

The Malicious Uses of Artificial Intelligence (MUAI) and Psychological Security in the Case of Iran

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Artificial intelligence (AI) is attracted great attention in the world, because its uses are going to be prevailed in many areas and issues. As a result, keeping the situation to use AI in the positive and optimistic manner would be meant that it is well-protected the society's mentality. The malicious uses of AI in the case of Iran are mattered by the three issues—the huge sanctions imposed to Iran by the Western countries, the psychological dissonance there is in the Iran's decision making process, and by ontological security perceived by the Iran's officials. It is tried to examine them in accordance with the technical, cognitive, and the institutional levels of AI.

Keywords: AI, Iran, malicious uses, psychological security, public policy

Introduction

Sustainable development seems to depend on three main parameters—foreign investment, scientific knowledge, and innovative technology. Artificial intelligence (AI) as a new technology is a high-profile case, because it has various effects across areas. It instead has many malicious uses that can cause some psychological insecurities. Put efficiently, it needs to examine it, in addition to care in targeting people's consciousness through deception and manipulation (Pashentsev, 2023, p. 1).

Iran, the Islamic Republic, is a country that called attention to AI for two reasons: Firstly, it faces challenges, including drought, environmental hazards, and economic crises that are a negative legacy of the US sanctions, industrial development, and defensive equipment. There is a perception that if these challenges do not have an optimized solution, AI is a panacea for meeting them. Secondly, the challenges set a context in which rival countries, the Western, put pressure on the system to modify its foreign policy behavior. The reasons show that what means psychological security includes three issues: international sanctions, cognitive dissonance, and ontological security. The paper examines each of them as related to the three levels of AI—the technical, the cognitive, and the institutional (Cai & Zhang, 2023, p. 386).

The MUAI Issue at the Technical Level in the Case of Iran

Iran has tried to work on AI for decades. The state of affairs shows that Iranian researchers published 34,028 international articles on AI from 1997 to 2017 that attained the 7th in high cited rank in the world and the second one in the Middle East (Rabiee, 2021). Many universities are working on as Sharif University of Technology, Amirkabir University of Technology, University of Tehran, Iran University of Science and Technology, Shahid

Behhsti University, K. N. Toosi University of Technology, Isfahan University of Technology, Shiraz University, Ferdowsi University of Mashhad, University of Isfahan, and Islamic Azad University. Annually, over 3,000 students graduate from universities, and more than 500 university scholars are working on it. According to the Web of Science, Islamic Azad University holds the 55th and the University of Tehran the 65th ranked among the 329 countries in the world (Moein, 2023). Additionally, 27 private companies are working on AI (Dehghani Firouzabadi, 2023).

Indeed, Iran, in terms of production of AI holds the 15th position, and in terms of using AI is the 77th ranked (Dehghani Firouzabadi, 2023). There are many reasons for this difference by far such as there is not still a plan for promoting AI at the national level as a result of poor rules and regulations, no filed patent for it weakened access index to the communication infrastructure, limited related companies to work on, poor foreign investment in this section, not paying attention to facilitate the entrepreneurship, and the high brain drain of the researchers (Rabiee, 2021).

Besides all stated, it is main factor that related to MUAI that resulted in psychological security. That is the international sanction that made an effective cause of Iran's development in all three parameters mentioned at the beginning of the paper, especially the technological innovation. On the one side, there is a claim that Iran is trying to reach high tech to use it maliciously in nuclear issues and military ones, and Iran, on the other side, believes that it is an unfair sanction to delay its development process in which there is no proof positive for diverging in the nuclear issue to the military dimensions. It has no possible solution because of cognitive dissonance appeared through its experience in related to the Western countries.

Cognitive Dissonance in Iran's Perception of AI

Cognitive dissonance occurs when mental beliefs or assumptions contradicted by new information (Duignen, 2023). It means there is an inconsistency that needs to find out a solution to reduce it (Metin & Camgoz, 2011, p. 131). In this situation, some defensive maneuvers take priority such as rejecting the explain away, avoiding the new information, persuading themselves that no conflict occurred, and restoring all to reconcile order and stability.

It can be found some cognitive dissonances in Iran's decision making process. While no rapprochement appeared between the US and Iran from the onset of the Islamic revolution in 1979, Iran first tried to reach the new high technologies from the Western countries as the main provider, especially during the Iran-Iraq War duration. It reached no net result and led to this perception that the Western countries utilized it on behave of its imperialistic ambitions to make a change in Iran's foreign behavior. To reduce the inconsistency, Iran put more effort into following its anti-imperialistic policy and tried to find alternatives to reach the technological equipment at various levels. In doing so, Iran tried to meet its needs from the non-Western countries, especially North Korea, China, and Russia. The Sino-Iran 25-Year Comprehensive Cooperation Document, recently signed in 2021, is a witness which gives evidence in which the main item for cooperation is related to new technologies and startups. Some related items include identifying a project in advanced technology, bank sharing in order to promote the artificial intelligence projects in Iran, establishing an academic chiefs association of two countries, developing a common communicative and information infrastructure, establishing an emergency warning for the national communication to involve the cyber security, promoting and providing the financial in construction and development of airport and its accessories between the two countries, cooperating and consulting in airport

