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PHILOSOPHY OF ARTIFICIAL INTELLIGENCE IN THE PERSPECTIVE OF CONCERN AND RISK: THE CASE OF AZERBAIJAN AND TURKEY

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Abstract. Throughout the evolution of technology, from its inception until the advent of Artificial intelligence, human cognitive abilities, and creative output have been considered as some of human beings; most significant advantages over machines. However, the rise of artificial intelligence has become a source of concern, as it can potentially undermine this supremacy.

Artificial intelligences nature, future, and applications are the themes of multidisciplinary discourse, including fields such as philosophy and sociology. Simultaneously, several nations

have initiated the examination of the effects of this emerging technology on both individual and societal levels, each from its unique standpoint. This study examines artificial intelligence research conducted in Turkey and Azerbaijan, focusing on the problems and risks associated with it. The analysis reveals that ethical considerations play a prominent role in the artificial intelligence studies conducted in both countries. Furthermore, it has been observed that research on artificial intelligence in Turkey primarily focuses on theoretical aspects, whereas in Azerbaijan, the emphasis is mainly on examining the influence of artificial intelligence technologies on Azerbaijan’s standing/position in international strategies. The research undertaken in both nations highlights the concerns, risks, and societal difficulties associated with the question of whether computers can think, a topic that arises with the advent of artificial intelligence.

Keywords: artificial intelligence, Aİ strategies, sociology of Aİ, Human cognition, Aİ Research in Turkey and Azerbaijan

SÜNİ İNTELLEKT FƏLSƏFƏSİ NARAHATLIQ VƏ RİSK BAXIMINDAN: AZƏRBAYCAN VƏ TÜRKİYƏ NÜMUNƏSİ

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Xülasə. Texnologiyanın inkişafı boyu, onun yaranışından süni intellektin meydana çıxmasına qədər insanın idrak qabiliyyətləri və yaradıcılığı maşınlar üzərindəki ən mühüm üstünlüklərindən biri hesab edilirdi. Lakin süni intellektin yüksəlişi bu üstünlüyü sarsıda biləcəyi üçün narahatlıq mənbəyinə çevrilmişdir. Süni intellektin mahiyyəti, gələcəyi və tətbiqləri fəlsəfə və sosiologiya kimi sahələri əhatə edən multidisiplinar müzakirələrin əsas mövzularındandır.

Eyni zamanda, bir sıra ölkələr bu yeni texnologiyanın həm fərdi, həm də ictimai səviyyədə təsirlərini öz baxış prizmasından araşdırmağa başlamışdır. Bu tədqiqat Türkiyə və Azərbaycanda aparılan süni intellekt araşdırmalarına nəzər salır və onunla bağlı problemlər və riskləri təhlil edir. Analiz göstərir ki, hər iki ölkədə süni intellekt sahəsində etik məsələlər xüsusi əhəmiyyət kəsb edir. Bundan əlavə, müşahidə olunmuşdur ki, Türkiyədə aparılan araşdırmalar əsasən nəzəri aspektlərə yönəldiyi halda, Azərbaycanda süni intellekt texnologiyalarının ölkənin beynəlxalq strategiyalardakı mövqeyinə təsirinin araşdırılmasına daha çox diqqət yetirilir.

Hər iki ölkədə aparılan araşdırmalar süni intellektin yaranması ilə aktuallaşan "kompüterlər düşünə bilərmi?" sualı ilə bağlı narahatlıqları, riskləri və sosial çətinlikləri ön plana çıxarır.

Açar sözlər: süni intellekt, süni intellekt strategiyaları, süni intellektin sosiologiyası, insan koqnisiyası, Türkiyədə və Azərbaycanda süni intellekt tədqiqatları.

ФИЛОСОФИЯ ИСКУССТВЕННОГО ИНТЕЛЛЕКТА В ПЕРСПЕКТИВЕ ОБЕСПОКОЕННОСТИ И РИСКА: НА ПРИМЕРЕ АЗЕРБАЙДЖАНА И ТУРЦИИ

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Резюме. На протяжении эволюции технологий, от их зарождения до появления искусственного интеллекта, когнитивные способности человека и его творческий потенциал считались одними из важнейших преимуществ перед машинами. Однако развитие искусственного интеллекта стало причиной беспокойства, так как эта технология смогла потенциально подорвать человеческое превосходство.

Ряд стран начали изучать влияние данной технологии как на индивидуальном, так и на общественном уровне, отражая свою точку зрения. В данной статье рассматриваются исследования в области искусственного интеллекта, проводимые в Турции и Азербайджане, фокусируясь на проблемах и рисках, связанных с ними. Анализ показывает, что в обеих странах важную роль в изучении искусственного интеллекта играет этический аспект. Кроме того, замечено, что в Турции исследования в основном сосредоточены на теоретических аспектах, тогда как в Азербайджане акцент делается на анализ влияния технологий искусственного интеллекта на позицию страны в международных стратегиях.

