Reverting to the Oracle. Anthropological, Ethical, and Pedagogical Questions about Artificial Intelligence

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Abstract: Taking into account the significance of the Artificial Intelligence phenomenon in many fields of human experience, a reflective approach is needed. In order to overcome preconceived representations and polarized opinions, it is necessary to examine the issues by going back to its roots. Starting from the exploring standpoint of the Special Pedagogy, perusing the Artificial Intelligence argument lets arise queries that have an ethical, anthropological, and pedagogical significance. Framed in the main field of the relationship between education and AI, the problem seems to enable some didactical issues, especially referring the learning process. Can this approach make us more aware of this phenomenon? What professionalism is required to meet the challenge of a coherent and mature understanding of human-environment interaction in educational processes managed with the aid of Artificial Intelligence?

Keywords: Artificial Intelligence; Special Pedagogy; Special Didactics; Ethics.

Abstract: La significatività del fenomeno dell'Intelligenza Artificiale nei molteplici campi dell'esperienza umana richiede un approccio riflessivo. Per superare rappresentazioni preconcette e opinioni polarizzate, è necessario analizzare la problematica partendo dalle sue radici. A partire dall'approccio critico-riflessivo della Pedagogia Speciale, un'attenta analisi del fenomeno lascia emergere domande che hanno un senso etico, antropologico e pedagogico. Nell'ambito della relazione tra l'educazione e l'Intelligenza Artificiale, tali questioni sembrano elicitare una problematica di carattere didattico, specialmente se riferita ai processi di apprendimento. Il contributo propone una riflessione tesa a comprendere in che termini si possa acquisire maggior consapevolezza rispetto al fenomeno e quale tipo di professionalità sia richiesta per far fronte alle sfide poste in campo educativo e acquisire una matura comprensione delle interazioni che l'uomo sviluppa con il proprio ambiente nel campo dei processi educativi supportati dall'Intelligenza Artificiale.

Keywords: Intelligenza Artificiale; Pedagogia Speciale; Didattica Speciale; Etica.

1. Artificial Intelligence: the field of a free and deep investigation

The opportunity to shed light on such a complex topic as the relevance of Artificial Intelligence on education represents a valuable chance to better understand how human interaction spreads ubiquitously, across the manyfold faces of interactive

experience, and how much presence there is in the distance of virtualized mechanisms of digital exploration. For that reason, in order to supersede some old-fashioned representations and oracle mechanisms of the phenomenon, it seems to be of some importance to undertake a paradigmatic reflection on the problem, reaching the roots of the questions.

In this sense, even if the Artificial Intelligence oracular representation must be surpassed, a reference to the Oracle in the argumentation is not to be avoided. In fact, reverting to the Oracle appears to be the way phenomena have to be explored, by freely and deeply questioning the facts and dynamics.

The intellectual attitude of Special Pedagogy, which indeed has articulated its epistemology as science of problematization, seems to be the most effective attitude to ask questions. Rather than as a well-define discipline, the Italian tradition of «research science» (Canevaro, 1999, p. 3, auth. trans.) has posed itself as crossing science, able to dialogue with other disciplines and approaches, and creating epistemological ruptures (Goussot, 2013). Considering this fundamental characteristic, every inquiry undertaken in the field of Special Pedagogy must be conceived as an action guided by a pedagogical passion and driven by a strong ethical tension (Murdaca, 2024).

In fearlessly framing the main field of the relationship between education and AI, the questions that arise are ethical, anthropological, as well as pedagogical. The aim of this reflection is to verify how these outcomes can allow a didactical problematization, urging for an increasingly reflective understanding of the human-environment interaction, in which "virtualization", "encoding", and defragmentation" can be conceived as the formal aspects of learning processes. Furthermore, how to define the professionalism and the professional identity required to meet the challenge of conducting an educational process supported with the aid of Artificial Intelligence?

2. Going beyond the oracle or starting from it?

The title chosen for the 2023's annual meeting of the project "*Ubiquità, Presenza, Distanza*" – Beyond the Oracle: Artificial Intelligence and Educational Processes – invites to deeply engage in reflection about how to overcome an oracular representation of Artificial Intelligence. As in Roncaglia (2023), the Old-Fashioned Artificial Intelligence, based on an architectural well-structured and formal organisation of knowledge, has been recently and largely replaced by a generative model of outputs management. The old instruments, as digital and web encyclopaedias, were characterized by a clear and transparent base of data, while the new "black box" appears to be increasingly organic, sustained by a vast neural network able to accomplish a deep learning system, but at the same time with a poor aptitude for a constant control. Considering the wide availability of processing capacity and data, which are continuously and broadly connected, the Artificial Intelligence could be conceived as a connectionist mechanism of elements with a large base of statistical correlation, rather than the fruit of a logical deduction (Floridi, 2022). As the number of electronic devices increases and the connection among those tools become closer, in a non-human-driven sharing activity, the way big data set are formed and fed will be steered towards acquiring an autonomy capacity to "learn" or combine data in a statistically significant way. Such a process is obviously enhanced by techniques of supervised and reinforced learning based on a quantitative semantic, able to train the intelligence to act as it where "intelligent" (Floridi, 2022; Roncaglia, 2023; Rossi, 2019).

