles of rationality, empathy, creativity, and morality. Humanities education in the post-human era must be designed not only to explore these values and principles but also to understand the dynamic interactions between humans, technology, and nature. The design of humanities education in the post-human era needs to adopt a transdisciplinary and interdisciplinary approach that integrates ethical understanding and responsibility in the context of human-technology interaction.

Keywords: Artificial Intelligence; Humanism-Renaissance; Humanities Education; Posthumanism

#### Introduction

Magnum miraculum est homo (Man is the great miracle). <sup>1</sup> This statement from Hermes Trismegistos, later revived by Giovanni Pico della Mirandola, captures the Renaissance faith in human capacity to create and shape themselves. <sup>2</sup> As the father of Humanism-Renaissance, Mirandola's vision exalted the individual's intellectual and creative powers. Rooted in Classical Humanism, Renaissance thought affirmed the credo Man is the measure of all things, as declared by the Sophist Protagoras. This anthropocentric worldview, <sup>3</sup> which positioned human reason as the ultimate source of truth and progress,

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<sup>&</sup>lt;sup>1</sup> George Hart, *The Routledge Dictionary of Egyptian Gods and Godnesses*, Second Edition (London & New York: Routledge, 2005), 158.

<sup>&</sup>lt;sup>2</sup> Frans Ceunfin, "Sejarah Pemikiran Modern I," *Manuscript* (Maumere: Ledalero Catholic College of Philosophy, 2003), 21.

<sup>&</sup>lt;sup>3</sup> René Descartes, *Meditations on First Philosophy* (Ryerson University Toronto, N.D.), https://pressbooks.library.torontomu.ca/meditationsonfirstphilosophy/front-matter/series-introduction/.

became the foundation for the modern pursuit of intelligent machines and the ideal of the homo universale the universal human fully aware of infinite potential.<sup>4</sup> The Enlightenment (Aufklärung) later reinforced this vision through its total faith in reason's power to pierce the veils of religion, tradition, and myth, ultimately embodying the radical anthropocentrism first conceived in Humanism-Renaissance.<sup>5</sup>

The product of this vision of Humanism-Renaissance and Aufklärung is rapid progress in science and information and communication technology. However, in the twenty-first century, humanity faces a paradox: we are both creators and potential casualties of our own technological imagination. Artificial intelligence (AI) systems capable of autonomous reasoning blur the line between human and machine cognition. Futurist Ray Kurzweil calls this a sign of technological singularity, when machine intelligence surpasses human control and comprehension.<sup>6</sup> Philosopher Flynn Coleman further argues that technological transformation demands a radical philosophical reconsideration of what it means to be human and how we define consciousness and morality.<sup>7</sup>

This transformation marks what Rosi Braidotti terms the *posthuman condition*: a historical moment in which the human subject becomes inseparable from technology, non-human beings, and the environment. In this condition, the human is no longer a self-contained moral center but part of a complex web of relations between organic and technological entities. The posthuman, therefore, is not a futuristic concept—it is our present reality.8

Against this backdrop, humanities education faces an existential challenge. The humanities have traditionally upheld values considered uniquely human-rationality, empathy, moral agency, and creativity. However, posthumanism questions whether these attributes remain exclusively human. If machines can compose music, write poetry, and make moral predictions, what does it mean to educate the human mind? Can moral formation and ethical responsibility remain relevant in a world where non-human agents participate in culture and decision-making?

This article critically rethinks humanities education within the posthuman paradigm. It argues that although posthumanism decenters the human subject, it does not make the humanities obsolete. Instead, it calls for a renewed humanism that recognizes the interdependence of humans, technology, and ecology, shifting education from anthropocentric mastery toward an ethical, relational understanding of learning and being.

In Indonesia, where education remains grounded in Enlightenment rationality and human-centered epistemologies, this shift is urgent. As digital technologies and AI permeate classrooms, new philosophical and pedagogical frameworks are needed to move beyond mere adaptation and to cultivate ethical sensitivity toward both human and non-human others. Such a transformation calls for reimagining the very purpose of education in a posthuman age.

<sup>&</sup>lt;sup>4</sup> Flynn Coleman, A Human Algorithm - How Artificial Intelligence is Redefining Who We Are (Berkeley: Counterpoint, 2019), 20.

<sup>&</sup>lt;sup>5</sup> Frans Ceunfin, "Sejarah Pemikiran Modern II," Manuscript (Maumere: Ledalero Catholic College of Philosophy,

<sup>&</sup>lt;sup>6</sup> Ray Kurzweil, *The Singularity Is Near: When Humans Transcend Biology* (New York: Viking, 2005).

<sup>&</sup>lt;sup>7</sup> Flynn Coleman, A Human Algorithm - How Artificial Intelligence is Redefining Who We Are, 12.

<sup>&</sup>lt;sup>8</sup> Rosi Braidotti, "Posthuman, All Too Human: The Memoirs and Aspirations of a Posthumanist," in *The Tanner* Lectures on Human Values (United Kingdom: Yale University, 2017), 5.