Исследования, проведенные в обеих странах, подчеркивают обеспокоенность, риски и социальные трудности и связаны с вопросом «могут ли компьютеры мыслить?» вопрос, который приобрел актуальность с развитием искусственного интеллекта.

Ключевые слова: искусственный интеллект, стратегии ИИ, социология ИИ, человеческое познание, исследования ИИ в Турции и Азербайджане.

Introduction

As one of the 21st century's most important technological developments, artificial intelligence has found its place in every aspect of life. Artificial intelligence has made great progress in a short time, leading to increased research to understand this new technology. Artificial intelligence, defined by the Turkish Language Association as “the ability of a computer, a computer-controlled robot or a programmable device to exhibit functions such as perception, learning, reasoning, decision making, problem solving, communication, etc. in a human-like manner”, has various definitions as it is an interdisciplinary field. Artificial intelligence, which was first used as a concept by John McCarthy in 1956, was defined by him as “the science and engineering of making human-like intelligent machines, especially intelligent computer programs” (McCarthy 2004, s.7’den akt. Arslan, 2020: 76). In another definition, artificial intelligence is defined as "(...) the ability of a computer or a computer-controlled robot to perform various activities similar to intelligent living beings" (Kozacıoğlu ve Yazgan, 2022: 43). It can be said that artificial intelligence is a computer-controlled system that has the ability to operate like intelligent beings similar to humans.

The definitions of artificial intelligence reveal its multidimensional structure. The fact that artificial intelligence functions as an imitation of human intelligence opens the door to discussions that go beyond the technical dimension. The issue of whether there can be machines that can think requires understanding the nature of the act of thinking, examining human consciousness, and questioning the imitability of human nature. In line with these problems, the technical status of artificial intelligence parallels the theoretical discussion of the problem of consciousness. How artificial intelligence technologies are perceived as an innovation, in which dimensions the stages of acceptance or rejection take place, and what their ontological, epistemological, and ethical problems

have begun to be among the main topics of social sciences and philosophy disciplines. It is essentially a philosophical question as to whether "consciousness" and "intelligence," which are frequently regarded as the characteristics that set humans apart from other living forms, can be duplicated in machines. Even though the debate has its roots in the machine and mathematical sciences, it entails investigating the nature of consciousness and the potential for human mind replication.

The philosophical foundations of artificial intelligence can be traced back to the 17th century (Coşkun ve Gülleroğlu, 2021: 948). In his Discourse on Method, Descartes explains why machines with human-like bodies, morally capable of imitating humans, cannot be human (Yeşilkaya, 2022: 103). According to Descartes, machines are distinguishable from humans because they cannot imitate human linguistic and bodily behaviors. He stated that the multidimensionality of communication and the diversity in life meant that machines could not think like humans. Although these evaluations he made on the technology of his time may vary today, this discussion raised by Descartes has been an important guide for Alan Turing, who had an important role in the development of artificial intelligence. Alan Turing is one of the pioneers of modern computing and artificial intelligence, and he worked at the National Physics Laboratory in London after the Second World War (Topal, 2017). Turing, who posed the question “Can machines think?” in his book “Computing Machines and Intelligence in the Mind,” moved the subject to a technical field in the background of Descartes' philosophical concepts on whether machines can think. In this context, Turing's philosophy of artificial intelligence focuses on the question “Can machines think?” (Yeşilkaya, 2022).

During the development of technology until artificial intelligence technologies, the ability of humans to think and produce seemed to be one of their greatest advantages over machines, while artificial intelligence has turned into a tool of anxiety with the potential to prevent this superiority (Tahça, 2009). The question of whether or not machines can think leads us to examine the nature and uses of technology alongside anxiety. Turing's “Imitation Game” is an important example of understanding the nature and philosophy of technology. With the game he developed, Turing aims not only to test whether machines can think but also to prove that machines are capable of thinking (Yeşilkaya, 2022). In another study, philosopher John Searle, in what he calls the “Chinese Room Argument”, questions whether computers think (Searle, 1980; Yeşilkaya, 2022). Searle's research also shows the importance of artificial intelligence in the philosophy of mind (Searle, 1980; Yeşilkaya, 2022). This study is designed to demonstrate that computers cannot be as intelligent as humans (Searle, 1980; Yeşilkaya, 2022). Dreyfus's “Phenomenological Argument”, which argues that artificial intelligence cannot understand human beings because it cannot understand the context of language, aims to prove that human intelligence and expertise are not only formed by conscious processes but also by unconscious processes (Dreyfus, 1975; Yeşilkaya, 2022). According to the literature, research on the philosophy of artificial intelligence necessitates an interdisciplinary approach.

