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The Learner's Role as an Acting Person and Emerging Technologies

Grounding Educational Policy on the Use of AI

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Abstract

The approach to empower learners as the subject in the use of AI is in line with the United Nations Educational, Scientific and Cultural Organization (UNESCO)'s AI and Education Guidance for Policy-Makers and is pursued in recognition of the three paradigmatic shifts in the use of AI in educational setting. To strengthen the role of learners as leaders in the use of AI, this article uses the idea of the *acting person* from Karol Wojtyla. The concept of the *acting person* focuses on moral responsibility founded in human consciousness and conducted through human actions. The moral act of an *acting person* leads to responsible use that requires the commitment to the common good. In the first part, I will describe the history and development of AI technologies. In the second part, I will discuss the idea of the *acting person* and the AI as an acting machine. In the last part, I will present an analysis of the importance of grounding educational policy on the use of AI in learners' ethical role as the *acting person*.

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1. Introduction

Artificial Intelligence (AI) technologies have become a part of our daily lives in the twenty-first century. From self-driving cars to instant machine translation, from Google maps that can predict shorter routes to rideshare apps that compare prices, the spam filter on email, grammar-checking, plagiarism checking, bank deposit of checks through a smartphone, quick fraud prevention on online banking, social networking that highlights face recognition, easy online shopping that provides suggestions on what you should buy, voice-to-text technology, a smartwatch that reminds when to take a break, exercise, and calories intake tracking, a smart personal assistant – Alexa, Siri, echo, dot, and even chat Generative Pre-trained Transformers (GPT) that response to questions and able to produce written content using human-like language.

In a century that has already been shaped by AI, rapid advancements in AI are allowing it to act increasingly like humans. On the one hand, this vision and developing reality can be a boon in advancing the quality of teaching and learning in an educational setting because AI provides many benefits, including data processing, pattern discovery, and statistical reasoning. The use of AI in education can improve classroom management, enhance teaching, and advance the learning process. On the other hand, an unguided use and total dependence on AI in teaching and learning can destroy learners' ability to develop critical-creative thinking, independent thought, awareness of social relations, and moral consciousness to become an ethical person. The use of AI in educational settings must be grounded in acknowledging human beings as a person in their wholeness to support and not threaten the goal of education itself.

In order to make sure that the use of AI in educational settings can fully support the formation of a whole person (intellectually, spiritually, and ethically), many strategies have been developed, including promoting AI literacy and supporting AI research and development. Educational policy on the use of AI has been directed to focus on fostering the use of AI that is aligned with educational goals, promoting the ethical use of AI, building

learners' capacity in using AI, and supporting the development of AI in education pedagogy. The focus on the person as the main subject in education when it comes to the use of AI in educational settings has also been advocated by the United Nations Educational, Scientific and Cultural Organization (UNESCO) through their AI and Education Guidance for Policy-Makers with five main recommendations: First, assure comprehensive approach through interdisciplinary collaboration. Second, ethical use and unbiased access to AI should be ensured. Third, a strategy for using AI in educational management must be developed. Fourth, continued evaluation of the effectiveness of AI in the educational field. Fifth, local AI inventions suitable for the educational field should be cultivated. A thorough examination of these five ethical guiding points from UNESCO exceeds the scope of this article. Therefore, I will focus only on grounding educational policy on the use of AI in learners' ethical ability to make moral decisions as a person in order to strengthen UNESCO's second and third recommendations.

The use of AI in educational settings has been through three paradigmatic shifts: first, AI-directed and the learner as the recipient; second, AI-supported and the learner as a collaborator; and third, AI-empowered and the learner as a leader. In the first paradigm, learners play the passive role of accepting general information provided through AI in the process of gaining knowledge. The main problem with this approach is the need for learners to play an active role as the source of knowledge, which will lead to the possibility of the dominance of AI as the only source of knowledge. In the second paradigm, learners are starting to play a more active role as collaborators in using AI. However, the main problem with this approach is that the complex and dynamic human learning process receives limited attention because of the need to 'adjust' to AI-supported learning instruction. In the third paradigm, the learner is acknowledged as the main subject in the use of AI and, therefore, can personalize the use of AI to gain information in an educational setting. The power of this paradigm is the role of learners as agencies with a specific ethical role as the basis for the use of AI. In support of this paradigm, this article discussed learners' ethical role as the acting person as the foundation in all educational policies on the use of AI. The model of an AI-empowered learner as a leader may not be achieved if

the agency of a person as a whole does not receive enough attention in the discussion of educational policy on the use of AI. The need to empower AI must not be conducted without empowering humans as the subjects who use it. The use of AI in the educational setting is ethical when it puts humans at the center of learning and continued learning.