Using a qualitative approach with secondary data analysis, this study examines the conceptual, ethical, and contextual impacts of posthumanism on humanities education. It contributes conceptually by positioning the humanities as a site of ethical reconfiguration rather than obsolescence. It also contributes contextually by offering an Indonesian perspective often missing in Euro-American posthumanist debates.

While earlier works by Neil Badmington, <sup>9</sup> Stefan Herbrechtera, <sup>10</sup> and Cary Wolfe <sup>11</sup> have established posthumanism as a critique of anthropocentrism, few have examined its implications for educational philosophy. Likewise, studies by Neubauer, <sup>12</sup> Bayne & Jandrić, <sup>13</sup> and Sarı, Nayir, & Bozkurt <sup>14</sup> discuss AI and learning in the digital age but overlook the transformation of core humanistic values in the humanities. This article thus fills that gap by articulating a critical-philosophical framework for reimagining the humanities in the posthuman era.

The article begins with a theoretical discussion of posthumanism and its challenge to the boundaries between the human and the non-human. It then analyzes the implications of this paradigm for humanities education, particularly in redefining moral responsibility in the age of artificial intelligence. Finally, it concludes by offering recommendations for integrating posthumanist ethics and transdisciplinary approaches into Indonesia's humanities curriculum.

## Posthumanism: Human Decentralization Amidst Technological Advancement and the Threat of Environmental Crisis

The roots of posthumanist theory can historically be traced back to the Macy Conference on cybernetics. <sup>15</sup> At that time, interdisciplinary experts – particularly from physics, biology, and computer science – sought to revise the theory of humanism by removing the privileges of the human species compared to animals, the environment, and machines. In other words, they sought to remove anthropocentrism from the theory of humanism. <sup>16</sup> In anthropocentric humanism, the human subject is

<sup>&</sup>lt;sup>9</sup> Neil Badmington, *Posthumanism* (New York: Palgrave, 2000).

<sup>&</sup>lt;sup>10</sup> Stefan Herbrechter, "Posthumanism and the Ends of Education," *On Education - Journal for Research and Debate*, 1 (2018), 1, https://doi.org/10.25656/01.

<sup>&</sup>lt;sup>11</sup> Cary Wolfe, What Is Posthumanism? (Minneapolis: University of Minnesota Press, 2010).

<sup>&</sup>lt;sup>12</sup> Aljoscha C Neubauer, "The Future of Intelligence Research in the Coming Age of Artificial Intelligence - With a Special Consideration of the Philosophical Movements of Trans- and Posthumanism," *Intelligence*, 87 (June 2021) 101563, 1, https://doi.org/10.1016/j.intell.2021.101563.

<sup>&</sup>lt;sup>13</sup> Bayne & Jandric. "From Anthropocentric Humanism to Critical Posthumanism in Digital Education," *Knowledge Cultures* 5, no. 2 (2017):197–216, https://doi.org/https://doi.org/10.22381/KC52201712.

<sup>&</sup>lt;sup>14</sup> Nayir Sarı & Bozkurt, "From Anthropocentrism to Posthumanism in Education," *Contemporary Educational Research Journal* 15 (2023).

<sup>&</sup>lt;sup>15</sup> The Macy Conferences on Cybernetics were a series of 10 interdisciplinary scientific meetings held in New York between 1946 and 1953. The meetings were sponsored by the Macy Foundation, which aimed to promote interdisciplinary approaches to the social sciences, humanities, and medicine. The conference sought to apply tools from the physical sciences and mathematics to solve problems in the biological sciences and humanities. Cf. Tara H. Abraham, "The Macy Conferences on Cybernetics: Reinstantiating the Mind," *Oxford Research Encyclopedia of Psychology*, 2020, https://doi.org/https://doi.org/10.1093/acrefore/9780190236557.013.541

<sup>&</sup>lt;sup>16</sup> Bingning Liu, "The Development of Posthuman Theory and Its Application Through the Lens of STS Studies," *Proceedings of the 2022 5th International Conference on Humanities Education and Social Sciences (ICHESS 2022)*, (2022), 835, https://doi.org/10.2991/978-2-494069-89-3\_98.

positioned as the central locus and ultimate telos of existence, while non-human entities are reduced to mere means, instruments, or resources in the service of human flourishing.<sup>17</sup>

The positioning of man as the center and end of all things rests on the classical premise of the rational and linguistic human, a view derived from Protagoras's dictum that man is the measure of all things. During the Italian Renaissance, the idea was updated as a universal model and represented in Leonardo da Vinci's Vitruvian Man. The idea was further refined by Rene Descartes and the Aufklärung thinkers. 18 Descartes described man as a knowing and conscious subject - Cogito ergo sum. Meanwhile, Immanuel Kant described humans as a community of reason. Then, sociologically, humans are described as citizens, rights holders, and others. The concept of humans inherited from the Enlightenment is very anthropocentric. The revolutionary Enlightenment narrative that challenged the oppressive feudal order and re-imagined humans as rational, autonomous, unique and free beings is now deconstructed. 19 That anthropocentric notion is now being questioned due to the dual pressures of scientific and technological advances and the challenges of the global economy.

