Towards Reconciliation of Islam and Artificial Intelligence (AI)

Talal Agil Attas Alkhiri

Umm Al-Qura University,
Faculty of Education,
Makkah, SA

Abstract
The objective of this paper is to conceptualize artificial intelligence (AI) from the Islamic viewpoint. It outlines the Islamic vision, principles, and premises that govern the course of human behavior in general including Man's utilization of AI. It defines the frameworks and ethical references for AI religiously, ethically, and civilly. The paper used a descriptive analytical design. It encompasses two sections: the first section lays out a conceptual framework of AI including its historical roots and philosophical origins, features, goals and significance. The second section provides a theoretical background of ethical theories and approaches that account for the concept of AI ethics: legitimacy and philosophy of ethics, and contemporary AI ethical interpretation trends. It demonstrates how modern philosophical vision deals with ethics related to science and AI based on virtue ethics, utility ethics, or the ethics of duty. These theories are based on statements of neutralizing religion as a component in directing ethics and science. However, the Islamic conception of AI is based on belief, religion and ethics as a starting point for science and civilizational outputs. It is all based on faith in God and observance of the legitimate purposes of Islam and the highest human and civilizational values as loci of societal reform to preserve humans' dignity. It also enhances the values of God-fearing to control uses of things, human dignity, privacy, honesty and transparency, justice and fairness, responsibility and accountability.

Keywords: *Artificial intelligence (AI), Ethics, Principles*

Introduction

Islamic education derives its methodology from the God Almighty. It is based on the well-established principles of faith, Sharia and its aims that achieve human happiness in this world and the hereafter. It is a humane education that transcends the limits of time and space and preserves its fixed moral framework and firm values to preserve human dignity in the face of challenges and changes. Allah says framework and firm values to preserve human dignity in the face of challenges and changes. Allah Almighty says, "We have certainly honored the children of Adam and carried them on land and sea and provided for them of the good things and preferred them over much of what We have created, with [definite] preference" (Holy Quran, Surah Al-Isra, 70).

Artificial intelligence (AI) refers to the efforts of developing computerized information systems that give way to natural languages and accomplish actual tasks in integrated coordination or using images and perceptual forms to rationalize physical behavior. At the same time, it can store accumulated human experiences and knowledge for use in the decision-making process [10]. The term includes applications and sub-technologies such as robotics, computer vision, speech recognition, natural language processing, and expert systems. AI scientists predict that machines will soon perform more than 80% of repetitive or complex tasks, making the moral rules of machines one of the most complicated tasks facing humans [1].

Rationale

With the ethical challenges caused by the Fourth Industrial Revolution, especially in artificial intelligence, the exerted efforts are considered few and slow. The violation of human sanctity and privacy leads to it and the lack of consideration of human dignity in exchange for achieving other political or economic goals. Several studies have confirmed that ethical treatment of artificial intelligence problems and the enactment of laws that limit them is still below expectations. [5] indicated that automated systems behave in a way that is difficult to predict and, therefore, difficult to correct. Hence, they have ethical risks that are also difficult to control. It is necessary to make decisions about these ethical challenges to AI. [6] confirmed that, despite global policies, there is no single fully institutionalized policy that meets the ethical policies of AI. [7]'s alleged that excessive use of AI systems has severe concerns about the negative impact on job opportunities, inequality, humanity, and security. All these issues bring a question of ethics in this fourth industrial revolution, which enables AI systems that operate on big data and algorithms to perform tasks that ordinarily need human intelligence, such as perception, learning, speech recognition, and decision-making. The question is: to what extent is the use of AI applications ethical about human dignity, a threat to life and self-determination?

It makes the task of education in all its institutions extremely challenging, with primacy to find an appropriate formula through which civilized interaction with the new global situation is based on a fundamental principle that AI and digital development cannot substitute human intelligence. It should not become independent of human beings. From the viewpoint of Sharia, what should be

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done is to develop AI techniques and applications through a humane, ethical approach based on human principles and moral values derived from the origins and purposes of Sharia. Given the ethical issue, which has given way to a hot debate among scientific communities worldwide, alongside different opinions of several philosophers, Islamic education confirms defining parameters of the ethical foundations on which AI systems and their contemporary applications are based.

