



The Prominent Role of Humanities in the Development and Application of Artificial Intelligence

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Abstract

Humanities and its branches are related to many disciplines and even influence them. It can be claimed that everything that is related to humans and human social life is also related to humanities and can also be influenced by humanities. Artificial intelligence is one of the phenomena that is related to humans, and based on this, the question of this paper is whether humanities is related to artificial intelligence and whether it has the ability to influence it. Three assumptions are made to answer this question. In the first and second assumptions, it is proved that humanities are related to AI and even influence it. Since artificial intelligence is man-made and related to humans, it has the ability to be guided by humanities. Furthermore, humanities can be effective in AI through the ethics. In the second assumption, it is also claimed that artificial intelligence is recognized by humans and humanities, so it can be influenced by humanities, because anything that can recognize something else can also influence it. The third assumption is that humanities are not able to influence AI and the reason is that humanities and artificial intelligence are two separate fields.

Keywords: *Humanities; Artificial Intelligence; Human*

Introduction

The phenomenon of artificial intelligence, which is considered one of the modern human phenomena, is transforming many other issues and due to its wide spread, it is related to many different sciences and techniques. Humanities are not excluded from other sciences and knowledge and due to its comprehensiveness, it is related to many sciences and knowledge. It should be noted that humanities are related to sciences that can have an impact on human life and thoughts. But in general, it should be claimed that the scope of humanities is high. On the other hand, artificial intelligence, which is itself a

product of man, for this reason, that is, because it is made by man, then it enters the circle of humanities. It should also be said that because artificial intelligence deals with many issues and these issues can affect people's lives and thoughts as well as all phenomena, then an ethical theory must also exist in order to be able to act and react. Check out artificial intelligence. Also, because ethics is considered a part of humanities, therefore humanities are also related to artificial intelligence.

This fact that artificial intelligence can be effective in humanities is assumed in the current research. This is because the scope of artificial intelligence is high and it is related to all sciences. Therefore, humanities are not an exception to this rule. On the other side, many phenomena resulting from artificial intelligence have been proposed based on a language system. Like Chat GPT, and the discussion of linguistic topics is also related to humanities, and even some linguistic issues are considered a part of the science of linguistics, and linguistics is also a part of the humanities. Another reason is that artificial intelligence can be a research assistant for humanities researchers (Kabali Samartoiy & Davar, 2023), and also because artificial intelligence was created by human, so it was a result of human action, and therefore the action of artificial intelligence in the end, it will be human action, even if it is mediated and can be investigated in humanities in this way. The meaning of this is that artificial intelligence enters humanities as a subject that can be studied, and something that can be studied in science and knowledge mean that it has an impact in that science and knowledge. In doing so, artificial intelligence has an impact in humanities from this point of view as well (Ibid, 2023).

The main focus of the present study revolves around the involvement of humanities in the realm of artificial intelligence. The fundamental question being explored is how humanities can contribute to the field of AI. In order to address this question, three assumptions can be put forward to shed light on the relationship between humanities and AI.

The first assumption is that the humanities, because they are related to humans, investigate all things related to humans. What are the actions that are created by humans and what are the phenomena that are related to humans in some way and humans also affect them. Artificial intelligence is also related to humans, and artificial intelligence itself is a phenomenon created by humans, so humanities can examine it and influence it, and the influence of humanities will be of the type of directing artificial intelligence. This orientation will be of the type of determining the nature of AI and setting goals for it.

The second assumption is that the humanities communicate with and influence artificial intelligence through ethics, and also examine it ethically. We have to accept that every creature that communicates with society is in the domain of ethics, and artificial intelligence is no exception to this rule. The fact that artificial intelligence has the possibility to destroy human jobs or, on the contrary, to help the growth and development of human jobs can be examined from an ethical point of view, and also if it does the current artificial intelligence, that action will be mediated by humans. and therefore the moral and non-ethical nature of that action can be checked. In addition, the moral orientation of AI is also in the field of ethics, and ethics is also a part of humanities. Thus, it should be said that humanities enter the world of artificial intelligence in terms of ethical orientation to artificial intelligence. Hence, orientation in the first assumption is a substantive orientation and orientation in the second assumption is a moral orientation.

The third assumption is that humanities cannot influence artificial intelligence, because the nature of AI is basically not one of the topics that humanities can investigate and of course can influence.

Research Methods

The research methodology employed in this paper is characterized as analytical research, as it involves the analysis of the three identified problems. Additionally, the references for the current study

were gathered using the library method. The analysis of each assumption relied on a rational approach, which led us to adopt a broad and philosophical perspective, thereby avoiding excessive focus on intricate details.

