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ARTIFICIAL INTELLIGENCE AND THE NEED FOR HUMAN RELATIONSHIPS

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Abstract: The new virtual contexts and Generative Artificial Intelligence (GAI) are reshaping various aspects of individual life, and in particular, human relationships. AI holds diverse potentialities, such as facilitating communication and linguistic comprehension, especially in multicultural environments, offering emotional support and companionship through responses that emulate human empathy. While artificial intelligence promises to foster human relationships, ethical and educational concerns arise regarding critical issues. If, on the one hand, AI promises to promote human relationships, on the other hand, from an ethical and educational point of view, concerns arise regarding some critical issues: the responsibility of those who program "intelligent" machines, the guarantee of the privacy of sensitive data, the risks that may arise from the use of new chatbots, new addictions, etc. One of the primary existential and educational concerns revolves around the possibility that individuals may increasingly prefer interactions with machines over human relationships. From an educational perspective, it is essential to have coherent adults capable of guiding younger generations axiologically, ensuring that technological processes are always aimed at the global development of the person and human dignity.

Keywords: Artificial Intelligence; Relationship; Ethics; Education.

1. Introduction

The emergence of new virtual environments and augmented reality utilizing AI is profoundly reshaping educational environments, as well as personal, familial, and social settings. Internet platforms, social media, and novel experiences within intelligent virtual worlds are being perceived by younger generations as immersive and interactive encounters that profoundly influence all aspects of an individual's life and personality (Romano, 2021). Particularly, AI is transforming the ways of thinking, learning, acquiring information, working, engaging with the world, and notably, initiating, maintaining, and concluding human relationships. We are facing an ecosystem of networks that presents both unprecedented educational and relational opportunities and new risks, affecting both youths and adults alike (cf. Russel & Norvig, 2022).

2. The Potential of Artificial Intelligence for Enhancing Human Relationships

A subset of AI encompasses Generative Artificial Intelligence (GAI) utilizes complex algorithms to generate images, videos, new art pieces, human facial images, original photographs, as well as texts, articles, and soon, emails. It can also find applications in domains of design, fashion, and music.

Within the realm of relationships and education, one of the most innovative aspects of Generative AI lies in its potential to facilitate human interactions, promoting communication, linguistic understanding, and social interactions (Panciroli et al., 2022). AI can be used to transcend spatial barriers and to bridge geographical distances, break down linguistic obstacles, and personalize communication. Moreover, AI-driven language translation services have filled linguistic gaps, fostering understanding and empathy among diverse cultures. By facilitating seamless communication, AI amplifies connections and establishes bonds among people.

Moreover, AI-based virtual assistants can also create virtual characters or digital companions providing emotional support and companionship, or interacting with users to alleviate loneliness and offer a sense of closeness. Virtual assistants with emotional intelligence capabilities promise empathetic responses and try to offer support also in managing stress, anxiety, or depression. Furthermore, there are chatbots capable of providing advice on conflict resolution or enhancing communication based on the analysis of past behaviors and interactions.

In the educational domain, neural networks can provide support in comprehension and learning, offering personalized educational resources and suggestions for both students and teachers. They can also be employed to promote collaboration, facilitating breakthrough projects, brainstorming sessions and knowledge sharing (Milani, 2023; Susanto et al., 2023). At a metacognitive level, AI also stimulates the crucial ability to formulate precise questions to obtain accurate answers aligned with one's expectations. In fact, if the question is poorly formulated, the AI will generate a less relevant or insufficient response (Panciroli & Rivoltella, 2023).

AI has the capability to analyze the content, context, and tone of conversations to offer support in understanding emotions and emotional nuances. Even more sophisticated systems can analyze facial expressions (gaze, mouth movements, eyebrows, forehead, etc.) and modify both individual scenes and story endings based on the viewer's emotional response.

It is obvious that AI offers numerous potential applications, many of which are yet unexplored, especially within educational settings.

3. The Evolving Landscape of AI and Human Relationships: Navigating the Ethical Crossroads

Despite the promising prospects, challenges and ethical considerations accompany the integration of AI in human relationships. Privacy concerns, algorithmic biases, and the risk of over-reliance on AI for emotional support are critical issues demanding attention. Balancing technological advancement with ethical considerations remains imperative to ensure that AI supplements rather than supplants human relationships (Pasca & Arcese, 2024).