The outline of a computational capability animated by statistical prevision grounded on big linguistic models shows how far the general community of ordinary users is from grasping a clear control over that knowledge management mechanism. In this sense a process of overcoming that oracular dimension in Artificial Intelligence has to be promoted, ensuring conditions of autonomous enjoyment for each one in different contexts.

Trying to meet such a challenge, gazing reflectively with the aforementioned approach of Special Pedagogy, one might return to the oracle rather than overcome it. Following the metaphoric redline that tie the oracular feature of Artificial Intelligence to the well-known episode of the Greek philosophy, it could be intriguing to recall that time when Chaerephon, as vehement Socrates' friend, «went to Delphi and dared to consult the oracle […] and he asked whether there was anyone wiser than I. The Pythia replied that no one was wiser» (Apology of Socrates, [21a]).

The philosopher's first reaction could be depicted as follows.

«When I heard these things, I pondered them like this: "What ever is the god saying, and what riddle is he posing? For I am conscious that I am not at all wise, either much or little. So what ever is he saying when he claims that I am wisest? Surely he is not saying something false, at least; for that is not sanctioned for him"» (Apology of Socrates, [21b]).

The main attitude that drives the philosopher is associated with the act of asking itself what it means to be considered as the wisest. The answer to the god's sentence is, therefore, firmly related to asking himself questions. This kind of action is a matter of gaining a superior self-knowledge. Socrates is oriented by the god's response to reason deeply about himself, considering his wisdom only in perceiving himself as unworthy of that appellation. From that point he is able to declare that the Pythia has made use of his name «in order to make me a pattern, as if he would say, "That one of you, o human beings, is wisest, who, like Socrates, become cognizant that in truth he is worth noting with respect to wisdom"» (Apology of Socrates, [23b]).

Fundamentally, these questions lead the wise man to reason about the human demanding behaviour, which and cannot be satisfied by mere information about phenomena, such as they are. Moreover, posing the question as an act of personal research practice justifies the epistemological condition of the knowledge. As required by the Delphic precept in Protagoras, «γνῶθι σαυτόν» [343b] "Know yourself" is the way to reach an essential posture of «*docta ignorantia*, which grounds the vital possibility to "do experiences" and become an "expert" on oneself and the world» (Filippi, 2002, p. 289). Likewise, Gadamer (1960) reminds that the construction of knowledge is given and based in the act of interrogating. Starting from the logical structure of openness as the hermeneutical form of knowing, «the frame of questioning is evidently presupposed in every experience and in the condition itself of doing experiences» (Gadamer, 1960, p. 418, auth. trans.).

For this reason, such an eminent warning must be taken into great consideration, initiating a profound itinerary of questions. What does human intelligence consist of? What does *tout court* human experience consist of? Are human beings considered intelligent because of their ability to solve problems or their tendency to ask questions?

3. Artificial Intelligence: anthropological, ethical, and pedagogical topics

Considering the extend of such preeminent interrogatives, the research about Artificial Intelligence cannot be narrowed within the area of practices and techniques

aimed at implementing digital and technological performances. It is rather important to bring to the fore the problem of the conditions under which human community wants to integrate Artificial Intelligence into everyday life. Furthermore, it must be carefully considered what transformations are the societies disposed, able, prepared, and willing to imagine and sustain (Rossi, 2019).

Every time a question is posed about the role and the space to be authorized for Artificial Intelligence – following the oracle's suggestion as in Protagoras – an essentially intellectual query about the meaning of human experience arises. Not only from a cognitive and epistemological standpoint, as a in search of a technical knowledge, rather from an anthropological, ethical, and pedagogical perspective.

Recalling the granularity of datasets that sustain the Artificial Intelligence activity – the more information there is, the more nuclear it is – a remarkable issue on complexity arises. Is such a grainy composition of information a true expression of complexity or a complicated fragment's connection? Is this remodelling of knowledge management affecting the general sensibility to grasp complexity? Has human interaction gained a real attitude and attention towards the complex expression of the phenomena of life experience? Is the summarized availability of data promised by the development of Artificial Intelligence really a condition of accessibility or a misrepresenting simplification?

Considering the most recurring worries of de-humanisation resulting from an uncontrolled implementation of Artificial Intelligence in common day life experience (Federspiel et al., 2023; Oldfield, 2023), seems to be inevitable to ask what defines the human being and how clearly human community claims to set a ruling criterion for that. How controversial could be to outline a normalized idea of human being, failing to recognise diversity in its manifold expression? How much de-humanizing can be produced by the risky market exploitation of Artificial Intelligence with the view to developing a control power over individuals? At the same time, it is necessary to reflect how unfair a process of technological development that would not be able to include everyone could be.