Rosi Braidotti situates the posthuman debate within the broader context of the Anthropocene. She argues that we inhabit a geological epoch in which the detrimental consequences of human activity on planetary sustainability have become empirically discernible. These consequences are multifaceted, encompassing a wide spectrum of interrelated ecological systems. Such conditions, she contends, expose the failure of anthropocentric humanism, which has generated new crises across environmental, socioeconomic, emotional, and psychological domains. 20 In the environmental field, for example, the exploitation of natural resources without considering the sustainability of life on this planet is rooted in the assumptions of anthropocentric humanism. Posthumanism emerged as a response to this crisis. Moreover, posthumanism also emerges as a response to major shifts in epistemology and ontology triggered by ecological challenges and modern technologies (such as AI, cyborgs, biotechnology, and robotics). Claire Colebrook highlights that the climate crisis and the extinction of living organisms on earth require us to reflect on the old limits of humanism and consider removing humans from the center of things.<sup>21</sup>

The crisis of the anthropocene has been exacerbated by rapid technological advances on the one hand and increasing environmental and social inequalities on the other. It has created a diverse and conflicted landscape. Referring to the anthropocene is not enough. We need new ideas and terms to understand and deal with current challenges and to chart a future course. Braidotti offers the idea and term posthumanism.<sup>22</sup>

In his article Introduction: Toward a Critique of Posthuman Futures, Bart Simon contends that posthumanism is fundamentally concerned with the deconstruction of classical humanism, which situates the human subject at the center of being and value. In this regard, posthumanism advances a conceptual

<sup>20</sup> Rosi Braidotti, "Posthuman, All Too Human: The Memoirs and Aspirations of a Posthumanist," in *The Tanner* Lectures on Human Values (Yale University, 2017), 10.

<sup>&</sup>lt;sup>17</sup> Liu, "The Development of Posthuman Theory and Its Application Through the Lens of STS Studies," 834.

<sup>&</sup>lt;sup>18</sup> Rosi Braidotti, *The Posthuman* (Cambridge, UK: Polity Press, 2013), 4.

<sup>&</sup>lt;sup>19</sup> Braidotti, *The Posthuman*, 3.

<sup>&</sup>lt;sup>21</sup> Claire Colebrook, Death of the Posthuman - Essays on Extinction, Vol. 1 (Michigan: Open Humanities Press and Michigan Publishing, 2015), 2.

<sup>&</sup>lt;sup>22</sup> Braidotti, "Posthuman, All Too Human: The Memoirs and Aspirations of a Posthumanist," 10.

shift toward the decentering of the human as both the locus and measure of all things. By quoting Francis Fukuyama, <sup>23</sup> Bart Simon asserts that contemporary biotechnology poses a serious threat to humans. Advances in contemporary biotechnology are likely to change human nature and could even bring humans to a new stage in history, namely posthumanism.<sup>24</sup>

The state of posthumanism marks a significant qualitative shift in thinking about human identity and its role in the world. This debate includes discussions ranging from robotics and prosthetic technology to trans-humanism. While in critical theory, posthumanism is seen as an exciting new development, it also triggers anxiety about the declining relevance of the concept of *Man* as the center and measure of all things, especially in the humanities. <sup>25</sup> Rationality, which was once considered the basic reference of the human species, for example, is now being challenged because intelligent machines can also think and act (make decisions). For the first time in history, humans can create machines that can think, create, and evolve independent of full human control.

Fukuyama cautions that although scientific advancement is both necessary and desirable for the betterment of humankind, its unrestrained development poses a profound threat to the very condition of humanity, carrying the potential for severe social consequences. This threat, he argues, is fundamental: genetic technologies, for instance, may transform the material and biological foundations of natural human equality upon which political equality and human rights ultimately rest. Fukuyama asks, "What will happen to political rights when we are able, in effect, to breed some people with saddles on their backs, and others with boots and spurs?"<sup>26</sup>

#### The Ontological Blurring of the Human-Nonhuman Boundary

According to Rosi Braidotti, the posthuman introduces a fundamental transformation in perspectives on human identity and its relation to other entities on earth.<sup>27</sup> The posthumanist paradigm challenges the traditional concept of the basic human unit of reference, which distinguishes humans from non-humans. Instead of taking for granted traditional claims about human identity as a thinking subject, posthumanism expands the notion of subjectivity to include non-human entities and technology.

The basic assumption of posthumanism lies in the understanding that living matter has vital self-organizing powers and is non-natural. The concept of the nature-culture continuum shifts the strict distinction between what is "given" (nature) and what is "constructed" (culture). Posthumanism creates a new scientific paradigm that rejects dualism. In this framework, the boundaries between human and non-human are blurred due to the impact of scientific and technological advances that challenge traditional categories of identity and social practices.<sup>28</sup>

<sup>&</sup>lt;sup>23</sup> Francis Fukuyama, *Our Posthuman Future: Consequences of the Biotechnology Revolution* (New York: Farrar, Straus, and Girou, 2002), 7.