AI, and particularly Chat-GPT, can perform operations that researchers did not expect it to be able to perform. In Chat-GPT4, a new capability emerges, notably the ability to exhibit more "agentive" behavior. In the OpenAI document that introduces GPT4, it is stated: "By 'agentive' in this context, we do not mean the humanization of language models or reference to sentience, but rather systems characterized by the ability to achieve goals that may not have been concretely specified and did not appear in training." (Benanti, 2023; cf. also Baker, 2023). Referring to the cited source in the footnotes, it clearly states: "We use the term 'agentivity' to emphasize the increasingly apparent fact that ML [Machine Learning] systems are not entirely under human control"[1] (Benanti, 2023; cf. also D'Oria, 2023; Durt et al., 2023).

As AI continues to permeate our lives, its impact on human relationships is becoming increasingly profound. While AI holds the potential to enhance communication, collaboration, and companionship, it also brings forth a spectrum of risks and raises significant ethical concerns that demand careful consideration. Now we will delve into the potential risks of AI in human relationships and explore strategies for navigating these ethical and educational complexities.

Specifically, one of the primary risks associated with AI involves the possibility of people replacing human interactions with man-machine interactions. Especially during preadolescence and adolescence, continuous and indiscriminate use of "intelligent" machines might lead individuals to reduce the quality and quantity of interpersonal relationships, potentially excluding connections with other human beings, as seen in cases of social withdrawal (Hikikomori) (Lancini 2019; Coeli et al., 2023). Similarly, it is increasingly common for individuals to prioritize or favor objects, technologies, or virtual animals over human beings.

In 2007, a book was published, still disconcerting today but likely less so tomorrow, titled *Love and Sex with Robots* by David L. Levy (2007). The book hypothesizes that within a few years, humans will be able to have pleasurable intimate relationships, including sexual encounters and even marriages, with robots that will become indistinguishable from humans. The author suggests that the reasons why a human falls in love with another human or forms emotional connections with pets may also apply to romantic and intimate relationships between humans and robots. Additionally, robots will be programmed to be very adept lovers and excellent teachers that can help improve one's sexual performance to the extent that these ar-

[1] As highlighted by the engineers who developed GPT4, this implies that the system might possess its "internal agenda and may act to acquire resources and means to achieve it." (Benanti, 2023).

tificial partners will be used as sexual therapists—both to instruct on sexual behavior and reduce failures in love, as well as to address the rampant social phenomena of pornography and pedophilia by treating those individuals who are treatable or, in cases of incurability, by providing the sexual gratification some individuals seek in children (Sherman, 2023; Droyd, 2021; Zhou & Fisher, 2019)[2] . Sexual interactions with robots will also be used for people with disabilities and the elderly, as noted by some authors from the University of the Netherlands and Australia (Fosch-Villaronga & Poulsen, 2020).

David Levy justifies his reasoning by asserting that if being with a robot makes one feel better, then it is legitimate to do so. However, feeling good cannot be the measure of all things; feeling good for the wrong reasons is possible. Indeed, not everything that provides pleasure is good, just as not everything causing pain is bad (Brandtzaeg et al., 2023; Symons & Abumusab, 2024).

Consequently, one of the most pressing concerns surrounding AI in human relationships is the potential erosion of empathy. Reliance on AI for emotional support and companionship may diminish the value of human interactions. As individuals become more accustomed to interacting with AI-powered "companions", they may become less inclined to engage in empathetic exchanges with others, potentially hindering the development of authentic human relationships. Furthermore, over-reliance on AI for decision-making and problem solving could potentially weaken individuals' self-reliance and critical thinking abilities.

Today, the danger of AI no longer solely lies in its usage, as certain processes no longer depend on human volition, but rather on those programming the intelligent machines and algorithms that can escape the control of the programmers themselves (cf. Benasayag, 2019; Benanti, 2018). For instance, it is plausible to fall victim to sextortion (sexual blackmail) even without having taken or published nude photos (consider the Deep Nude bot—a form of AI software manipulating regularly clothed female photos into naked images. It is noteworthy that the inventor programmed the software to exclusively target women).

In fact, the proliferation of AI introduces significant concerns regarding user privacy and data security. Artificial intelligence systems rely heavily on data accumulation and analysis, often involving the processing of sensitive personal information. Inadequate safeguards or improper use of data could lead to privacy violations, resulting in unauthorized access, manipulation or exploitation of data, consequently jeopardizing individuals' trust in digital interactions and platforms.