Research Background

The realm of artificial intelligence has largely overlooked the profound impact that the humanities can have in this domain, highlighting the imperative for further investigation and exploration. This study breaks new ground by adopting an innovative approach, offering a reasoned exploration into the potential role of the humanities in the realm of artificial intelligence. Numerous studies have already ventured into the relationship between the humanities and artificial intelligence, each providing a distinct perspective on the matter. For instance, Rich (1985) penned a compelling paper entitled "Artificial Intelligence and the Humanities," while Dimock (2020) delved into the subject of "AI and the Humanities." Kabali Samartoiy and Davar (2023) contributed an insightful article examining the "Impact and Connection of AI with Humanities," substantiating the crucial role that artificial intelligence can play in the humanities. Similarly, Gefen et al. (2021) focused on the intersection of artificial intelligence with digital humanities and social sciences. Hallamaa and Kalliokoski (2022) carried out a comprehensive study on the ethical implications of artificial intelligence, whereas Khan et al. (2021) conducted an extensive literature review on the ethical considerations within the field. Bostrom and Yudkowsky (2018) also embarked on an exploration of the ethical dimensions of artificial intelligence. Floridi et al. (2018) presented a thought-provoking research paper titled "AI4People-An Ethical Framework for a Good AI Society: Opportunities, Risks, Principles, and Recommendations," while Pizzi et al. (2020) delved into the practical applications of artificial intelligence in humanitarian endeavors.

Definitions

Humanities: Humanities in the Cambridge Dictionary includes knowledge such as philosophy, literature and language, history and any such knowledge that is not part of science (Cambridge Dictionary, Humanities). In other phrases, humanities are the knowledge whose subject is the non-biological dimensions of man, that is, his beliefs, tendencies, and ethics and his individual and collective actions in a specific context or contexts. Humanities try to obtain the principles and rules governing the above dimensions with appropriate methods. The main goal of humanities is to make man and his spiritual perfection, although there are other primary and intermediate goals in these sciences (Abbaszadeh and Ghafari: 2022). In addition, it must be acknowledged that humanities have a broad concept and also many definitions are imposed on it. (For example, see: Ullman, 1946). But what we mean by humanities in this article is knowledge related to human actions, beliefs and morals. Therefore, the disciplines related to culture and society are all part of humanities.

AI: The fact is, "Defining AI is not easy; in fact, there is no generally accepted definition of the concept" (Sheikh et al. 2023; also see Russell & Norving, 2020). However, maybe we can consider artificial intelligence as an algorithm, although some researchers disagree with this definition and said that the algorithm is derived from the name of Persian mathematician Mohammed ibn Musa al-Kharizmi, and the algorithm refers to a specific instruction for solving a problem or performing a calculation (Sheikh et al. 2023). Moreover, Sheikh et al. (2023) in their research refer to other definitions and examine them and say that "AI is difficult to define is linked to evolution of this discipline" (Ibid, 2023).

Although the definitions of artificial intelligence are complex and perhaps a definite definition of it has not yet been obtained, but with a series of definitions, its nature can be understood. For instance, it has been said that artificial intelligence "is the science and engineering of making intelligent machines,

especially intelligent computer programs” (McCarthy, 2007). This definition is a common definition and can be seen in various papers. (e.g. Hamet & Tremblay, 2017; Kersting, 2018; Mohsin, 2020).

Therefore, although the exact definition of artificial intelligence seems difficult, and this may be because it is emerging or that it is expanding, but it must be said that artificial intelligence is an intelligent nature that makes the machine and program also intelligent.

First and Second Assumption

It can be well understood that the basic axis of all branches and disciplines of humanities is human. As a matter of fact, the basic nature of humanities revolves around humankind. Thus, wherever human makes an impact, humanities enter it. Some of the disciplines and fields of humanities are with humans and for humans. Its effect can be seen both in humans and human society, and it may affect the natural world as well. For example, the field of international relations completely revolves around humans and human societies and is also for humans and human societies. It is possible that negotiators from two different societies reach an agreement with each other on the environmental issue based on the principles of international relations, and this agreement affects both human society and the natural world. It is clear that the main goal is for humankind.

On the other hand, some disciplines that are not included in the humanities are also related to the humanities in some ways due to the fact that humans influence them. For example, medical sciences are based on a series of natural rules. When a medic, who is a man himself, treats a disease, he treats him according to his body, which is from nature. However, a human society is formed between the patient and the medic and between the medical community, and since every society needs a set of moral rules, therefore, ethics, which is one of the branches of humanities, will enter that society. The moral formation of medics is the responsibility of humanities and it conveys the impact of humanities in the medical society.

Artificial intelligence is known both as a phenomenon and as a scientific discipline, and we must accept that artificial intelligence has a social identity, because it is related to humans and human society. What is more, artificial intelligence is made by humans and it is also made for humans (Kabali Samartoiy & Davar, 2023). Humanities and artificial intelligence are related and due to the fact that artificial intelligence has a social identity and is used in various societies, therefore it is under human management. Management is also a branch of humanities, so it can be claimed that artificial intelligence applied in different human societies is guided by humanities.