management, air industry, air navigation, and information infrastructure, delivering the air industry technology to Iran, implementing the Iran's regional and national railway, fundraising to electrify Iran's railway and participating in construction of the Tehran-North highway, investing to construct the smart cities according to the Makran City of Iran's ecosystem, cooperating into constructing of the green and smart buildings, delivering technology in construction of the desert highway in Iran, providing Chinese participation in construction of logistic networks in Iran's ports, railways and of terminals of the free zone, establishing a maritime transportation company, delivering the new technology in transportation to Iran (Gharayagh-Zandi, 2022, p. 141). It is a cognitive dissonance because Iran tried to attain new technologies without being engaged in the existing financial mechanism, which means Swift or Financial Action Task Force (FATF). To find out the answer to this resistance despite this inconsistency, one needs to explain it in the Iranian mindset by understanding the ontological security below.

Ontological Security at the Institutional Level of Iran's Policy Process

Ontological security maybe of help where there is no way to explain what a person, a group, or a country does according to cost and benefit analysis and rational choice. In other words, "The concept of ontological security allows us to see rational agency instead of an effect of practices" (Mitzen, 2006, p. 345). In addition,

Ontological security reveals how the crisis that garners the attention of states challenges their identity. As the disparate behaviors of states illustrate, identity needs to compel them to pursue seemingly irrational actions—yet such behavior must have made sense to the state agents who decide upon that course of action at that time. (Steele, 2008, p. 3)

It is why it can provoke societal unrest and the MUAI because it is not predictable according to perceiving of its state of affairs (Pashensev, 2023, pp. 5-6).

Iran, after the withdrawal of the US from the Joint Comprehensive Plan of Action (JCPOA) in 2018, it is arrived at a conclusion in which not only did the Western countries come into getting engaged with Iran based on the mutual understanding of the interest, but also, it utilized it as a Troy horse to make a desired change in the domestic environment meanwhile based on the domestic unrests appeared. As a result, President Raeisi issued an order in December 2023 to establish "A National Strategic Council and Center for AI" that should be held by the President or the Presidential Scientific and Technological Vice President with the other high-ranked members such as Chief of the General Staff of the Armed Forces; Head of Planning and Budget Organization; Head of Administrative and Recruitment Affairs Organization; Ministries of Industry, Mine and Trade; of Science, Research, and Technology; of Health and Medical Education; of Information and Communication Technology; of Economic Affairs and Finance; of Defense and Armed Forces Logistics; and Secretary of Supreme Council of Cultural Revolution; Secretary of Supreme Council of Cyberspace; Command—in—Chief of Islamic Revolutionary Guard Corps; Chairman of National Development Fund of Iran; Chairman of Iran National Innovation Fund; and lastly two natural persons who work on AI (Iranian Studies' News Agency, 2023).

It traced back to the supreme leader giving attention to AI in 2023 and needed to meet a target in which Iran has to be in the Top 10 countries for a decade in 2033 (Khamenaei, 2023). According to the prospect, a rough draft, a national roadmap for developing AI, published on March 2023, deemed to localize AI in terms of Iran's autarky policy in the new and strategic technologies, using AI as a driver in economic productivity, to promote the justice and fairness, public welfare, protecting the private sphere and to achieve a smart good governance through which carrying a constructive collaboration with the master countries in AI, enjoying the NGO's fund,

educating the related expert forward. It comes up with the plan to carry out it across areas such as the economy, transportation, urban management, healthcare system, environmental issues, agriculture, managing social problems, industry, mine and trade, education, and energy.

The areas mentioned here, that of The Sino-Iran 25 Year Comprehensive Cooperation Document, are going to do in advance. It is in harmony with Raisi's look at the East foreign policy because there is a perception among Iran's officials that AI is a paradigm shift in propaganda (Matello, Ho, & Podoletz, 2023, p. 83) in which it is possible to use it as the weaponized narration or the supreme political weapon, strategic deception, and episteme attack and also it uses it to utilize the terrorist plot against the country (Vacarelu, 2023, p. 208; Rondeldt & Aeruilla, 2020, p. 77; Bazarkina, 2023, p. 267). It is a demonstrated fact for Iran's policymakers that has clear proof for it in the domestic unrest that appeared in recent years. AI would have helped to preserve its ontological security.

Concluding Note

It tried to show that AI is getting the high attention the Iranian officials to some extent that is going to establish a high-ranked organization and mobilize tangible and intangible funds; it is an auspicious start to Iran's assist development; indeed, it is a deep-seated fear for MUAI to prevent its psychological insecurities too.

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