<sup>&</sup>lt;sup>24</sup> Bart Simon, "Introduction: Toward a Critique of Posthuman Futures," *Cultural Critique*, Winter, 53 (2003), 1, https://www.jstor.org/stable/1354621.

<sup>&</sup>lt;sup>25</sup> Braidotti, "Posthuman, All Too Human: The Memoirs and Aspirations of a Posthumanist," 6.

<sup>&</sup>lt;sup>26</sup> Fukuyama, Our Posthuman Future: Consequences of the Biotechnology Revolution, 8.

<sup>&</sup>lt;sup>27</sup> Braidotti, *The Posthuman*, 1-2.

<sup>&</sup>lt;sup>28</sup> Braidotti, *The Posthuman*, 1-2.

The blurring of boundaries between human and non-human in the perspective of posthumanism stems from the idea of neomaterialism. Braidotti was heavily influenced by this idea. The philosophical foundation of Braidotti's posthumanism is the idea of vital neomaterialism.<sup>29</sup> Charles T. Wolfe defines vital materialism as an approach that combines the ideas of materialism and vitalism. The combination results in an understanding that matter is something active and dynamic, not just a passive or mechanistic substance. The consequence of this view is that matter is considered to have the capacity to exhibit the characteristics of life without reference to the principles of classical vitalism. In this context, Wolfe's vital materialism is different from mechanistic materialism. Mechanistic materialism views matter only in terms of size, shape, and movement, and emphasizes that life cannot be separated from the materiality of living organisms.30

Lemke discusses vital materialism in the context of political theory by focusing on the ideas of Jane Bennett. Bennett developed the concept of "thing-power" which describes the ability of inanimate objects to influence and have a "life" of their own. Bennett's vital materialism aims to abolish the boundaries between humans and non-humans as well as subjects and objects. She recognizes that objects such as metals, plants, and even weather phenomena have the potential to act. This indicates a shift from the traditional view of agency, which is usually only associated with humans, to the recognition that inanimate objects also have the capacity to act (agency).<sup>31</sup>

Benneatt's view above within the perspective of posthumanism is quite central and vital in the midst of the rapid development of artificial intelligence (AI) technology. AI seems to force us to rethink the boundaries between humans and non-humans. If we consider rationality or the capacity to think as the distinguishing trait between humans and non-humans then we must be prepared to be challenged by the fact that AI can also think and even act like humans can. In fact, AI can think and make decisions much more quickly and precisely than humans. This development raises questions about human identity as the capabilities of machines and even genetically modified organisms can resemble or even surpass humans in some aspects.

#### **Humans and Artificial Intelligence**

The majority of people may find it difficult to accept the fact that there is no longer a significant difference between humans and intelligent machines. An intelligent machine refers to a machine designed to be an intelligent agent equipped with a belief system. American computer and cognitive scientist McCarthy first called intelligent machines artificial intelligence (AI) in 1955.<sup>32</sup> Artificial intelligence has become an integral component of contemporary life. Increasingly, individuals depend on AI to perform a wide array of tasks across professional, educational, and everyday contexts. From organizational

<sup>30</sup> Charles T Wolfe, "Varieties of Vital Materialism," in The New Politics of Materialism: History, Philosophy, and Science, ed. Sarah Ellenzweig & John H. Sammito, 1st Edition (New York: Routledge, Taylor and Francis Group, 2017), 22-40.

<sup>&</sup>lt;sup>29</sup> Braidotti, *The Posthuman*, 8.

<sup>&</sup>lt;sup>31</sup> Thomas Lemke, "An Alternative Model of Politics? Prospects and Problems of Jane Bennett's Vital Materialism," Theory, Culture and Society 35, no. 6 (2018): 31-33, https://doi.org/10.1177/0263276418757316.

<sup>&</sup>lt;sup>32</sup> Rosi Braidotti and Maria Hlavajova, *Posthuman Glossary* (London, New Delhi, Oxford, Sidney, New York: Bloomsbury Academic, 2018), 21.

management and quality control to language translation, text generation, navigation, and personalized recommendations, AI now mediates much of human activity with remarkable speed and precision. The rapid proliferation of these technologies has enabled machines to assume functions once regarded as uniquely human—often executing them with greater efficiency and accuracy—thereby eroding the boundaries that once separated the human from the non-human.<sup>33</sup>

There is no single definition of AI that is accepted by all. However, in general, AI is understood as "reactive" machines developed to mimic human behavior. This is called narrow or weak AI. In contrast, strong or general AI (AGI: *artificial general intelligence*) is AI that can learn and think autonomously and is therefore theoretically intelligent. AGI refers to machines that have the authentic ability to think, have at least limited memory, and are capable of performing most human tasks. Artificial *super intelligence* (ASI), meanwhile, is a speculative technology that will be self-aware. That's why some people suggest that there should be a fourth category of AI, namely conscious AI.<sup>34</sup>