This article does not aim to provide practical guidance for policymakers in educational settings. Instead, it focuses on a person's moral foundation as the basis for developing educational policy for learners. Research on the moral grounds for using AI in educational settings does not receive adequate attention in the current literature because of the massive focus on practical guidance for using AI in the educational setting. Examining educational policy on the use of AI must include a discussion of a person's ability to act ethically. In agreement with this need, this article is systematized into three parts. In the first part, I describe the history and development of AI technologies. In the second part, I discuss the idea of the acting person and the learners' ethical role as the acting person. In the last part, I present an analysis of the importance of grounding educational policy on the use of AI in learners' ethical role as the acting person.

2. An Introduction to Artificial Intelligence (AI)

The term "artificial intelligence" (AI) originated in the 1950s. AI includes a vast array of scientific fields, such as mathematics, cognitive science, computer science, philosophy, and many other branches of knowledge. Hence, it is not easy to define AI because diverse scientific fields define AI variously. The American Association for Artificial Intelligence (AAAI) defines AI as "the scientific understanding of the mechanisms underlying thought and intelligent behavior and their embodiment in machine."[1] The Webster's Dictionary defines AI as "the capacity of computers or programs to operate in ways to mimic human thought processes, such as

[1] Raymond S. T. Lee. 2020. *Artificial Intelligence in Daily Life*, Berlin, Switzerland: Springer, 20.

reasoning and learning."[2] In addition, The Cambridge Handbook of Artificial Intelligence defines AI as "a cross-disciplinary approach to understanding, modeling, and replicating intelligence and cognitive processes by invoking various computational, mathematical, logical, mechanical, and even biological principles and devices."[3] The scholar Virginia Dignum wrote in *Responsible Artificial Intelligence* that AI consists of "artifacts that perceive the environment and take actions that maximize their chance of success at some goal."[4] AI is "a system that 'processes information in order to do something purposeful."[5] John McCarthy, Marvin L. Minsky, Nathaniel Rochester, and Claude E. Shannon define AI as "a computational artifact built through human intervention that thinks or acts like humans, or how we expect humans to think or act."[6] Based on these definitions, the general picture of AI technology is that it incorporates human-like intelligence by absorbing and incorporating information that allows it to react with a particular mode of action. The overall reality is that the potential of AI technologies is virtually limitless.

It is informative to look at the history of AI. There are several stages of development in the history of AI which includes its ups and downs. Starting from the Pre-AI stage (1943-1950) until the golden age of AI (1994-now).[7]

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[2] Mirriam-Webster Dictionary, Artificial Intelligence, https://www.merriam-webster.com/dictionary/artificial%20intelligence

[3] Keith Frankish and William M. Ramsey. 2014. "Introduction," in *The Cambridge Handbook of Artificial Intelligence*, ed. Keith Frankish and William M. Ramsey, Cambridge: Cambridge University Press, 1.

[4] Virginia Dignum. 2019. *Responsible Artificial Intelligence: How to Develop and Use AI in a Responsible Way,* in *Artificial Intelligence: Foundations, Theory, and Algorithms,* ed. Barry O'Sullivan and Michael Wooldridge, Switzerland: Springer, 11.

[5] Ibid., 11.

[6] John McCarthy, Marvin L. Minsky, Nathaniel Rochester, and Claude E. Shannon, A proposal for the Dartmouth Summer Research Project on Artificial Intelligence, August 31, 1955. AI Magazine 27, 4 (2006), 12–14 in Dignum, *Responsible Artificial Intelligence*, 9.

[7] Lee, Raymond S. T. 2020. *Artificial Intelligence in Daily Life*. Springer, 21.

