

Unveiling Ethical Implications: AI Robot Accountability in Islamic Context

Muhammad Khaeruddin Hamsin^{1*}, Rizaldy Anggriawan², Farisma Jiatrahman³

^{1,2}Faculty of Law, Universitas Muhammadiyah Yogyakarta, Indonesia

³College of Art and Sciences, Qatar University, Qatar

*Corresponding Author: khaeruddin@umy.ac.id

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ABSTRACT

The world is currently experiencing what is known as industry 4.0, a fusion of business and IT where robots and other forms of artificial intelligence are massively utilized. The fact that robots are now a regular part of people's lives raises novel liability issues. The research aims to address the questions whether artificial intelligence robots can be accepted as ethical and legal subjects in Islamic perspective. It also considers whether it is necessary to grant legal personality to robots and hold them liable for their decisions and conducts. The research is doctrinal legal research where the analysis was presented within the context of Islamic viewpoints in a descriptive-structured way. The result demonstrates that robots with artificial intelligence fall under the definition of *jamadat*. No matter how sophisticated, an artificial intelligence cannot have a biological vitality. Therefore, only humans have the potential to possess rights and be held liable for their actions. Robotic artificial intelligence systems lack the capacity to be regarded as responsible entities in this sense, to inflict legal sanctions on activities that are the result of algorithms, and to be held accountable for both civil and criminal offenses.

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1. Introduction

Today, humanity is witnessing the integration of industry and information technology, which is described as industry 4.0 or the 4th industrial revolution, and a new era in which different manifestations of artificial intelligence such as robots and androids are spoken.¹ In terms of capacity, artificial intelligence is generally considered in three categories as weak, general and

¹ Morteza Ghobakhloo, 'Industry 4.0, Digitization, and Opportunities for Sustainability', *Journal of Cleaner Production*, 25.2 (2020), 119869 <https://doi.org/10.1016/j.jclepro.2019.119869>.

super.² Artificial intelligences that can specialize in a single human subject with the help of algorithms are considered weak or narrow (ANI),³ while artificial intelligences at the human level in the intellectual sense that fulfill every task that a human can do are considered general (AGI),⁴ and artificial intelligence that is predicted to exceed the human intelligence in scientific and social fields, and which is thought to be a threat to humanity are classified as super (ASI).⁵ If artificial general intelligence is developed, it is assumed that it will transform to super level very quickly with exponential growth rate, this situation is called intelligence explosion.⁶

Beyond being machines that perform human-specific activities, artificial intelligence robots are said to reach a level where human-robot interactions cannot be distinguished from human-human relations in the near future,⁷ as they develop some cognitive features, adapt to changing conditions and reach the stage of autonomous decision making.⁸ The possibility of reaching the level of artificial general intelligence has brought with it control concerns on the one hand, and various questions that need to be addressed by different disciplines of social sciences such as philosophy, ethics, *fiqh*, and law.^{9,10}

Many studies have been carried out at the level of books and articles that deal with the subject of artificial intelligence and robots from an ethical and legal point of view. However, as far as authors' concern, the subject has not been studied in terms of Islamic ethics and *fiqh* disciplines, and has not been dealt with in the integrity of ethics and *fiqh*. Thus, the study has a novelty in this aspect. While the subject is being handled, firstly, various approaches from the perspective of ethics and positive law will be mentioned, and then a perspective will be drawn in terms of Islamic law and ethics.

The research aims to address the question on is it possible for robots to have consciousness and will, and to surpass humans one day? Can artificial intelligence robots that can make autonomous decisions be accepted as moral and legal subjects? Is there a need for robots to be

² I Gede Agus Kurniawan, 'Digitalization of Business Law: Urgency and Orientation of the Industrial Revolution 4.0 and Society 5.0', *Volksgeist: Jurnal Ilmu Hukum Dan Konstitusi*, 5.2 (2022), 253–265 <https://doi.org/10.24090/volksgeist.v5i2.6847>.

³ Osmo Kuusi and Sirkka Heinonen, 'Scenarios From Artificial Narrow Intelligence to Artificial General Intelligence – Reviewing the Results of the International Work/Technology 2050 Study', *World Futures Review*, 14.1 (2022), 65–79 <https://doi.org/10.1177/19467567221101637>.

⁴ Scott McLean and others, 'The Risks Associated with Artificial General Intelligence: A Systematic Review', *Journal of Experimental & Theoretical Artificial Intelligence*, 2021, 1–15 <https://doi.org/10.1080/0952813X.2021.1964003>.

⁵ Ali Mohammad Saghiri and others, 'A Survey of Artificial Intelligence Challenges: Analyzing the Definitions, Relationships, and Evolutions', *Applied Sciences*, 12.8 (2022), 4054 <https://doi.org/10.3390/app12084054>.

⁶ Miles Brundage, 'Taking Superintelligence Seriously', *Futures*, 72 (2015), 32–35 <https://doi.org/10.1016/j.futures.2015.07.009>.

⁷ Anna Henschel, Ruud Hortensius, and Emily S. Cross, 'Social Cognition in the Age of Human–Robot Interaction', *Trends in Neurosciences*, 43.6 (2020), 373–84 <https://doi.org/10.1016/j.tins.2020.03.013>.

⁸ Yogesh K. Dwivedi and others, 'Artificial Intelligence (AI): Multidisciplinary Perspectives on Emerging Challenges, Opportunities, and Agenda for Research, Practice and Policy', *International Journal of Information Management*, 57 (2021), 101994 <https://doi.org/10.1016/j.ijinfomgt.2019.08.002>.