Previous studies

The following studies are worthwhile to cite here as they relate to the present study. [11] studied the Internet and the techno-social system. The study aimed to determine a general technical framework for the composition of the Internet, which leads to drawing a social framework and foundations of the link between the concepts of the social system and its various sections, with what it offers with the changes the Internet includes and social problems and anticipating the futures of technology and its multiple dimensions in human societies. The author used the descriptive and analytical approach. The study showed that the Internet, in its techno-social image, represents the civilized face of modern man. The Internet has also put man on the brink of a dangerous question regarding entry into a new social state, redefining oneself. As well, the technological factor, in its essence, is a social factor. Contemporary technical developments in their image simulate the human mind's capabilities in the mechanisms of thinking, storage and editing on behalf of the human being. In addition to this, the techno-social situation gives rise to global social change.

[7] studied ethical issues and considerations related to AI and autonomous systems. The study aimed to unveil, evaluate, and critique the ethical issues related to AI and autonomous systems and evaluate artificial intelligence developments. The researcher used the document analysis research design. The results showed that changes observed in real life due to the excessive use of AI-based and autonomous systems have raised real concerns about the negative impact on employment, inequality, humanity and security. Also, global spending on safety measures is increasing rapidly, such as ensuring the safe use of AI applications.

[12] explored the ethics of autonomous social robots. The study aimed to illuminate ethical issues when designing robots. It also aimed to help stakeholders provide a model for ethical decision-making in robots and understand the multiple dimensions available for automated implementation. Additionally, it aimed at building standards that help stakeholders determine who is responsible for the damages caused by robotic actions. The study used the descriptive approach. The results showed that regulatory bodies are responsible for controlling the robotics industry to protect society. Similarly, robotics companies are responsible for building ethical robots. People are responsible for maintaining awareness of their use of robots.

[6] studied the ethics of AI and Robots. The study aimed to:

a. identify the concept of AI ethics,
b. study the ethical issues and aspects associated with it and the concerns that may arise from the self-awareness of robots, and
c. Come up with proposed local policies for AI ethics by analyzing the reality of AI policies in the study community.

It represents five global policies: ITI politics of AI, Information Technology Industry Council, LEEE Policy, HRI Policy, EUORN Policy, and German Federal Ministry of Transport Policy. The study concluded that the Arab World hardly has AI/robot ethical policies. Similarly, the policies under consideration lack the criterion of equality. Likewise, the German Ministry of Transport's policy has the highest percentage of standards that must be met in the ethics policies of AI, with a rate of 48.7. %. Let alone the need for further development and improvement in the standards of ethics policies for AI and robotics.

Generally, previous studies varied in their approach to the ethics of artificial intelligence according to the different goals and approaches used to achieve them. For instance, [11] aimed at drawing the technical framework of the Internet to correspond with its social framework analytically. [7] aimed to reveal the ethical issues related to AI. Likewise, [12] considered how to focus on the ethics of artificial intelligence on transparency and trust. [6] touched on the reality of ethics in the AI industry-related policies. The present study differs from previous studies. It determines the requirements and foundations on which ethical issues related to AI are based from the perspective of Islamic education. It is a response to some of the results of those previous studies, especially those on the Arab world, which still lacks ethical policies related to artificial intelligence.

Research Questions:

The questions of the study are in line with its objectives:

1. What is the conceptual framework of AI?
2. What are the ethical theories and trends that explain the reality of AI?
3.

Objectives:

- Defining the conceptual framework of artificial intelligence.
- Uncovering the most prominent theories and ethical trends that explain the ethics of AI.
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Significance of the Study

The study meets a contemporary need to shed light on the Islamic ethical position on the most critical issues of the era represented in data science and artificial intelligence. It responds to recommendations from previous studies, including the outcomes of the Conference on AI and the Fourth Industrial Revolution (Future Prospects). There is a need to prepare and enact legislations to confront the AI developments. [6] also recommended advancing research to develop AI ethical policies. Likewise, [8] recommended further research on AI and giving it more attention. Hopefully, the study contributes to raising moral awareness about AI applications among researchers, institutions, and individuals. The researcher hopes that the study will be an addition to Islamic educational literature on ethics and values and fill some gaps in the literature.