This opens another spectrum of issues related to biases created and reinforced by algorithms. AI systems, if trained on biased datasets or programmed without adequate ethical guidelines, risk perpetuating and amplifying social biases (cf. Bottà 2020; Brandtzaeg et al., 2023). Inherent biases in training data can lead to discriminatory outcomes, exacerbating social inequalities and marginalizing certain groups based on ethnicity, gender, or socioeconomic status. The perpetuation of such prejudices could hinder the inclusiveness and equality necessary for healthy human relationships.

[2] There is now a substantial international literature on the topic of love and sex with robots. See, among others, the Proceedings of the International Conferences organized by the Love and Sex with Robots (LSR) Research Group, which have been published from 2014 to the present (https://www.lovewithrobots.com/).

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It is fundamental to highlight how AI's autonomy raises ethical dilemmas, particularly in decision-making scenarios where AI algorithms operate autonomously. Determining liability and accountability in case of errors or harmful outcomes becomes truly complicated when AI systems operate independently, potentially leading to moral quandaries and legal uncertainties that could strain human relationships and trust in AI systems (cf. Floridi, 2022).

4. The Importance of the Presence of Significant and Competent Adults

Although AI and robots can simulate human behaviors and appropriate emotional responses, humans are always the ones programming the machines, and machines can never be "human." (Weil, 2023; Chamorro-Premuzic, 2023). This implies that a machine can never be "intelligent" and will never be capable of emotional understanding and empathy; rather, it can only be programmed and trained to mirror human emotional states. Especially in younger individuals and the most vulnerable, forms of dependence on AI systems might arise, which never disappoint, hurt, become angry, abandon, or betray.

Interactions with AI devices, if they become the sole means of interaction with the world, can significantly reduce the capacity to accept diversity, rejection, and failure. This evidence is supported by the increasing number of reports in the media concerning violent actions by individuals or groups bullying weaker persons, or men assaulting, disfiguring, and even killing their (former) partners.

Today's youth lack the tools to process defeat and rejection and prefer to rely on AI and robots that please, do not contradict, and do not reject. We are moving toward a human dimension fearful of disappointment and humiliation, intolerant of frustrations and difficulties, and therefore choosing machines or robots over other human beings (Armostrong et al., 2023).

However, it is necessary to educate younger generations on the significance that defeat or rejection might have at a particular moment in their lives and how to face and experience them without compromising one's dignity or honor. Provided that significant adult figures are present to help young people find meaning in defeat and suffering, becoming witnesses to consistent relationships in which adolescents can find containment for their disorientation and ethical guidance.

Indeed, an individual grows only if an experience or learning is shared with someone who helps find meaning in what is learned and who can mediate between the subject and the machine. An educational relationship will exponentially accelerate the processes of activating all forms of intelligence and cognitive-affective interconnections, akin to genuine personal insights. An educational relationship that functions effectively is one that manages to both engage the learner in constructing knowledge and initiate within them a process of discernment, interpretation, and attributing meaning and significance, enabling them to comprehend what is beneficial to learn and what is best to discard (Romano, 2022).

However, we are well aware that Artificial Intelligence is emerging as a fundamental force that also shapes modern educational paradigms. Its potential spans various educational dimensions, offering new possibilities to enhance learning and student engagement. Nevertheless, its integration into educational contexts requires competent adults and careful considerations to harness its benefits while mitigating the potential risks outlined above.

5. The Unrelenting Need for Relationships

This discourse leads us to make a consideration that obviously doesn't dismiss, but includes the new forms of AI, both in educational settings and in personal life. Faced with numerous educational emergencies related to internet/smartphone dependencies and ethical concerns regarding AI, chatbots, etc., pedagogists are required to intervene and provide appropriate responses. It is necessary to address the problem differently, gestaltically reflecting not only on the figure—the emergency, the problem—but primarily on the background of the problem, which inverts the perspective.

Educators must ponder whether the extensive use of platforms employing AI is the actual cause, or rather a crucial indicator of deeper discomfort among young people—an alarm signal about the fragility of relationships and the difficulty in structuring meaningful ones (Romano, 2018). What parents and teachers mainly lament—the constant online presence, continuous use of social media, and games implemented by various AI forms—is cited as the cause for deteriorating family and school relationships. Or might it signify an unease indicating that relationships within these age-old institutions are no longer satisfactory? Moreover, this is a sign that underlines how the methods of schooling no longer meet the needs of the youth and society in which they live, and of the hyper-technologized working world where they will be required to function and meet its challenges.