At the core of artificial intelligence (AI) lies the algorithm—a systematic, step-by-step process for accomplishing tasks. The concept dates back to the ninth century, when Persian mathematician Al-Khwarizmi, the "father of algebra," gave rise to the term itself.<sup>35</sup> Modern computer algorithms, developed in the 1950s, evolved from fixed rule-based instructions into systems capable of self-learning. Through *machine learning* and *reinforcement learning*, AI can update its internal models and optimize behavior based on experience, enabling machines to simulate human-like intelligence and decision-making.<sup>36</sup>

Based on the discussion above, there are apparently no more privileges that exist in humans as *ens rationale*. Human activities as *ens rationale* can now be taken over by intelligent machines. To examine this claim, it is essential to first clarify what is meant by intelligence. If AI technology is indeed intelligent, does that mean it has cognitive abilities such as perception, memory, judgment, and reasoning? Does it actually know something, or is it just storing and generating data? Then, in terms of consciousness, emotions, such as joy and anger, empathy, compassion and other experiences, does AI also have them? <sup>37</sup>

Intelligence is variously understood. Some understand intelligence as "the general mental ability to reason, solve problems and learn". Carl Bereiter, an educational researcher, defines intelligence as "what you use when you don't know what to do." Flynn Coleman defines intelligence as "the ability to solve new problems". Coleman gives the example of an electronic calculator that is able to calculate at a higher speed than humans. Hardly anyone can argue that the calculator in that context is intelligent. However, its intelligence is limited only to the ability to count, not to anything else, such as driving or giving directions.<sup>38</sup> This suggests that its capacity is limited to the design of its algorithms.

Intelligence is also often associated with the workings of the mind, including concepts such as learning, reasoning, perception, planning, language processing, and problem solving. It is with this understanding that humans often place themselves superior to everything else on the planet, such as animals,

<sup>&</sup>lt;sup>33</sup> Liu, "The Development of Posthuman Theory and Its Application Through the Lens of STS Studies," 835.

<sup>&</sup>lt;sup>34</sup> Coleman, A Human Algorithm - How Artificial Intelligence is Redefining Who We Are,16.

<sup>&</sup>lt;sup>35</sup> Coleman, A Human Algorithm - How Artificial Intelligence is Redefining Who We Are,16.

<sup>&</sup>lt;sup>36</sup> Coleman, A Human Algorithm - How Artificial Intelligence is Redefining Who We Are, 16.

<sup>&</sup>lt;sup>37</sup> Coleman, A Human Algorithm - How Artificial Intelligence is Redefining Who We Are,16.

<sup>&</sup>lt;sup>38</sup> Coleman, A Human Algorithm - How Artificial Intelligence is Redefining Who We Are, 61.

plants, and even the technology they themselves have created. Humans tend to place themselves at the center of the universe. They also place themselves at the "top" in any discussion about intelligence. However, according to Coleman, we must realize that animals and plants also possess certain types of intelligence that far surpass human intelligence. For example, leaves can photosynthesize in ways that we cannot. Jaguars can run and jump faster than the most exceptional athletes. After spending years at sea, salmon return to their birthplace. Chimpanzees have better short-term memories than humans. Octopuses have the ability to spread their insights and solve many problems at once. There are many forms of intelligence that we don't have that other creatures do. Comparing AI to human intelligence helps frame the problem within a comfortable zone of understanding, but it completely ignores other unique forms of intelligence. <sup>39</sup>

One of the earliest rules for maintaining the boundary between AI and its inventors, namely humans, comes from Isaac Asimov's Three Laws of Robotics, proposed in his 1942 short story, "Runaround". One of the earliest attempts to counteract and underscore this demarcation can be attributed to Alan Turing's Turing Test in the 1950s: if the questioner could not tell whether the respondent was human, the subject was deemed to pass the Turing Test, and therefore the subject was human.<sup>40</sup>

In the contemporary era, as advances in artificial intelligence (AI) and virtual technologies accelerate, the boundary between human and machine has become a central theme in both cultural imagination and scholarly discourse. Since Blade Runner (1982) first envisioned intelligent machines "more human than humans," this once-speculative idea has materialized as automation replaces human labor in fields such as accounting, logistics, and security. Such technological displacement provokes profound social unease and philosophical reflection, urging a reconsideration of what it means to be human in an age of intelligent machines.<sup>41</sup>

#### Posthumanism, Antihumanism, Post-anthropocentrism, and Transhumanism

Before discussing the implications of posthumanism for humanities education, some fundamental concepts that are often misunderstood need to be explained first. First, posthumanism is not the same as antihumanism. The antithesis of humanism is antihumanism. Examples of antihumanist ideologies in history are fascism and communism. Both ideologies flourished in the 1960s and 1970s. Both focus on questioning the individuality element of the humanism model. Both ideologies are more concerned with fighting for the collective good of humans or certain groups rather than the freedom of each individual. The latest form of antihumanism comes in the form of racism. Antihumanism in this context clearly only reinforces hierarchy in human society.<sup>42</sup>

Second, posthumanism is also different from post-anthropocentrism. According to Braidotti, posthumanism and post-anthropocentrism refer to two different lineages and are not automatically related. Posthumanism is related to the shift in how we view humans in the age of advanced technology. It impacts

<sup>&</sup>lt;sup>39</sup> Coleman, A Human Algorithm - How Artificial Intelligence is Redefining Who We Are, 61-62.