Method

The study used the descriptive, documentary (analytical) research design to answer its questions and achieve its objectives. [9] defined it as an accurate collection of records and available documents related to the subject of the study for a comprehensive analysis of their contents to deduce the subject of the research from evidence and proof. To answer the research questions.

Section One: Conceptual framework

This section corresponds to the first research question on the conceptual framework of AI.

First: Definition

Artificial intelligence (AI) is a term of two words: intelligence and artificial. Each of them has an independent meaning. According to Webster Dictionary, intelligence means the ability to understand new or changing circumstances or situations, which means perceiving new situations. As for the word 'artificial' or 'industrial', it is related to the act of making and fabricating, and it is called the things that arise as a result of the act of industry and the formation of new things in order to distinguish them from those that exist naturally without human intervention [13:12]. It is to be noted that the varied definitions of AI emphasize the following considerations [2, pp. 228-229]:

- Simulating human behavior.
- Simulating human thinking.
- Act rationally.
- Reasoning like human beings.

Second: Historical Roots and Philosophical Origins

Historically, the literature indicates that AI has its roots in Greek civilization. Aristotle described a formal debate as a syllogism, allowing drawing conclusions from premises. This thesis paved the way for extensive research on AI about machine intelligence which had become too complex by the mid of the 2oth century to validate those ideas. Hence, AI arose in the light of a new trend, which is the pluralistic trend, which indicates the plurality of scientific research and the building of research teams from multiple disciplines, such as computer, mathematics, region, language, philosophy and psychology. The literature also indicates that the emergence of AI dates back to 1942, when the science fiction specialist Isaac Asimov wrote his story (Runaround) about a developed robot. The relationship between man and machine, through the following:

- A robot should not harm or cause harm to humans.
- The robot must obey the commands issued by humans unless they are harmful to humans.
- The robot must maintain its existence as long as it does not conflict with obedience to humans and does not harm them [14, p. 19].

Third: AI Significance, Features and Goals

To begin with, the importance of artificial intelligence in contemporary reality is no longer hidden, and this importance is confirmed through its contributions in various areas of life as mentioned [15, p. 9], as follows:

- Artificial intelligence contributes to preserving accumulated human experiences and transferring them to intelligent machines.
- Artificial intelligence enables humans to use the human language in dealing with machines instead of computer programming languages, making it accessible to all segments after dealing with specialists in computers and programming.
- Artificial intelligence will play a prominent role in many sensitive fields and areas, such as assistance in diagnosing diseases and prescribing medications, legal and professional advice, and military and security fields.
- AI makes a solid contribution to areas related to decision-making, independence, objectivity, and accuracy lead to far-reaching decisions far from error, discrimination, and racism.

What confirms the importance of artificial intelligence is how intelligent machines help relieve pressure on humans and make them focus on the most critical and sensitive areas.

In terms of goals, [16, p. 24] stated that AI is used to achieve the following objectives:

- Enabling machines to process information closer to the human processing or what can be called parallel processing in which several orders are executed simultaneously.
- A better understanding of the importance of human intelligence by deciphering the brain to be simulated. The nervous system and the human brain are the most

complexes of the body's systems. They work interconnected and permanently in identifying things.

That is to say, AI gains its contemporary importance from its goals that focus on understanding the nature of human intelligence by preparing computer programs capable of simulating intelligent human behavior. It means the ability of computer programs to bring up an issue or make a decision in a specific situation. The program itself finds solutions to problems or decides by referring to many of the various inferential processes fed into the program. This is what makes the devices more intelligent and valuable and understanding and developing human intelligence.

[17, p.170] provides several features of AI as outlined below:

- Using intelligence in solving problems in the absence of complete information.
- The ability to:
- think and perceive.
- acquire and apply knowledge.
- learn and understand from past experiences and expertise.
- use old experiences and apply them to new situations.
- use trial and error in various matters.
- respond quickly to new situations and circumstances.
- handle complex difficult cases.
- deal with ambiguous situations in the absence of information.
- distinguish the relative importance of the elements of the presented cases.
- photograph, create, understand and perceive visual matters.
- provide information to support administrative decisions.