During the Pre-AI stage, Alan Turing published "Computing Machinery and Intelligence" in *Mind*, where he discussed a test of a machine's ability to exhibit intelligent behavior equivalent to or indistinguishable from that of humans.[8] Meanwhile, several main events have marked the golden age of AI (1994-now). First was the birth of the Internet and the development of intelligent agents, a sub- period that began in 1994.[9] Then, second came the chess computer, IBM's Deep Blue, an intelligent agent that defeated the reigning world champion in 1997.[10] The third event was the wide use of smartphones worldwide that has pushed us towards the age of accessible AI applications. "When the smartphone rose in popularity in the early 2000s, web designers were faced with the obstacle of truncating their websites to fit onto a much smaller screen."[11] Today, a vast array of mobile apps can be accessed instantly to help people address multiple needs.[12]

In the present golden age, the fourth hallmark was the invention of AI through human- like technologies such as Sophia, the robot. Sophia is "a robot that has the unique ability to connect and communicate with humans" because it is "a cognitive robotics platform."[13] David Hanson elaborates on what Sophia does: ". . . it's a social robot that uses artificial intelligence to see people, understand conversations, and form relationships."[14] However, Ben Goertzel, the architect of Sophia's brain, states that "Sophia is more of a user-interface than a human being—meaning it can be programmed to run different code

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[8] Ibid., 22

[9] Ibid., 27

[10] Ibid., 27

[11] Nicolas Bayerque. 2018. "A Short History of Chatbots and Artificial Intelligence," in *The Reference Shelf: Artificial Intelligence,* ed. Micah Issitt, Ipswich, MA: H.W. Wilson, 38.

[12] Ibid., 39

[13] "Sophia," Hanson Robotics, accessed October 2020, https://www.hanson robotics.com/sophia-2020/

[14] Dave Gershgorn, "Hello, Sophia: Inside the Mechanical Brain of the World's First Robot Citizen," in *The Reference Shelf: Artificial Intelligence*, 41.

for different situations."[15] Sophia's contribution is significant because it was able to showcase different human-like components that work together.

These stages in the development of AI demonstrate that AI has evolved from the concept of a machine that exhibits intelligent behavior that is equivalent to or indistinguishable from that of humans to a robot that is not only shaped to resemble the human body but, most notably, is capable of human-like cognitive. From AI that can carry on specific tasks, based on separated algorithms created by humans, to "an image recognition algorithm [that] can detect a specific person's face, which can then cause another algorithm to pull up possible pre-written phrases."[16] The advancement of AI leads to questions about how machines learn and act and whether machines can have consciousness.

First is this question: How do machines learn? David Danks argues that "the value of machine learning is less in the output, and more in the way that the output can be used for future tasks: prediction, planning, classification, recognition, and so on."[17] "Machine-learning algorithms employ structural inference, and so if there are no patterns in the data, then there is nothing that can be inferred."[18] Accordingly, machine learning is roughly analogous to algorithm inputs and data provided. Machine learning relies on human work to specify and control the algorithm and provide the possible interpretation for the algorithm output.[19]

The second question is this: How do machines act? Generally, the AI process of making decisions about which actions to perform is made possible through the manipulation of the "Physical Symbol System Hypothesis."[20] "To get an

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[15] Ibid., 41

[16] Ibid., 42

[17] David Danks, "Learning," in *The Cambridge Handbook of Artificial Intelligence*, 157.

[18] Ibid., 157

[19] Ibid., 161

[20] Eduardo Alonso, "Actions and Agents," in *The Cambridge Handbook of Artificial Intelligence*, 232.

AI system to 'act' it is enough to give it a logical representation of a theory of action (how systems make decisions and act accordingly) and get it to do a bit of theorem proving."[21] The system will be given a description and a set of actions with a list of preconditions for the action to be executed.[22] In Sophia, actions can be described in three configurations: First is a "research platform."[23] Dave Gershgorn points out that Sophia can answer simple questions like "Who are you looking at?" or "Is the door open or shut?" But it does not have the ability to analyze and provide answers to more profound questions -- unless they have been added as pre-written responses.[24] Second is "a speech-reciting robot."[25] "Goertzel says that Sophia can be pre-loaded with text that it'll speak, and then use machine learning to match facial expressions and pauses to the text."[26] Last is "a robotic chatbot."[27] Sophia is equipped with the ability to run a dialogue system, "where it can look at people, listen to what they say, and choose a pre-written response based on what the person said, and other factors gathered from the internet."[28]

Third is this question: Can machines have consciousness? Discussion about machine consciousness started in the mid-1990s.[29] "Most proposals on consciousness in artificial agents are conceptual at present and provide a set of potentially implementable principles."[30] 'Conscious' Mattie was the first functional prototype of a software agent that can write seminar

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[21] Ibid., 232

[22] Ibid., 232

[23] Gershgorn, "Hello, Sophia," 42.

[24] Ibid., 42

[25] Ibid., 42

[26] Ibid., 42

[27] Ibid., 42

[28] Ibid., 42

[29] Matthias Scheutz. 2014. "Artificial Emotions and Machine Consciousness," in *The Cambridge Handbook of Artificial Intelligence*, ed. Keith Frankish and William M. Ramsey, Cambridge: Cambridge University Press, 258.