What artificial intelligence is, what it will be, and what it will serve will continue to find its place in many disciplines, including philosophy. At this point, each country is trying to examine this new technology from its perspective. The examination of artificial intelligence has garnered attention in Turkey and Azerbaijan, mirroring global trends. There are similar and different issues from the perspectives of research in Azerbaijan and Turkey on the philosophy of artificial intelligence. Ethical concerns are a major focus in Azerbaijani and Turkish studies, as well as in global social research on artificial intelligence. In addition, it is observed that studies on the sectoral development of artificial intelligence are frequently preferred in research. In artificial intelligence research conducted in Azerbaijan, it has been observed that technical details, the use of artificial intelligence in the field of health, and artificial intelligence research in diplomatic relations come to the fore. The availability of articles and theses open to access is an important factor in finding findings on broader topics in artificial intelligence research conducted in Turkey.

Research Perspectives of Artificial Intelligence Philosophy in Turkey and Azerbaijan

In Biçer's study conducted in 2024, it is observed that the articles written in the field of philosophy of artificial intelligence in Turkey between 2020 and 2023 focus on the problem of the definition of artificial intelligence, the philosophical origins of the philosophy of artificial

intelligence, the positioning of artificial intelligence in the legal and ethical framework, the artistic value of artificial intelligence productions and the patent problem (Biçer, 2024). The ethical implications of the potential risks associated with artificial intelligence are a focal point in Turkish research. The study conducted by Efe in 2021 analyzed the risks associated with the development of artificial intelligence under six primary categories: social, performance, security, economic, control, and ethical risks (Efe, 2021). In studies conducted in Turkey, the impact of artificial intelligence tools on decision-making processes and how to protect the privacy of individuals have also been discussed in the ethical question of artificial intelligence. For example, Başkaya and Karacan's study on chatbots in 2022 focused on the privacy of data transferred to chatbots. A survey of 100 individuals revealed that 45% of respondents deemed chatbots unreliable, while 62.1% were unaware that these tools handle personal data (Başkaya ve Karacan, 2022). In Kavut's study conducted in 2022, which examines the content of theses written on artificial intelligence in Turkey between 2019 and 2021, it was observed that the researchers focused more on science and engineering (Kavut, 2022). The place of social sciences in artificial intelligence research is less due to the technical development of the field. In social science research, it is seen that there is a focus on topics such as future scenarios, the philosophical status of artificial intelligence, and artificial intelligence anxiety. In the study conducted by Takıl, Erden, and Arasıl in 2022, in which the anxiety level of different professional groups towards artificial intelligence technology was examined through university students, the anxiety levels of the Faculty of Education students were at the highest level, while the anxiety levels of Engineering and Law Faculty students were at the lowest level (Takıl, Erden ve Arasıl, 2022). There may be a relationship between the higher number of thesis studies on artificial intelligence in the Faculties of Engineering compared to other faculties and the lower level of anxiety due to knowledge. Takıl, Erden, and Arasıl (2022) state in their study that there may be a negative relationship between knowing artificial intelligence and artificial intelligence anxiety. In Dönmez's article titled Artificial Intelligence and the 2025 Syndrome in the Philosophical Context, published in 2020, while talking about the complex situation of artificial intelligence, he also discusses the limits of the power of artificial intelligence, which will find itself in almost every aspect of life as of 2025, and what it can change in life (Dönmez, 2020). Although there has been some research on artificial intelligence in Turkey, Dönmez's study found that it has been restricted to private and commercial endeavors and that this problem needs to be approached from a religious, philosophical, and economic standpoint (Dönmez, 2020).

While ethics, consciousness, mind, free will, and many other topics are covered in the question "Can machines think?" regarding artificial intelligence, this question also asks whether robots will be free agents or slaves and whether humanity is creating a self-destroying entity (Yeşilkaya, 2022). The research conducted in Turkey demonstrates the practical equivalents of these theoretical inquiries. In general, the researches, in which technical fields come first, are addressed by the law in the philosophical dimension, questioning the security of personal data and whether privacy can be violated. Another concern about artificial intelligence is that it will increase unemployment. The unpredictable progress of artificial intelligence, its potential to destroy business lines, and the related uncertainty are observed as a cause for concern (Özbey ve Tan, 2022).