[18: 43] summarizes the following characteristics of artificial intelligence:

- The ability to represent knowledge
- Use the optimistic experimental method.
- Ability to deal with missing information.
- The ability to learn.
- Inference ability.

Fourth: AI Systems

Based on the literature review, the AI systems and applications include expert systems, robotics, natural language processing, and artificial neural network.

To begin with, ***The Expert Systems*** is a program specifically designed to carry out the work of an expert in a particular field. It is known as the knowledge-based system, as expert systems consist of a knowledge base that consists of facts in a particular field and research bases that determine how to use those facts. Such systems are designed to help human experts, not replace them in many fields, such as medicine, geology, and chemistry [19, p. 498].

As for ***Robotics,*** it is a distinct field in artificial intelligence concerned with the design, production and use of robots. Robots simulates the kinetic processes carried out by humans or animals. This field aims to replace the machine with the human in repetitive and dangerous operations or operations that may man become unable to perform, such as dealing with volcanic craters, iron smelting furnaces, or descending into the depths of the oceans [20, p. 27].

What is more, the ***Natural language processing*** is a programming language consisting of special automatic codes that a computer can implement directly. Then the intermediate languages of human language and machine language appeared, such as BASIC, FORTRAN, C and others. After that, many systems developed in natural language processing through language in its standard form. Alternatively, in the form of menus on a computer screen, machine translation is a branch of the field of natural language processing [20, p. 27].

The ***Artificial neural network*** is a system for processing data in the same way that the natural neural network of a person or an organism does, as it contains a large number of small systems for processing information, and it is called a neuron [21, p. 33].

Fuzzy logic is a method depends on the perception and simulation of the human element to estimate values through non-fuzzy data through justification, similar to the human element that allows incomplete data and values to be inferred on their basis [10, p.15]. [16, p. 32] stated that the science of AI is based on two basic principles. The first is the representation of data so that the computer can process it, output it, and think of its solution. The second is searching for the available options which parallel the process of thinking, an assessment, a deduction, and a decision.

In this light, AI has several areas in which it is applied, most notably what was mentioned [22, p. 230] in the following points:

- Expert systems design.
- Logical reasoning.
- the games.
- Knowledge representation.
- be informed.
- Robotics vision, photo.
- Speech and writing recognition.
- Interaction between person and machine.
- Understanding of natural languages.
- Multi-talent system.
- Planning.
- Get rid of restrictions.
- Computational Linguistics.
- neural networks

Given the discussion above, AI is a distinguished civilizational sign with its advanced contemporary

concept, importance, characteristics, and applications. It is the civilized face of modern man. It has become a reality and a necessity to keep pace with civilized development. Its systems possess a superior ability to simulate human behavior, thinking and decision-making, which has formed positives and contributions. Artificial intelligence is great for helping humans in various fields, the most urgent and need, such as health, medicine, education, security, and industry. Despite this, there is a growing concern about the downsides of excessive use of artificial intelligence and the threat it causes to humans.

Section Two: Theories and Approaches

In trying to find some answers for the second question: What are the ethical theories and approaches that could account for the concept of AI ethics?, the present study provides a theoretical background in the following sections:

First: Foundations and Legitimacy of Ethics

Historically, there are two perspectives for ethics foundations and legitimacy. The first viewpoint sees that ethics are basically grounded in religion. Divine religions constitute ethics in propagating virtue and prohibiting vice. The second perspective holds that human intellect is the basis for ethics as it instinctively distinguishes between good and bad and right and wrong. Advocates of the second perspective vary from one another. Some have inclination to believe that metaphysical principles elevate ethics to Divine status, that the good we experience cannot be presumed as ultimate good and that only Allah is the source of good as is held by philosophers including Plato and other prominent ones after him. Other advocates of this perspective link ethics to religion. Still there are some people who relate ethics to intellect, and there are some who attribute ethics to emotion and conscience [23, pp. 27-28].