[30] Ibid., 260

announcements and communicate through emails with seminar organizers.[31] "A second prototype, IDA for 'Intelligent Distribution Agent,' was developed for the US Navy to facilitate the process of assigning sailors to new missions."[32] The third model is LIDA (Learning Intelligent Distribution Agent), "a complete cognitive architecture … which adds various types of learning to the previous architecture," and has been developed into several models.[33]

Briefly, AI technology advancement has gone through many phases and will continue to develop its quality. From the Turing test to Sophia the robot, AI technology development reached its most promising stage with the invention of the internet. The machine's capacity to operate in ways that imitate human learning and acting enters a promising phase with the invention of Sophia the robot, even though it is clear that Sophia does not yet represent the pinnacle of robot capabilities. AI, as a computational artifact, is a system invented by humans to mimic human thought processes and produce something purposeful. The development of AI technology leads to questions about how machines learn and act and whether machines can develop consciousness.

In the next part of this article, I will discuss how humans act, based on the work of Karol Wojtyla, The Acting Person, to show several characteristics that set human actions apart from machine actions and to present the ethical role of persons in using AI technology.

3. The *Acting Person* and the Acting Machine

The question of machine learning, acting, and consciousness is vital in philosophical studies of AI. What are the differences between human actions and machine actions? In this section, I will present Karol Wojtyla's investigation into person and act and relate it to the discussion of machine learning, acting, and consciousness.

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[31] Ibid., 261

[32] Ibid., 261

[33] Ibid., 261

Wojtyla begins his investigation in The Acting Person by observing the phenomenon of duality in human experience. He contends that the human experience is the most complex and valuable experience accessible to a person.[34] Wojtyla declares that every human experience is a "single event," which means that not only is each human experience exclusive, but also it is unrepeatable.[35] Wojtyla states that the human experience is the elementary part of human cognition[36] and includes both the intellectual and sensory aspects of the physical body.[37]

Wojtyla points out that in human experience, there are two ways of acting. The first is "the man acts," and the second is "something happens to the man." The first reveals man's personal experience, in which "I act." The second reveals that man is the recipient of an outside force --- "something that happens to me," which comes from outside of myself so that I may or may not be conscious of it.[38] These two forms of action show the classical distinction Aquinas made between *actus humanus* and *actus hominis*, between human action and an act of a human being.

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[34] Karol Wojtyla. 1979. *The Acting Person: A Contribution to Phenomenological Anthropology*, Analecta Husserliana, v. 10. Ed. Anna-Teresa Tymieniecka, trans. Andrzej Potocki, Dordrecht, Holland: D. Reidel Publishing Company, 3.

[35] Wojtyla, *The Acting Person*, 3; Karol Wojtyla. 1993. "The Personal Structure of Self-Determination," in *Person and Community: Selected Essays. Catholic Thought from Lublin Vol. 4*, trans. Theresa Sandok, OSM, ed. Andrew N. Woznicki, New York: Peter Lang, 189.

[36] In human experience, cognition "is realized not through the truth of its own act (percipi) but through the truth of a transcendent object – something that exists with a real and objective existence independently of the act of knowing". Karol Wojtyla, "The Problem of Experience in Ethics," in *Person and Community*, 116.

[37] Wojtyla, "The Personal Structure of Self-Determination," 188.

[38] Grzegorz Hołub, Tadeusz Biesaha, SDB, Jarosław Merecki, SDS, and Marek Kostur, 2019. *Karol Wojtyla: The Polish Christian Philosophy in the 20th Century*, ed. Grzegorz Hołub. Krakow: Ignatianum University Press Krakow, 347.

In human experience, a person as the subject and a concrete "I" both exist and act.[39] Wojtyla is convinced that "action reveals the person, and we look at the person through his action."[40] In fact, action provides "the best insight into the inherent essence of the person and allows us to understand the person most fully."[41] In order to analyze a person, one must start from the actions, argues Wojtyla.[42] In her actions, a person experiences herself both as the subject who is experiencing and as an object which is being experienced by the subject.[43]

Wojtyla identifies an element in the comprehensive experience of the human being that helps distinguish between I-act and something happens in me. He calls this element "self- determination."[44] In human experience, self-determination is associated with 'a sense of efficacy.' Wojtyla declares that, as a result, "'I act' means 'I am the efficient cause' of my action and of my self-actualization as a subject "when something merely 'happens' in me, for then I do not experience the efficacy of my personal self."[45] So Wojtyla concludes that "self- determination is a deeper and more basic dimension of the efficacy of the human self through which the acting human being is revealed as a personal subject."[46] "Efficacy indicates a relation between effect and cause—between the act formed and a person who performs the act."[47]

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[39] Jove Jim S. Aguas, "Karol Wojtyla: On Person and Subjectivity," Ad Veritatem 8 (2), October 2009: 436.