The preference and the amount of time young people spend in front of a PC or smartphone serve as an indicative signal of their need for relationships (cf. Armostrong et al., 2023). Despite increased accessibility and growing use of intelligent networks and devices, this underlying need has visibly intensified. The modes of request have changed, undoubtedly more transgressive and showcased, but the underscoring need that requires to be addressed remains the plea for more consistent and meaningful relationships with adults who accompany them, showing interest in their new ways of relating, entertaining, and problem-solving.

How can one not comprehend that the distress of young people is a clear reflection of the distress of adults and, more generally, of the evils and certain horrors still present in the world? What testimony of coherence and maturity are adults providing to the youth today? The real problem is lurking in the background without being seriously addressed—namely, within the complicated context of family and school relationships that struggle to function properly or function poorly today (Sirna, 2008).

When the web and the relationships that young people build in the digital world become a "substitute" for something they need but cannot find, it implies that the important educational figures have not measured up to their expectations. Thus, the network with its algorithms becomes the means through which young people demonstrate their strength and power, but also express their difficulties, disappointments, and aspirations. The content posted on social media becomes a performative expression of distress that they cannot express to their parents or teachers (Romano, 2022).

Therefore, the question is inverted: Is the adult world prepared to address issues related to the digital lives of young people? Often, adults are hindered by feeling less competent than their children in technical aspects and cannot provide the necessary and appropriate support for the growth phases and level of expertise. However, it would be highly enriching if adolescents and adults began to perceive each other mutually as a resource.

Understanding adolescents can no longer rely on outdated interpretative retro-topical categories (Bauman 2017; Rivoltella, 2020); instead, educators, parents, and teachers must learn and open themselves to listening to the deeper needs of young people, taking an interest in their real problems, paying attention to what they love or hate. Awareness of dynamics and processes linked to the virtual experience will help adults understand the new languages of the youth, provoke their reflections, and propose critical perspectives in modes that are "desirable" for them.

6. Conclusion

Current and future technological societies can be very enticing and even risk becoming anesthetizing if they do not help men and women improve human relationships and build meaningful projects. AI becomes an important hermeneutic key to understanding how society is transforming, the challenges faced by men and women of our time, especially the youth—what has become important to them, what is missing, their concerns, complaints, likes, and amusements. However, in a (not too distant) dystopian future, if AI were to replace interaction between human beings, what guidance can pedagogy offer to the programmers of intelligent machines?

This is why education today must primarily aim to better and more profoundly understand the changes occurring within societies and, particularly, within new and diverse family realities, educational agencies, and the individuals themselves. Indeed, behind the requests of young people, there is always an appeal to be heard, within technological methods there is their attempt to solve problems—a need that is unexpressed or distorted by the fear of something they cannot voice.

To mitigate the risks of technological usage that does not highlight what is fundamentally essential, it is crucial to both stand by young people in their journey of constructing meaning in the world and to develop and use AI ethically. This involves making the criteria applied to algorithms transparent, protecting users' sensitive information (collection, processing, and utilization of personal data), and ensuring that AI is designed to enhance and facilitate human relationships rather than substitute or compromise them (cf. Tegmark, 2018).

In conclusion, Artificial Intelligence possesses immense potential to enrich and fortify human relationships. By augmenting communication, providing personalized interactions, and offering emotional support, AI contributes significantly to fostering meaningful connections. However, caution and ethical considerations are vital to harness AI's potential responsibly, ensuring that it complements and enhances human relationships without compromising their authenticity and depth.

This essay constitutes an exploration of AI's potential in fostering deeper human relationships, provided that it significantly underscores ethical issues concerning the importance of human dignity. Pope Francis, addressing participants in the "Minerva Dialogues" stated:

> I encourage you, in your deliberations, to make the intrinsic dignity of every man and every woman the key criterion in evaluating emerging technologies; these will prove ethically sound to the extent that they help respect that dignity and increase its expression at every level of human life. […]. The concept of human dignity […] requires us to recognize and respect the fact that a person's fundamental value cannot be measured by data alone. [...] We cannot allow algorithms to limit or condition respect for human dignity, or to

> exclude compassion, […] and, above all, the hope that people are able to change (Francesco, 2023).

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