Ethics is a philosophy concerned with principles of what is right and what is wrong while dealing with others. This philosophy has been well-established for over 2500 years and has been the subject of interest for various philosophers and scholars from different backgrounds. Muslim philosophers such as Ibn Sina (also known as Avicenna), Ibn Rushed (known as Averroes in Latin), and Ibn Maskoubah among others have had their say in ethics. [23, p. 12].

Second: The Philosophy of Ethics

Based on present literature on ethics philosophy, there are two main intellectual approaches: The first is the relative approach heavily grounded on the notion that there are no constant invariable laws governing ethical moral values and principles. Such values are man-made and therefore cannot be over-generalized to all societies. Every human community is unique and bound by its own values and or norms which are not supposed to be imposed on other societies. Moreover, a community's values are subject to change over time. Hence, what people take as a moral ethical value at present may not be necessarily construed as such in future. Thus, moral values variability can never safeguard the sanctity of people, their life, fortune and honor.

The second is the objective approach with an emphasis and focus on the invariability and constancy of moral and ethical values as they emanate from man's natural ethical moral being. Such values are constant, invariable and unchangeable over space and time. These objective values have two trends. The first trend sees that such values are Divine-based as Allah have created man and have had consent with these values and man has to abide by them. The second trend associates objective values the eternal moral ethical ideals which have to be viewed as constant and invariable [2, p. 22].

Focusing on Artificial Intelligence AI ethics and applications, this study explores a topic that addresses AI applications and the ethical dilemmas and limitations therein, in which both ethics philosophy and AI applications intertwine as two fields of knowledge. The objective approach is the most effective orientation for this study which emphasizes the invariability and constancy of ethical principles and values. Whenever we think of AI and technology applications, there always arises the question of legitimacy of AI applications use. This necessitates the need for creating standard guidelines to govern the use of AI application without violating human being sanctity and ethical codes.

Third: Contemporary ethical interpretation trends of AI applications use:

There are three major trends for a better understanding of moralized ethics of science, technology and AI applications as listed hereunder:

First, the virtue ethics is trend that goes back to the Greek philosopher Aristotle. The focus here is on the importance of the human intellect which determines the legitimate ethical duty in dealing with confusing behavioral cases we have. Aristotle asserts that resorting to virtue and moral conscience is the standard in decision-making for what is right and good. This trend focuses on the concept of happiness and that it is the purpose of man in all his actions. Happiness will only be achieved through commitment to virtue. The virtuous person is the one who not only is satisfied by virtue but also practices it in action. [2, p. 225].

The setback of this trend is the lack of specific directions and guidelines for ethical questions and dilemmas that require a positive ethical law, let alone moral ethical guidance. Although virtue is deemed a

vitally important standard as viewed by many various philosophies and trends, it does not suffice in issues related to moral ethical issues, human trafficking, human flourishing, the Internet, and finally artificial intelligence.

Second, the utility ethics trend has crystallized through the ideas of many philosophers in addition to being an extension of Epicurus's philosophy of pleasure. However, the new contemporary trend makes ground for an empirical basis.The idea of this trend is summed up in John Stuart Mill's definition of utilitarianism that there is one thing and one thing only that is intrinsically desirable namely pleasure, and there is one thing which is intrinsically undesirable and must be resisted, namely pain. Happiness is pleasure-based and pain-free. The criterion of happiness is not measured from the point view point of the actor only, but also with regard to all those involved [24]. Since a virtuous and moral act does not mean that its doer is noble, a distinction must be made between the action and the drive. For instance, if we consider a person who saves someone's life from drowning in order to obtain the award, it is a noble act, saving a person's life regardless of who is doing it. As for the doer, when we know that his motive is the prize, it does not deserve to be praised. The ethics of utilitarianism fits well with the commercial mentality and mindset. The difficulty of this trend lies in the difficulty of determining which alternatives are more beneficial or harmful in actualizing and attaining happiness [2, p. 28].