[40] Wojtyla, *The Acting Person*, 11.

[41] Ibid., 11

[42] Ibid., 12; Grzegorz Hołub argues that in *The Acting Person*, Wojtyla is not aiming to justify the claim that man is a person; instead, he wanted to show "how man experiences himself as a person." Hołub et all., *Karol Wojtyła*, 50-51.

[43] Karol Wojtyla, "The Person: Subject and Community," in *Person and Community*, 221.

[44] 46 Wojtyla, "The Personal Structure of Self-Determination," 189.

[45] Ibid., 189.

[46] Wojtyla, "The Person: Subject and Community," 229.

[47] Gerard Beigel. 1997. *Faith and Social Justice in the Teaching of Pope John Paul II*. American University Studies Series VII Theology and Religion Vol. 191, New York: Peter Lang Publishing Inc, 13.

But efficacy cannot represent the wholeness of personal subjectivity.[48] Still, efficacy in action corresponds to self-determination, because with it a person can take a deliberate action that involves self-determination.[49] To act is to realize "one's efficient causality,"[50] which includes one's ability to effect change.

Patrycja Maj and P. Popović states that self-determination manifests itself in the form of will.[51] It is the person who retains the will, and not the other way around.[52] In possessing the will, a person discovers "a fundamental orientation towards the inside, towards the subject."[53] Within self-determination, a person as a subject encounter herself (the subject) as an object.[54] Hence, a person becomes good or evil based on what she decides within herself. "Wojtyła stresses that this reality of the 'becoming' (in Latin: *fieri*) of the person" is the impact of self-determination.[55] Within the reality of 'becoming' in the human person a distinction can be made, says Wojtyla, between two ways of actualization, which are defined through the concepts of "doing" and "acting."[56] On the one hand, "doing" is closely related to the field of emotions, even though it is possible for a person to be aware of those emotions and guide them. Generally, when humans experience different feelings, this particular event is not accompanied by the experience of agency;

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[48] Wojtyla, "The Person: Subject and Community," 229.

[49] Beigel, *Faith and Social Justice*, 13.

[50] In Thomistic understanding, efficient causality is a factor that brings about any cause. It is present to the effect, but it is not part of the effect. The principle of causality is that it produces something similar to itself. *Omne agen sagit simile sibi*: every agent produces something similar to itself (but does so diversely).

[51] Petar Popović and Patrycja Maj, "The Personalistic Value of the Human Act in the Philosophy of Karol Wojtyła,"
Anthropotes 32/2 (2016): 371.

[52] Ibid., 372

[53] Ibid., 372

[54] Ibid., 372

[55] Ibid., 373

[56] Hołub et al., *Karol Wojtyła*, 56.

hence this experience falls into the realm of doing.[57] On the other hand, "acting" plays a vital role in human agency because self-determination is closely tied to the experience of agency.[58] A person must act to reveal the whole self; in a way, a person can be seen as the developer of herself.

In Wojtyla 's understanding, "the value of the act must be integrated within the personalistic level of the value of the act."[59] Hence when act is performed, a person actualizes and realizes her own self.[60] A person is responsible for the "realization of values which he recognizes to be good, but first of all among these values to be realized is the person himself."[61] A person creates herself through self-determination when she sees herself as the efficient cause of her own actions.[62] Self-determination reveals the characteristic of self-possession and self-governance in a person.[63]

Wojtyla affirms "that action as the moment of the special apprehension of the person always manifests itself through consciousness."[64] Consciousness constitutes a distinct aspect of human action.[65] Doran reminds us that the condition of consciousness does not belong only to persons.[66] Still, the consciousness that is proper to a person is not only complex but also revealed in action.[67] Hence, it is necessary to differentiate between "conscious acting and the consciousness of acting."[68] When a person carries out a conscious act, she is conscious that she is acting. A person does more than act consciously;

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[57] Ibid., 57

[58] Ibid., 56

[59] Popović and Maj, "The Personalistic Value," 367.