<sup>&</sup>lt;sup>40</sup> Liu, "The Development of Posthuman Theory and Its Application Through the Lens of STS Studies," 836.

<sup>&</sup>lt;sup>41</sup> Liu, "The Development of Posthuman Theory and Its Application Through the Lens of STS Studies," 836

<sup>&</sup>lt;sup>42</sup> Liu, "The Development of Posthuman Theory and Its Application Through the Lens of STS Studies," 838.

our construction of human identity. Posthumanism in this context is a critique of the concept of anthropocentric humanism. While post-anthropocentrism is related to the shift in focus from humans to non-human entities. Post-anthropocentrism recognizes that humans are not the measure of all things. In addition, reality also includes non-human elements such as animals, plants, viruses, algorithms, and others.<sup>43</sup>

Third, despite the relationship, the posthuman remains distinct from posthumanism and post-anthropocentrism. According to Braidotti, the posthuman is a phenomenon of convergence that occurs at the intersection between posthumanism and post-anthropocentrism. Posthumanism criticizes the ideals of Western humanism that define humans as "intelligent beings" who are the universal measure of all things. Meanwhile, post-anthropocentrism rests on the rejection of species hierarchy and the exclusion of humans.<sup>44</sup>

Fourth, posthumanism stands in contrast to transhumanism. As articulated by Max More, transhumanism represents a philosophical worldview that envisions the continuation and acceleration of the evolution of intelligent life beyond the parameters of the current human condition. Its proponents aim to transcend human limitations through the application of science and technology, guided by values and principles that affirm and advance the flourishing of life. One of the concerns with this idea is that technology used to improve humanity will actually increase inequality. It will create a widening gap between people who have the resources to improve themselves and people who lack the resources to improve themselves.

#### Posthumanism and its Implications for Humanities Education Design

One of the important issues that needs to be elaborated further in this paper is the implication of posthumanism views on the design of humanities education. Posthumanism shifts the traditional anthropocentric paradigm of humanities education. Anthropocentric humanities education emphasizes traits and values that are believed to be unique to humans, such as rationality, empathy, creativity, and morality. The waning boundaries between humans and non-humans – such as AI technology – in the posthuman era are shifting the conventional humanities education paradigm. We need a new perspective of humanities education that is relevant to the posthuman condition. The authors call this perspective posthumanist humanities education.

Posthumanist humanities education no longer places humans at the center of everything. As explained by Braidotti, posthumanism proposes a decentralized view of humans. Humans in a posthumanist perspective should be seen as part of an interconnected network with technology, ecosystems, and other non-human entities. This idea blurs the traditional boundaries between humans and technology.<sup>47</sup> It directs humanities education to not only focus on exploring human values such as rationality, empathy, creativity,

<sup>&</sup>lt;sup>43</sup> Braidotti, "Posthuman, All Too Human: The Memoirs and Aspirations of a Posthumanist," 20.

<sup>&</sup>lt;sup>44</sup> Braidotti, "Posthuman, All Too Human: The Memoirs and Aspirations of a Posthumanist," 22.

<sup>&</sup>lt;sup>45</sup> Max More, "Transhumanism: Toward a Futurist Philosophy," Extropy, Summer Issu 6 (1990), 13.

<sup>&</sup>lt;sup>46</sup> Coleman, A Human Algorithm - How Artificial Intelligence is Redefining Who We Are, 118.

<sup>&</sup>lt;sup>47</sup> Braidotti, "Posthuman, All Too Human: The Memoirs and Aspirations of a Posthumanist," 8.

and morality, but also understanding the dynamic interactions between humans, technology, and nature in a broader context.

Posthumanist humanities education design encourages a transdisciplinary approach. 48 The transdisciplinary approach emphasizes the efforts of sciences to go beyond the classical boundaries of their disciplines to create innovations and new perspectives that integrate relevant disciplines. In the study of technology, for example, a transdisciplinary approach allows a philosopher to collaborate with information technology experts, biotechnologists, environmental experts, communication experts, and experts in other relevant fields. The collaboration results in new perspectives, methods, and approaches in the study of technology and its impact on human relations with non-humans. With this approach, students can understand the complexity of global problems that occur due to innovation and the use of modern technology. According to the authors, this opens a space for humanities education to not only try to convey traditional humanistic values, but also to provide cross-disciplinary critical learning. Thus, students become more critical and responsive to the global challenges posed by technological transformation.