Third, the ethics of duty is a trend that views mind as the moral ethical standard. Kant, a German philosopher was the first to theorize that the mental state is the standard for what should done do by a person. When faced with a question as to whether we should return that we borrowed from someone, the criterion is to visualize the consequent outcome of this action. In view that the result may be loss of trust among people, this action is deemed unethical and immoral. Accordingly, in the light of duty ethics, people are an end, not a means. The mind acquires its moral value on the basis of acting in accordance with the duty, even if no better outcome is achieved from such actions [2, p. 30]. This explains why it is impossible to disconnect what is obligatory and what is emotional and so on.

The axiomatic question is: whether technological advancement as a whole is in the interest of humanity or against it? Research and reality prove the positive role of technology and artificial intelligence in fields of industry, medicine, health, education and economy but without neglecting the ethical, moral and social impact of technology and AI. This puts the previous question a fertile subject for research and consideration.

From the foregoing discussion, it is concluded that there are three perspectives that summarize the impact of technology, including artificial intelligence systems, on society reported by [2] as follows:

The first perspective considers technology as a blessing for the individual and society alike, a source of good for humanity and the basis for every progress and prosperity that has happened to man and nature. This is justified by the fact that man is incapable of facing the dangers surround him alone, just as he cannot benefit from available possibilities of the world without technology. The positive vision of technology emerged among nineteenth century philosophers, including Karl Marx and Auguste Comte. Marx states that technology as an aid to liberate mankind, eliminate the oppressive feudal system and protect the common people from feudalism. Comte and Francis Bacon see that technology helps us to better understand the secrets of the universe. Advocates of this perspective believe that any adverse impacts shall not be attributed to technology itself but to its misuse.

The second standpoint views technology as a cause of human misery, having deprived man of job opportunities and robbed him of his privacy, moral values and human dignity, let alone those crises, health problems, and the destruction of humanity caused by technology. Advocates of this trend point out that, instead of becoming the one in control of technology, man has become a slave of it, and in 'a state of alienation'. According to this view, technology reinforces material values and destroys religion, morals, ethics and social life. Supporters of this pessimistic view towards technology negative impacts are trying to justify this view on grounds that technology has the ability to shape values, trends and life in an unimaginable Jack Elliot, an ardent supporter of this view, holds that technology is not only beyond our control. Rather we are controlled by technology. The science fiction films produced by this philosopher embody his idea, depicting a story of a man creating a machine to help him rule the world, but then the machine turns against man and replaces him in controlling everything. Continuous over indulgence in the world of technology is tricky, leading to an unpredictable future for humanity.

The third point of view is an attempt to reconcile between the two previous trends. It considers technology, like others, bearing a negative and a positive aspect. It is required to invest in the positive aspects of high return with all areas of life and try to reduce the risks of its use. They view it as a neutral tool and according to its uses it is classified negatively or positively.

Fourth: ethical challenges of relying on artificial intelligence systems. Relying on artificial intelligence and its systems and employing the Internet of Things and algorithms in applications that address all aspects of human activity is no longer a matter of choice. Rather, it has become an essential reality to keep pace with the

contemporary global civilization transformation. There remains the urgent question the extent to which the uses of artificial intelligence can be based on ethical foundations that take into account whether it should be used or not, and the impact of applications on human activity from an ethical perspective.

[2, pp. 240-251] reported some challenging concerns in relying on artificial intelligence systems, including the following

- ***Treating man as a machine***

This is a drawback of artificial intelligence systems that deal with humans as machines, just like those performing a given job. This view is based on Tylor's theory, in his book The Foundations of Scientific Management, in which he dealt with the ideal theory that views man merely as a machine playing a specific role. Like Descartes, Tylor asserts the neutralization of the human role, relegating man to just an instrument to achieve political and economic goals.

- ***Impact on a person's mental abilities***

This occurs by relying on computers and other calculation devices, which led to a decline in human mental abilities, which is known as declining skill, defined by Thomas Wilson as the ongoing technical development, which causes a decrease in the interest in the responsibilities of the working individual to a small and specialized business issues.

With the ever increasing interest in developing smart and decision-making systems, smart machine has become the benchmark reference in solving problems, and the need for the human element has decreased, which affects the development of his mental abilities. Artificial intelligence systems and their applications can affect admission to scientific majors and weaken the desire of students. There has been a remarkable decline in PhD students in engineering and science majors since 2001.