[60] Ibid., 367

[61] Kevin P. Doran. 1996. *Solidarity: A Synthesis of Personalism and Communalism in the Thought of Karol Wojtyla/Pope John Paul II*. New York: P. Lang, 136.

[62] Popović and Maj, "The Personalistic Value," 371.

[63] Ibid., 371

[64] Wojtyla, *The Acting Person*, 20

[65] Ibid., 30

[66] Doran, *Solidarity*, 125.

[67] Ibid., 124-126

[68] Wojtyla, *The Acting Person*, 28.

she is conscious that she is acting and that she is acting consciously.[69] The difference between "conscious" and "consciousness," is that "one is used attributively, when reference is made to conscious acting; the other is employed as a noun, which may be the subject, when the reference is to the consciousness of acting."[70]

In The Acting Person, Wojtyla also pay attention to the act of a person in participation together with others who are members of the community. In Wojtyla's examination, an act is understood as "a concrete form of access to a person and its structures, which reveal it as a value in the individual and community dimension."[71] In his discussion of participation, Wojtyla connects a person's action to her subjectivity. To be able to participate, a person, when acting together with others, retains her own personalistic value of her own actions while she simultaneously shares in the result of communal acting.[72] Participation enables a person to act together with others and, by doing so, reach her full meaning and potential as a person.[73] By stressing acting together with others, Wojtyla focuses on community membership, instead of associational relationships in society.[74] Participation in the community presupposes that each person is willingly involved in the shared action by living it out in each person's experiences.[75]

Participation intrinsically corresponds with both the person's integration and her transcendence, because when a person acts together with others, she finds

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[69] Deborah Savage, "The Centrality of Lived Experience in Wojtyla's Account of the Person," *Annals of Philosophy*, Vol. 61, No. 4 (2013): 33.

[70] Aguas, "Karol Wojtyla: On Person and Subjectivity," 446.

[71] Hołub et all., *Karol Wojtyła*, 111.

[72] Wojtyla, The Acting Person, 269.

[73] Ibid., 276

[74] Ibid., 278

[75] Nancy Mardas Billias and Agnes B. Curry. 2008. "Introduction," in *Karol Wojtyla's Philosophical Legacy. Cultural Heritage and Contemporary Change Series I*, Culture and Value Volume 3, ed. George F. McLean. Washington, DC: The Council for Research in Values and Philosophy, 4.

her own personalistic value and the fulfillment of this value.[76] However, participation cannot be understood simply as sharing or taking part in something. "Rather, participation is the kind of transcendence and integration that each of us displays in action with others."[77] In participation, a person transcends herself and bypasses her own self for the benefit of others. In participation, a person also integrates herself; she makes sense of what is shared and acts upon it.[78] A person participates when she not only transcends her actions but permits the others to provide a response.[79] "Participation fulfills a person's transcendence and integration by first identifying one's own choice through self-determination to act together with others."[80] This process is accompanied by "the actualization, fulfillment, and realization of the personalistic value of the action."[81]

Based on Wojtyla's presentation on a person and act, as stated above, there are clear difference between a machine and a person's actions. Several key elements in this distinction. First, there is the fact that a person's actions represent her cognition, and that includes both the intellectual and sensory aspects of the physical body. Hence, a person's act reveals insight into the inherent essence of the person. A machine's action offers no insight into the machine's inherent essence because a machine's act is a series of algorithms and operations. A machine action's is not a real act at all, but rather a reaction to something from outside it that happens to it, based on the inputs that were prepared by humans. I am not claiming that it is impossible for a machine to have cognition; rather, I am only pointing out the failure of current machine actions to rise to the level of a true person's acts. Second, in action a person experiences herself both as the subject who is experiencing and as an object experienced by the subject, that is herself. This process is possible only with

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[76] Wojtyla, The Acting Person, 270.

[77] Billias and Curry, "Introduction," 4.

[78] Ibid., 4

[79] Ibid., 4

[80] Andrè Ong. 2007. *The Ethics and Philosophical Anthropology of Karol Wojtyla*. PhD diss., Claremont Graduate University, 136.

[81] Ibid., 136

the existence of consciousness. When a person carries out a conscious act, she is conscious that she is acting, conscious of her act, and conscious of the others being affected by the act that she performed. A machine lacks these characteristics that will allow it to justify an act as its own act: a machine's act is grounded not in itself, but in the users' or the programmers' consciousness. A robot acts by processing data provided to achieve a specific goal, and the data and the processing method are programmed into it by someone outside of the robot.