In addition to encouraging a transdisciplinary approach, posthumanist humanities education must also encourage an interdisciplinary approach. The emphasis of the interdisciplinary approach is on the integration of two or more disciplines to produce a new framework for solving a problem. In the study of information technology, for example, an expert in information technology, an expert in communication, and an expert in the philosophy of human rights can work together to develop policies that consider human rights in the development of information and communication technology. These interdisciplinary experts attempt to combine research methods and theories from their respective fields to come up with an integrated solution.

In the context of education in Indonesia, the posthumanist approach is in line with the "Independent Curriculum" (Kurikulum Merdeka)<sup>49</sup> and "Independent Campus" (Kampus Merdeka)<sup>50</sup> policies that offer flexibility in learning. With an interdisciplinary approach, students have the freedom to choose subjects from various disciplines. This supports the development of technological literacy competencies, ecological awareness, and social understanding in a broader context, where humans and non-humans coexist. 51

Posthumanism also changes humanities education's perspective on the subject of knowledge. Anthropocentric humanities place humans as the sole subject who have the agency to produce knowledge. Only humans have the agency to produce knowledge because only humans have reason. This perspective is challenged in the era of posthumanism. Posthumanism expands the concept of subjects with agency to produce knowledge to include AI and other non-human entities. The goal of posthumanist humanities education in this context is to build critical awareness for students that cognitive abilities and agency are

<sup>&</sup>lt;sup>48</sup> Braidotti, "Posthuman, All Too Human: The Memoirs and Aspirations of a Posthumanist," 33.

<sup>&</sup>lt;sup>49</sup> Dinn Wahyudin et al., Kajian Akademik Kurikulum Merdeka, Kemendikbud (Jakarta: Center for Curriculum and Learning of the Education Standards, Curriculum and Assessment Agency of the Ministry of Education, Culture, Research and Technology, 2024).

<sup>&</sup>lt;sup>50</sup> Edy Cahyono et al., Buku Panduan Merdeka Belajar Kampus Merdeka, Direktorat Jenderal Pendidikan Tinggi, Riset, Dan Teknologi (Jakarta: Directorate of Learning and Student Affairs, Directorate General of Higher Education, Research and Technology, Ministry of Education, Culture, Research and Technology, 2024).

<sup>&</sup>lt;sup>51</sup> Cahyono et al., Buku Panduan Merdeka Belajar Kampus Merdeka, Direktorat Jenderal Pendidikan Tinggi, Riset, Dan Teknologi, 12.

no longer the exclusive property of humans. Those capabilities are also now possessed by intelligent machines. With this awareness, we are directed not to see AI as a frightening specter for the world of education. Instead, we are required to develop educational models that integrate AI into the learning system. This demand must be followed by efforts to develop guidelines for the use of AI in the learning system.

Based on the above explanation, in line with Andrew Feendberg's substantive perspective of technology, <sup>52</sup> the authors see that in the posthuman era, technology, including AI, is not just a *tool*, but part of the new educational environment. Technology not only needs to be integrated in teaching and learning activities, but also understood as an agent that can influence the dynamics of learning. Thus, students and educators are expected to make peace with technology and consider it as a partner in the learning process. However, the ethics of using technology, especially AI, still need to be formulated so that users do not become passive subjects who are enslaved by technology.

Overall, posthumanism leads us to see a new perspective of humanities education that places humans as part of a complex and interconnected world with non-human entities. Humans in this context are no longer subjects who are the center and measure of everything, but as one entity among other equal entities. This perspective shifts the perspective of the previous asymmetrical relationship pattern between humans and non-humans.

From a more analytical standpoint, the shift toward posthumanist humanities education represents not merely a curricular reform but an epistemological transformation. <sup>53</sup> It challenges the modernist separation between knowing subjects and the objects of knowledge, thereby reconfiguring how authority, agency, and meaning are produced in the classroom. Such transformation invites us to rethink pedagogy as a relational and co-evolutionary process where human and non-human actors co-constitute learning experiences. This reconceptualization disrupts the hierarchy between "teacher" and "machine," emphasizing instead the ethics of collaboration, adaptability, and co-agency.

Poshumanist humanities education can be envisioned as a model of *technomoral learning*, where digital technologies are not viewed solely as learning aids but as ethical companions in shaping students' critical consciousness. This approach opens new research directions: how AI may embody, extend, or even transform human moral reasoning. Integrating such a perspective could position Indonesian humanities education at the forefront of global debates on the ethical integration of intelligent systems in learning, marking a paradigmatic shift from *learning about technology* to *learning with technology*.

### **Moral Responsibility of Intelligent Machines**

One of the interesting questions that needs to be asked in the design of humanities education in the posthuman era is whether intelligent machines that have limited cognitive abilities can also be held morally accountable? This question is asked because posthumanism claims that intelligent machines can also think and act (make decisions) on their own. Our assumption is that any subject capable of thinking and acting can be held morally accountable.

<sup>&</sup>lt;sup>52</sup> Andrew Feenberg, *Transforming Technology* (New York: Oxford University Press, 2002), 7-8.