- ***Weakening social relations under artificial intelligence***

This was evident with the advent of the means of communication and the information revolution technology. Available literature indicates that the information revolution has made people more selfish, introvert and more consuming, leading to weakened social relations. This increases with the emergence of addiction to electronic games, which reaching a rate of 97% in the case of entertainment, as illustrated by statistics.

As for the ethical issues arising from the use of artificial intelligence systems and its applications, it may appear in the long term that breakthroughs will occur in many areas in addition to the ethical and societal impact on individuals, society and the environment. Therefore, the issue of the ethicality of using artificial intelligence and its applications arises despite its great positives in the lives of individuals, societies, development, economy, medicine, and so on. Anderson and Anderson, 2011, p:13 point out to the importance of developing machine's work ethics, by integrating the necessary ethics into machine's work for the reasons listed hereunder:

- Ethics is important, which necessitates good handling by machines.
- Ethics is fun, making machines of the future more controllable, more autonomous and having more machine ethics.
- Programming a machine to operate ethically will help to better understand the necessary ethics. [25] addressed some of the ethical issues related to the development of artificial intelligence systems and its applications summarized as follows: [25, p. 3].
- Social impacts: These are ones resulting from the potential impact of artificial intelligence on labor market, economy, jobs, equality, monopoly of wealth, human rights and human dignity, and its impact on democracy.
- Psychological effects: These arise from the relationship between humans and robots, and the human and marital relationships.
- Financial system impact: It is expressed through the collusive manipulation of artificial intelligence on financial systems.
- Legal effects: They mean the ways in which artificial intelligence systems influence the legal system, such as liability if used in criminal activities, drugs, accidents, and injuries.
- Environmental impacts: these are oriented towards challenges of using in-kind resources, requiring increased demand for energy and waste disposal in light of the increased use of artificial intelligence.
- Impact on trust: where artificial intelligence takes on important tasks such as performing surgery in medicine, which requires an increased trust on the part of the beneficiaries in the technology.

Fifth, contemporary ethical principles for AI applications. The field of AI is a recent branch of knowledge that has revolutionized contemporary technology and the requirements for using AI systems, especially ethical standards, which are a priority for international and human rights organizations and research centers. [25] has formulated an AI Ethical Guidelines Document based on the Ethical Fundamental Rights, including seven requirements applicable to the various stakeholders who participate in the production cycle of AI systems, namely:

- Human agency and oversight: AI systems are not allowed to override human control or manipulate and coerce people into their systems. Humans must be able to interfere or supervise AI decision-making.

- Technical accuracy and safety: AI must be safe, accurate, reliable and impenetrable and must be a guarantee of the physical and mental integrity of the human being.
- Privacy data management: Privacy is closely related to the principle of harm prevention which requires that AI systems be secure, private and inaccessible to another person.
- transparency: It is related to the interpretability of all AI-related elements.
- Diversity, non-discrimination and fairness: It is linked to the possession of trust and the participation of all stakeholders.
- Social and Environmental Responsibility: This is meant to achieve sustainability and environmental responsibility for artificial intelligence systems and provide solutions that address areas of global concern in the field of sustainability.
- Accountability: It is linked to the principle of fairness and devising mechanisms guaranteed by artificial intelligence systems before and after their development, spread and use.

In the United States of America, the state of California has adopted legislation to support the twenty-three principles of artificial intelligence approved by the Institute for the Future of Life (Asilomar Al). The legislation aims to promote safe and beneficial development of artificial intelligence. It also includes research issues, ethics and values and has been widely approved in artificial intelligence research.

In the same manner, the UK government has been keen to develop AI ethics guidelines for sustainable and transparent use. The Center for Data Ethics and Innovation has been established to make recommendations for sustainable, safe and ethical use of AI [25, p. 3].