Third, Wojtyla emphasizes the social aspect of a person's acts. In Wojtyla's thought, to be able to participate, a person, when acting together with others, retains her own personalistic value of her own actions while she simultaneously shares in the results of communal acting. Participation enables a person to act together with others and, by doing so, reach her full meaning and potential as a person. An AI technology capable of interacting with a human did not do so in order to find meaning and develop its full potential; it was done based only on meaningless performance and a series of symbols.

However, John R. Searle, in "Minds, Brains, and Programs," made several substantial claims in relation to a machine's ability to think and act like a human, in here I will mention two of them. First, he asked, can a man-made machine think? His answer is yes; for as long as one can reproduce an exact duplicate of the causes, one can duplicate the effects. Second, he asked, ". . . could something think, understand, and so on, solely by virtue of being a computer with the right sort of program? Could instantiating a program, the right program of course, by itself be a sufficient condition for understanding?"[82] To this question, his answer is no, "because the formal symbol manipulations by themselves don't have any intentionality. They are meaningless—they aren't even symbol manipulations, since the 'symbols'

[82] John R. Searle. 1997. "Minds, Brains, and Programs," in *Mind Design II: Philosophy, Psychology, and Artificial Intelligence*, ed. John Haugeland. Cambridge, MA: MIT, 199.

don't symbolize anything."[83] In addition, he explains why machines cannot have understanding: "in the linguistic jargon, they have only a syntax but no semantics. Such intentionality, as computers appear to have, is solely in the minds of those who program them and those who use them, those who send in the input and who interpret the output."[84]

In short, AI technology today still cannot be compared to human intelligence. "Human intelligence is multifaceted, containing cognitive, emotional and social aspects."[85] Thus, no advanced machine actions should be seen as equal to a person's actions. A person's act carries within it a moral obligation that comes with acknowledging human dignity.[86] In the next section, I will discuss an acting person's moral responsibility in the use of AI, especially in educational setting.

4. The Learner's Role as an Acting Person and Educational Policy on AI

Today, we use AI technology daily, so, as moral beings, we must pay attention to the ethics of AI. If persons are the ones responsible for using AI technology, then the ethical role of persons must receive more attention. Dignum argues that an urgency exists to discuss moral responsibility in the relationship between humans and AI technology. "Being fundamentally tools, AI systems are fully under the control and responsibility of their owners or users." Hence, users have a responsibility for the AI technology that they use. According to Wojtyla's *The Acting Person*, this moral responsibility is founded in human consciousness and conducted through human actions. The *actus humanus*, the human act, with the focus on the aspect of purpose and deliberateness, involves knowledge and will. This *actus humanus*, in Wojtyla, is a moral act. Further, in his analysis of *The Acting Person*, Tranzillo makes

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[83] Ibid., 199

[84] Ibid., 199

[85] Dignum, *Responsible Artificial Intelligence*, 10.

[86] Ibid., 90

it clear that Wojtyla focuses on "the primacy of the (human) person, as the subject, in relation to the concrete moral act, … the act itself reveals the concrete reality and inner structure of the personal subject who performs it." Tranzillo affirms Wojtyla's primary emphasis, which is that: "operari sequitur esse, action follows on being." A being must first exist to act. This action does not include all kinds of actions in human experiences. Only a conscious act of a person is considered as a real act in Wojtyla's moral sphere. A conscious act is an act that is characterized by the will. The most distinctive conscious act performed by a person is a moral act. The moral act of an acting person leads to responsible use. This responsibility includes the development of AI to work towards the common goal in the community. Dignum states that this kind of responsibility "requires the commitment of all stakeholders and the active inclusion of all of society." Wojtyla discussed this kind of responsibility at the end of The Acting Person, in his presentation of persons' participation in the common good.

In developing educational policy on the use of AI, learners' ethical role as the acting person must be seen as one of the main foundations. Based on Wojtyla's presentation, the acting person emphasizes that the learners' ethical role in using AI within an educational setting must be integrated within the personalistic level of the value of the act because when an act is performed, a person actualizes and realizes her own self, hence can become a whole person.

Several critical elements in grounding educational policy on the use of AI in learners' ethical role as the acting person include: First, emphasize the decision to use AI by learners as a well- informed and conscious action with awareness of its limitations and biases. Second, focus on learners' moral consciousness that will lead to the ethical and responsible use of AI. Third, highlight the social aspect of learners' acts when participating and acting together with others in using AI. Participation enables a person to act together with others and, by doing so, reach her full meaning and potential as a person; hence, educational policy on the use of AI must be able to provide a space for this need.