<sup>&</sup>lt;sup>53</sup> Braidotti, *The posthuman*, 49.

In the traditional perspective, moral responsibility is associated with the ability to make decisions based on awareness, ethical judgment, and consequences of actions. Therefore, actions that can be held morally responsible by the perpetrators are only *actus humanus*, not *actus hominis*. *Actus humanus* is an action based on the moral awareness of the perpetrator. Meanwhile, *actus hominis* is an instinctual and reflex action. If so, should AI, which is clearly not a human agent, be held morally accountable? Isn't AI just human-generated technology that operates based on algorithmic design?

Asking machines for moral accountability is, to the authors, naive. Despite having human-like cognitive capacities, AI is still a machine. Machines act without any moral intent. As such, machines cannot be held morally accountable in the same sense as humans. However, in the posthuman perspective, agency is not the exclusive property of humans. AI is considered to have limited agency because it can influence and even make decisions that have a significant impact on human lives. This limitation has sparked a polemic about the extent to which AI can be considered an entity with moral responsibility.

In the frame of posthumanist humanities education, moral responsibility may need to be understood as distributed. <sup>54</sup> AI is considered to be part of the ethical decision-making process, but the ultimate responsibility remains with the developers, users, and institutions that utilize AI in education. An intelligent machine may be able to help students and educators make more ethical decisions by providing information and analysis, but it has no human-like moral understanding. In this context, AI is only considered as a tool. Therefore, the design of posthumanist humanities education needs to emphasize students' and educators' understanding of the limits of AI agency and how to be morally responsible for the outcomes of AI use.

Humanities education in the posthuman era can be designed to provide ethical knowledge and moral understanding to every AI user, not to the machine itself. This needs to be emphasized so that AI users can understand their moral and social limits and responsibilities in using AI. In this context, humanities education is expected to produce a generation that is not only technology-oriented but also possesses moral responsibility for the development and use of technology.

Humanities education in the posthuman era is also inseparable from relevant curriculum design. The authors advocate the need for a specialized curriculum design on the ethical use of technology. Such curriculum allows students to learn about the ethical boundaries of using technology in general or AI in particular. The special curriculum design is also geared towards making students realize that the moral responsibility for using AI remains with humans, not with machines. In the long run, the curriculum design aims to support ethical or moral considerations in designing technology.

#### Conclusion

The rapid transformation of technology has led to a shift in philosophical paradigms. The anthropocentric paradigm inherited from Humanism-Renaissance and Enlightenment, for example, is now being displaced by the innovation of intelligent technology that has human-like capacities. The position of humans is decentralized. Humans who were once considered the center and measure of everything are now seen as equal to other entities, such as animals, plants, and technology or machines. On the other hand, the boundaries between humans and non-humans, such as machines, are now increasingly blurred. The ability

<sup>&</sup>lt;sup>54</sup> Rossi Braidotti, *Posthuman knowledge* (Cambridge: Polity Press, 2019), 39-41.

to think or the possession of intellect that has been claimed as a human privilege, for example, is now also possessed by intelligent machines or AI.

According to Rosi Braidotti, the decentering of the human subject and the dissolution of boundaries between humans, machines, and other non-human entities signify the emergence of a new epoch—the posthuman era. Braidotti conceives the posthuman as a convergent condition arising at the intersection of posthumanism and post-anthropocentrism. Posthumanism critiques the foundational ideals of Western humanism that position the human as a rational and universal measure of all things, whereas post-anthropocentrism is grounded in the rejection of species hierarchies and the privileging of the human over other forms of life.

This article has discussed the key theses of posthumanism. In addition, the implications of the idea of posthumanism for the design of humanities education have also been elaborated more comprehensively. One of the authors' conclusions is that humanities education in the posthuman era must be designed not only to focus on exploring human values such as rationality, empathy, creativity, and morality, but also to understand the dynamic interactions between humans, technology, and nature. The design of posthumanist humanities education needs to adopt both transdisciplinary and interdisciplinary approaches. In the Indonesian context, both approaches are in line with the "Independent Curriculum" and "Independent Campus" policies that offer flexibility in learning.

In the final section of the article, it is also emphasized that while intelligent technology, such as AI, has human-like cognitive capacities, it is still a machine. Machines operate without any moral intentions. As such, machines cannot be held morally accountable like humans. An intelligent machine may be able to help students and educators make more ethical decisions by providing information and analysis, but it has no human-like moral understanding. It is the developers and users of intelligent machines who should be held morally accountable.

This article recommends that humanities education needs to integrate ethical understanding and responsibility in the context of human-technology interaction. Humanities education curriculum design also needs to consider interdisciplinary and transdisciplinary approaches as an effort to provide solution tools for problems that could potentially arise in the posthuman era.

This study recommends the importance of conducting empirical research on the extent to which posthumanist ethics, such as equality between entities (human and non-human), can be integrated into humanities education. The authors also recommend research on how humanities curricula can integrate skills relevant to the posthuman era, such as digital skills, critical thinking about technology, and ethical awareness of AI and robotics.

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