In 2018, Singapore also announced additional initiatives focusing on AI ethics and providing a set of ethical guidelines on managing and integrating human decision-making into AI and reducing bias in the dataset [25, p. 3]. The UAE, through the Smart Dubai Office, announced the launch of AI principles, guidelines, and ethics aimed at defining policies that support the ethical use of AI in a fair, transparent, accountable and explainable manner (Smart Dubai, BD13).

In light of the aforementioned discussion, the contemporary philosophical vision deals with ethics related to science and artificial intelligence on the basis of the philosophies of virtue ethics, utility ethics, or duty ethics. These theories are grounded in statements seeking to neutralize religion as a component to guide and inform ethics and science. Such philosophical perspectives were projected in three distinct trends. The first one sees that AI applications use is positive and a blessing that must absolutely be invested. All ensuing drawbacks arise from only misuse of technology and AI. Advocates of the second trend view it as a source of misery for the human being and must be prohibited. The third trend supporters tend to a mediatory approach viewing technology and AI as neutral and should be invested and strengthened in its positives while setting moral ethical regulations to limit its misuse. The ethical challenges associated with the use of artificial intelligence as an alternative to human intelligence and human behavior have also emerged, raising concerns that it treats man as a machine and exploits him economically and politically, affecting his mental abilities, weakening his social relations and affecting his confidence. This consequently has led to an established ethical use of artificial intelligence, including agency and human oversight, accuracy, preserving privacy, observing pluralism and diversity, and developing a system of transparency-based responsibility and accountability.

Conclusion

To establish an Islamic framework of AI, the present study accounts for ethics in the field of artificial intelligence based on belief in God, observes the legitimate purposes of the religion of Islam, and considers the supreme human and civilizational values to preserve human dignity. The study highlighted that it is still below the standard despite the subsequent international efforts to lay the foundations and ethical frameworks for artificial intelligence in the Arab and Islamic worlds. The contemporary philosophical vision deals with ethics related to science and artificial intelligence based on the philosophy of virtue ethics, utility ethics, or the ethics of duty. These theories are based on statements that attempt to neutralize religion as a component in directing ethics and science.

One of the most prominent ethical challenges accompanying the AR uses as an alternative to human intelligence and human behavior, and raises concerns and fears, is that it treats man as a machine and exploits him economically and politically, which affects Man's mental abilities and weakens social relations. Efforts have emerged for some bodies to define the ethical principles that establish the ethical use of AI, including agency and human oversight, accuracy, preserving privacy, observing pluralism and diversity, and developing a system of responsibility and accountability based on transparency.

The Islamic conception is based on the ethical framework of artificial intelligence on belief, Sharia and ethics as a starting point for science and its civilizational outputs. As defined by this study, the ethics of AI in the Islamic vision express the principles and premises that govern the course of human behavior and define frameworks and ethical references for science and

civilization, religiously, ethically, and civilly. The Islamic moral theory is distinguished by its reliance on two postulates: man's moral character and the religious character of morality. The foundation of faith is the origin of morality. It is a scientific basis based on the Islamic conception of the Creator's reality. The Islamic conception of man, the universe, and life, unlike other theories that derive their laws from the human condition, is often biased towards his beliefs.. Building ethics and principles that guide the use of artificial intelligence in the light of the Islamic system is based on the purposes of Islam. It preserves the interests of the individual and the group in belief, Sharia and behavior.

The study recommends working in the Arab and Islamic frameworks to adopt policies that guarantee the ethical employment of artificial intelligence based on faith, intent and value foundations. It also suggests establishing specialized centers and bodies locally in Saudi Arabia regionally that adopt a review. The principles and ethics of artificial intelligence and their reproduction in light of our Arab culture and its Islamic origins. To complement the research shortcomings, the researcher suggests conducting more studies, including (a) an evaluation study of Arab and Islamic efforts on AI ethics and (b) a comparative study of the foundations of contemporary artificial intelligence ethics.

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Author:

Talal Agil Attas Alkhiri is Professor of Islamic Educational Foundations and Islamic Studies at Umm Al-Qura University in Makkah, Saudi Arabia. He obtained a doctorate in Islamic foundations of education and a master's degree in Islamic and comparative education. He has several books on the foundations of education and comparative education and many studies are in the pipeline.