In spite the growing fascination exert by such topics, some of the occurring questions appear unjustifiable and unacceptable, especially those that seem to investigate the reflective nature of phenomena. From an ethical point of view is noteworthy to focus the attention on public debate about Artificial Intelligence, where discussion on innovation is not merely limited to objects, but rather affects attitudes and values related to human development and emancipation, sometimes tragically diminished in unproductive dichotomies and opposition. In this sense, exposing the different perspectives of enthusiasm and fearfulness to a sterile divergence and polarity gives way to an unfair and corporate hierarchy among supporters and detractors. In this case, the opportunity to properly understand and interpret the broad meaning of the concept of innovation for the improvement of society would be missed.

The cluster of interrogatives collected so far allows to define the wide range of challenges that characterise the relevance of Artificial Intelligence in the field of education. Furthermore, from the pedagogical point of view arise several and intrinsic issues, particularly when it comes to intelligence. Although it has become clear how manifold and fluctuating is the expression of intelligence (Gardner, 1983), the linguistic feature seems to remain the most prominent, as if it were the only one recognised by the main culture. In what sense should this technological phenomenon be understood as an expression of intelligence? Is the way in which that digital interac-

tion is depicted still adequate? As already explained, the management of knowledge within the Artificial Intelligence is delegated to a process of statistical correlation, which implies a separation between an intelligent task and the process of its fulfilment (Floridi, 2022). If the knowledge treatment among users were diminish to a statistical computation of existing data, would not the possibility to inaugurate new "epistemic ruptures" be lost?

Could the set of this questions introduce an essentially didactical query about the sense in which education has to deal with the challenges posed by Artificial Intelligence?

4. Turn topics into didactical questions – turn didactics into questioning

As evident, Artificial Intelligence has become a topic that raises a significant cluster of questions, in particular with regard to some important transformations that could be accomplish in the field of education. Important suggestions in this sense are offered by research in Special Pedagogy, where the employment of the digital technologies and Artificial Intelligence is regarded as a fruitful choice for personalizing and individualizing of learning processes (Bonavolotà et al., 2023; Bonavolontà & Pagliara, 2024).

Considering the field of didactics as much then a plain and narrow instructional process in which students are called to acquire information, it is important to understand to what extend Artificial Intelligence can support structural and meaningful changes in the learning process. Also, in respect of the important dimension of accessibility, the exploitation of digital environments and instruments cannot be merely conceived as a technical means for facilitating the handling of contents. As a crucial context aimed to accomplish the goal of a "New Humanism" (MIUR, 2012), schools are called for enhance learning process in order to give all students the opportunity to explore, discover, and express their own potential. In this sense, Artificial Intelligence could be used to restructure teaching activities and practices for giving students plenty of opportunity to develop competences and teachers a responsible role in innovating educational processes.

Rather than an obstacle in learning process, Artificial Intelligence could represent a multimedia environment that can enrich a competence didactics by introducing activities aimed at developing in students the ability of "virtualization", "encoding", "defragmentation" as formal frameworks of an increasingly reflective interaction with the context. The introduction of digital environments and technological instruments into the learning process invites teachers and educators to reflect, not only about objects and products legitimacy, but also about teaching practice, its nature, its future and the professionals' awareness of it. With the aid of a such intriguing technology teachers are encouraged to think of their professional activity as an ongoing research action. In planning and developing enquiry, simulation, translation, invention, organization tasks in classrooms, teachers are stimulated to adopt personalizing and individualizing processes, as well as an essential approach to enhancement.

Such a broader perspective leads to a fundamental question about the meaning of the learning process. Is the Artificial Intelligence an "enemy" of educational itineraries, which risks diminishing them, or is it a favourable opportunity to give way to an "axial rotation" (Simmel, 1922) of learning process? The latter implies a professional attitude characterized by some important features in the frame of an inclusive professional profile (Mura, 2019; Mura, Zurru & Tatulli, 2019).

Faced with such a challenge, teachers need to be involved in training pathways that allow them to acquire an emancipatory vision of teaching, characterized by an open mentality and prepared to deal with difficulties as challenges rather than obstacles. In this professional expression, plural languages and methods are seen as ever-changing elements resulting by a proper investigating action and a training attitude (Zurru, 2022).

The issue of Artificial Intelligence's role in educational programmes is not a matter of necessary and terrifying reductionism neither an enthusiastic futuristic scenario. As well as every complex system that structures and mediates human interaction, Artificial Intelligence has to be conceived as a cluster of interesting phenomena that challenge education in its essence and that need to be attentively monitored, as Special Pedagogy has learned to interpret its role, bearing in mind the goal of emancipation for all (Mura, 2016). In the field of Special Didactics, the case of Artificial Intelligence, as well as the plural technological media, invoke the same orientation to reflect and define its epistemology. The plurality of tools that can be employed in individualizing and personalizing learning processes should not conceived as mere prosthetic instruments, but rather a chance to improve and enhance the practices towards a more critical and explorative inquiry. Instead of defending learning processes from Artificial Intelligence, it is a matter of a deep reflection on what learning is.

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