Human beings cannot afford to support AI technologies unquestioningly. Promoting awareness of AI technology and facilitating discussion of its effects is vital. Human beings must dedicate themselves to active engagement in shaping AI advancement if they do not want to let AI shape their future lives. It is also crucial to define the relationship between human beings and AI, so we must pay attention to the ethical development of AI technologies and the ethics of the people behind the machines. Today, AI is being used to make life easier and more productive, but can AI technology help humans create a morally better society and a better quality of education? Drawing on the history and development of AI technologies and the acting AI concept in comparison with the acting person, AI technologies must be developed ethically to build a future where human beings are not competing with machines. Within the educational setting, the use of AI must be grounded on the awareness of learners' ethical role as the acting person.

As the discussion of the advancement of AI technologies with their human-like characteristic has begun to intensify in the twenty-first century, the analysis in this article has shown that the ultimate aim of creating a human-like "acting machine", has not yet been realized. Based on my earlier explanation of Wojtyla's presentation on the person and act, it is clear that machines and persons' actions are fundamentally different. AI technologies cannot be compared to human intelligence. However, in our twenty-first century life, we have been using AI technologies on a daily basis, and we must pay attention to the ethical responsibility within this relationship. An acting person's moral act leads to the responsible use and development of AI in concert with the common goal in the community that supports and enhances human well-being in all settings, including in education. Dignum has clarified that "responsible Artificial Intelligence is about human responsibility for the development of intelligent systems along fundamental human principles and values to ensure human flourishing and well-being in a sustainable world." As learners who live in the age of advanced AI, we are all obligated to participate and act morally in our commitments and actions that support the use and implementation of AI technologies that respect human dignity and social interdependence.

5. Conclusion

The use of AI in educational settings must be grounded in acknowledging the learner as a whole person (intellectually, spiritually, and ethically). In order to make sure that the use of AI in educational settings can fully support the formation of a whole person, educational policy on the use of AI has been directed to be focused on fostering the use of AI aligned with educational goals, promoting the ethical use of AI, building learners' capacity in the use of AI, and supporting the development of AI in education pedagogy must always put the learner as the main subject. The focus on the person as the center of education when it comes to the use of AI in educational settings, as has been advocated by UNESCO, is supported through the grounding of educational policy on the use of AI in learners' ethical ability to make moral decisions.

As has been explored above, within the educational setting, the use of AI has been through three paradigmatic shifts: first, AI-directed and the learner as the recipient; second, AI- supported and the learner as a collaborator; and third, AI-empowered and learner as a leader. In support of the third paradigm, focusing on learners' ethical role as the acting person as the foundation in all educational policies on using AI has been proven to be vital. The model of an AI-empowered learner as a leader can only be achieved if the agency of a person as a whole receives enough attention in the formation of educational policy on the use of AI. A person as a subject must be the center of the use of AI in the educational setting.

By focusing on a person's moral act, as introduced by Karol Wojtyla in The Acting Person, the need to focus on learners as leaders in the use of AI has been proven to be crucial. Acknowledging the complex dimensions of human intelligence, including cognitive, emotional, and social aspects, must lead to the grounding of educational policy on human ability and personal knowledge. No advanced machine actions should be considered equal to a person's actions. Acknowledging a person's act that carries within it a moral obligation that comes with acknowledging human dignity must lead to

grounding educational policy on the use of AI that respects humanity and its uniqueness.

According to Wojtyla's *The Acting Person*, moral responsibility is founded in human consciousness and conducted through human actions. The *actus humanus*, the human act, with the focus on the aspect of purpose and deliberateness, involves knowledge and will. This *actus humanus*, in Wojtyla, is a moral act. In developing educational policy on the use of AI, learners' ethical role as the acting person must be seen as one of the main foundations. Based on Wojtyla's presentation, the acting person emphasizes that the learners' ethical role in using AI within an educational setting must be integrated within the personalistic level of the value of the act because when an act is performed, a person actualizes and realizes her own self, hence can become a whole person. Several key elements in grounding educational policy on the use of AI in learners' ethical role as the acting person include: First, emphasize the decision to use AI by learners as a well-informed and conscious action with awareness of its limitations and biases. Second, focus on learners' moral consciousness that will lead to the ethical and responsible use of AI. Third, highlight the social aspect of learners' acts when participating and acting together with others in the use of AI. Participation enables a person to act together with others and, by doing so, reach her full meaning and potential as a person; hence, educational policy on the use of AI must be able to provide a space for this need.

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