The primary observation regarding artificial intelligence research in Azerbaijan is the emphasis on practical research over theoretical research. A search for the keyword "Suni İntellekt" on Google Scholar yielded 18 results. Upon analysis of these results, two studies were identified as exemplary representations of artificial intelligence research conducted in Azerbaijan. The initial study is titled “Digitalization of the World Economy and Social Life: Global Trends, Achievements, and Challenges to the National Interests and Growth Perspectives of Azerbaijan,” authored by Abbasov and Ibrahimov in 2019 (Abbasov və İbrahimov, 2019). This study focuses on the challenges that the digitalization of the world poses to Azerbaijan's national interests. The study discusses Azerbaijan's technological breakthroughs over the last 50 years, the need to keep abreast of artificial intelligence and digital technologies, the necessity to be involved in international partnerships, the importance of creating a modern system compatible with these new technologies in all areas from education to economy, and the threat posed by these new technologies in many areas from cybercrime to military

threats (Abbasov və İbrahimov, 2019). This research has been conducted practically, in contrast to the studies performed in Turkey, to benefit the country rather than theoretically. The focus has been on assessing the role of artificial intelligence technologies within Azerbaijan's international strategies, rather than addressing their social or global issues. This research exemplifies the evaluation of artificial intelligence as an object. Another artificial intelligence study from the Azerbaijani perspective is the 2023 publication by Hüseynova, Bayramov, and Məmmədova entitled “The Role of Suni Intelligent Algorithms in the Diagnosis of Hepatocellular Carcinoma.” This study examines the role of artificial intelligence technologies in diagnosing hepatocellular carcinoma (Hüseynova, Bayramov və Məmmədova, 2023). This study revealed that the use of artificial intelligence technologies in the field of health is beneficial against waste of resources and the use of artificial intelligence tools in medical imaging provides benefits in examinations (Hüseynova, Bayramov və Məmmədova, 2023). As in the studies of Abbasov and Ibrahimov, artificial intelligence is considered an object in this study. When Turkish and English studies on artificial intelligence research in Azerbaijan were analyzed through Google Scholar, 8 studies were found. Among these studies, two are deemed appropriate for initiating discourse on the philosophy of artificial intelligence within the context of Azerbaijani research. Əkbərova's “Yeni Nəsil Generativ Süni İntellekt Texnologiyaları (Chatgpt) və İnsan Hüquqları: tənzimlənməsi ilə bağli ilk cəhdlər”, the social impact and consequences of new generation chatbots are emphasized. In her study, Əkbərova explains that artificial intelligence can be useful in the field of human rights, thanks to the artificial intelligence-based translation tool called Deeply, legal documents are translated more accurately, thus protecting rights and international journalists can provide information more clearly (Əkbərova, 2023). On the other hand, the fact that artificial intelligence-based applications are worrisome in terms of the possibility of discrimination in the field of law and work is exemplified by the sexist reflections of the criminal profile management application used to assist judges in some states in the USA, giving more punishment against black people, or Amazon's artificial intelligence-based application used in job searches giving priority to men (Əkbərova, 2023). Although the literature looks at artificial intelligence from a more social perspective, this research also examines the effects of artificial intelligence through practical examples. Allahyarova's study titled “Süni İntellektual Texnologiyalarının inkişafı və tətbiqinin sosial nəticələri”, published in 2023, focused on the social consequences of the development and application of artificial intelligence technologies (Allahyarova, 2023). Allahyarova's study deals with artificial intelligence from a social and philosophical point of view, evaluate the state of artificial intelligence globally, and expresses concerns about artificial intelligence from the perspective of Turkey. In her study, Allahyarova talked about the concerns that artificial intelligence will destroy humanity and focused on the possibility of this happening. In the study, it is stated that there is irresponsible behavior in artificial intelligence technologies from governments to companies, from professionals to managers, and if this situation continues, artificial intelligence can bring the end of humanity, so legal restrictions on artificial intelligence should be urgently introduced (Allahyarova, 2023). Expressing concerns over the uncontrolled use of artificial intelligence tools, the study warned that the manipulative use of artificial intelligence against natural intelligence is alarming, dangerous, and risky (Allahyarova, 2023).

Conclusion

While the discourse surrounding the development of artificial intelligence technologies predominantly focuses on their technical dimensions, it remains essential to theoretically explore the possibility of imitating human consciousness. The fact that the artificial intelligence tools used today act on the commands given shows that the controversial artificial intelligence that thinks like a human is still a product of the future and science fiction. For this reason, the philosophical foundations of the possibility of future technology continue to be discussed as much as the technical possibilities of human-like artificial intelligence.

In the current position of artificial intelligence, the discussions on artificial intelligence are also in the field of philosophy. The question of whether artificial intelligence can attain consciousness falls within the realm of epistemology, while the possibility of conscious machines becoming subjects is a topic in the philosophy of being. Beyond these philosophical debates, discussions about artificial

intelligence also focus on its societal implications. As can be seen in the studies conducted in Turkey and Azerbaijan, the technical inadequacies of today's artificial intelligence emphasize the ethical and social problems of machines that think like humans, rather than the problems of existence and knowledge. The basis of this situation lies in the ambiguous situation due to the rapid development of artificial intelligence tools. While the practical field comes to the forefront of artificial intelligence research in Turkey and Azerbaijan, social research emphasizes concerns, risks, and social problems.

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