Holm et al. (2015, 27) in a research paper claimed that “Several humanities disciplines contribute significantly to the social and natural sciences. Regardless of whatever claims are made about the value of humanities research in general, this indirect utility has been promoted by some to demonstrate the value of the humanities”. For example, linguistics is related to computer science and archeology is related to environmental and climate science (Ibid, 2015).

Additionally, in the same way that AI is related to humans and human societies and acquires a social identity, it is related to ethics, and ethics can examine artificial intelligence as a phenomenon and give it moral direction. Artificial intelligence experts and engineers also need a series of ethical rules because they are a society, and these ethical rules affect their work. Therefore, humanities give direction to artificial intelligence through ethics¹.

¹ Several studies have been conducted on the ethics of artificial intelligence, e.g. see Hallamaa & Kalliokoski, 2022; Waelen, 2022.

From another point of view, the influence and role of humanities in AI can be proved. Because humanities are knowledge that is from humans and for humans, that is why it has human characteristics and is not separate from human nature. It should also be said that among the creatures of the world, a creature more amazing than man has not been seen so far. Maybe in the future, a creature more amazing than man will not appear. It can be claimed that in the future there will not be a creature more amazing than human. Because what exists in the future, if it is perceptible, it will be understood by human, and what is perceptible by human, will be known to human, and what is understood by human, will be surrounded by human (Ebrahimi Dinani, 2015). The phenomenon of artificial intelligence, which is considered a wonder and is similar to human in terms of intelligence, was created by human and will also be understood by humans. Hence, this phenomenon will not only not conflict with humans, but will be understood by human, and what can be understood will also be surrounded. Humanities also have human characteristics and understand the nature of artificial intelligence, so they can surround it and give it direction.

It may come to mind that artificial intelligence, because it is intelligent, will conflict with humans and can replace humans in many jobs.

It should be answered that because AI is made by humans and is understood by humans, and what it understands can surround the thing that is understood, therefore artificial intelligence will never destroy the power of humans. On the other hand, it should be said that since AI is made by humans, the actions it performs will return to humans through intermediaries.

Another question that may come to mind is that if AI is developed, is it possible to use artificial intelligence in its service? In other words, human uses artificial intelligence in his service or AI uses human in his service?

In answer to this question, it should be said that the nature of AI is used by humans. Thus, if a human is placed in the service of artificial intelligence, it is because of his own actions. This applies to other objects as well.

Another question that may come to mind is whether AI, because it is intelligent and expanding, will become completely like humans?

In response, it should be said that since two things cannot be the same at the same time, and everything is itself (identity), even if artificial intelligence is completely similar to humans, it is not human and cannot become human. Firstly, it is impossible to become exactly like a human, secondly, each of them has its own nature. Human is human and AI is AI.

This possible question should be answered that artificial intelligence has been created by humans and it brings the power of human creativity. AI no matter how much it grows, this growth will return to humans.

As a result of what was said, it can be claimed that humanities are related to artificial intelligence and can influence it. This influence is since artificial intelligence is understood by humanities and it can identify its nature and even determine its nature and purpose. It can also give moral direction to artificial intelligence by establishing ethical rules for artificial intelligence.

Third Assumption

Another assumption that was stated in the introduction of this article is that humanities cannot affect artificial intelligence, because humanities and artificial intelligence are two different natures. Humanities cannot shape artificial intelligence, and the reason is that humanities and artificial intelligence

have separate natures. This assumption is rejected, because every phenomenon has its own nature and the difference in nature is not the reason for lack of communication and influence.

According to what was said, it is well known that the humanities, in addition to being related to AI in various ways, can also influence it. In addition, just as humanities can play a role in other sciences and even other phenomena, so it can also play a role in artificial intelligence. AI is made by humans, so it can be understood by humans. For this reason, AI cannot be assumed to be separate from humans and humanities.

Conclusion

There are three assumptions about the relationship and influence of humanities in artificial intelligence, and in the first two assumptions, humanities, in addition to being related to AI, also has the ability to influence it. In the first assumption, it is stated that humanities are related to everything that is related to humans and can have an impact on it. AI is made by humans and for humans, and because it is related to humans, it has a social identity, so it is related to humanities, and humanities can influence it. Moreover, since artificial intelligence has a social identity, it is also related to ethics, and humanities can influence it through ethics. In the second assumption, humanities are related to AI and also have an impact on it. Basically, everything that can be recognized by humans has the ability to be captured by humans. Artificial intelligence is made by humans and its nature is also known by humans. Humanities, which have the characteristics of humans, can understand the nature of AI and of course can give it direction. The third assumption, contrary to the first and second assumptions, is that humanities cannot form artificial intelligence, and the reason for this is that humanities and artificial intelligence have separate natures. This assumption is rejected, because every phenomenon has its own nature and the difference in nature is not the reason for lack of communication and influence.

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