⁹ Bustami, Rio Laksamana, and Zuliana Roviqoh, 'Waqf Fundraising through Money in the Industrial Revolution 4.0 Era: A Case Study on Baitulmaal Munzalan Indonesia', *Ijtihad: Jurnal Wacana Hukum Islam Dan Kemanusiaan*, 20.1 (2020), 23–39 <https://doi.org/10.18326/ijtihad.v20i1.23-39>.

¹⁰ Iwan Satriawan, Tareq Muhammad Aziz Elven, and Tanto Lailam, 'Internet Shutdown in Indonesia: An Appropriate Response or A Threat to Human Rights?', *Sriwijaya Law Review*, 7.1 (2023), 19 <https://doi.org/10.28946/slrev.Vol7.Iss1.1018.pp19-46>.

given legal personality and held accountable for their decisions and actions? This study tries to make an evaluation from the perspective of ethical and *fiqh*.

2. Research Method

This is a qualitative study incorporating secondary data and employed doctrinal legal research. The data in this study were acquired from reference material consisting of books, journal articles, and research results that are linked to the present issue. Through a thorough analysis of the literature, the analysis was carried out, and it was then presented within the context of Islamic viewpoints (*fiqh* and *akhlaq*) in a descriptive-structured way. As a result, the presentation in this article can be viewed as a logical and coherent sequence that connects one part to another.

3. Result and Discussion

3.1. Recognition Approaches to the Ethical and Legal Status of Artificial Intelligence Robots

Being morally and legally a subject is related to being a person or individual.¹¹ Therefore, it is important to determine what it means to be a person. It requires the existence of criteria such as self-consciousness, will, sense of responsibility, freedom of movement, complex thinking, communication ability, capability of realizing life purpose, and ability to live in society. The theory of human agency as discussed by Widigdo's research is linked to the capacity of humans to act autonomously and make choices, as well as their ability to resist certain dominant and established rules or authorities. Within the framework of Islamic legal thinking, human agency extends beyond just submitting to the authoritative teachings of the Quran and hadith, it also manifests in various other ways.¹² There are different approaches in the doctrine as to whether artificial intelligence robots can be legally recognized as a person or not.¹³

3.1.1. Ethical Approaches

The human brain has conscious actions, which are mental processes. This state of consciousness or self-awareness gives people the ability to take responsibility for their actions and, accordingly, a moral personality.¹⁴ In fact, with the will, people can be selective in their orientations and change their decision when necessary. Can a robotic artificial intelligence have mental processes such as making decisions other than the program loaded or defined, changing the decision made in extraordinary situations, even understanding that some correct assumptions are wrong in some places and assigning a new value to it in the context of the

¹¹ Andi Agus Salim, Rizaldy Anggriawan, and Mohammad Hazyar Arumbinang, 'Dilemma of Dual Citizenship Issues in Indonesia: A Legal and Political Perspective', *Journal of Indonesian Legal Studies*, 7.1 (2022), 101–54 <https://doi.org/10.15294/jils.v7i1.53503>.

¹² Mohammad Syifa Amin Widigdo, 'Human Agency in Islamic Moral Reasoning', *Kanz Philosophia: A Journal for Islamic Philosophy and Mysticism*, 4.1 (2014), 94–103. <https://journal.sadra.ac.id/ojs/index.php/kanz/article/view/71>

¹³ Monika Simmler and Nora Markwalder, 'Guilty Robots? – Rethinking the Nature of Culpability and Legal Personhood in an Age of Artificial Intelligence', *Criminal Law Forum*, 30.1 (2019), 1–31 <https://doi.org/10.1007/s10609-018-9360-0>.

¹⁴ Rian Saputra and others, 'Artificial Intelligence and Intellectual Property Protection in Indonesia and Japan', *Journal of Human Rights, Culture and Legal System*, 3.2 (2023), 210–35 <https://doi.org/10.53955/jhcls.v3i2.69>.

case? There are a number of new ethical rules and suggestions that have recently developed and changed about whether robotic artificial intelligences can have a moral personality.¹⁵

According to the approach, which considers it possible for scientists to bring artificial intelligence systems to the level of human brain or natural intelligence and imitate them, and even bring them to a conscious level, an artificial ethics will be required for the artificial system.¹⁶ In order for human beings to keep their own artificial intelligence systems under their control and not harm the human race, many moral elements such as responsibility and will must be artificially integrated within the framework of the concepts of good and bad, which are the basis of ethics, although it is very difficult to do this. Otherwise, it may be possible for artificial systems to get out of the control of the person who created them and cause many chaotic situations.¹⁷

Will the ethical reality of artificial intelligence systems be the machine or the human being responsible for the mistakes made by the machines?¹⁸ Attributing responsibility for damaging activities to artificial intelligence will lead to people avoiding their own ethical responsibilities, as well as the elimination of obligations.¹⁹ This question also raises the question of whether it is ethical to build artificial intelligence in this way. While it is an ethical problem in itself that man does not take responsibility for the situations he causes and attributes it to artificial intelligence, it actually makes it more likely that artificial intelligence will be used as an unprecedented tool for human oppression.²⁰ It is considered necessary to evaluate artificial intelligence as an ethical element and to reach a consensus on certain rules regarding artificial intelligence. This attitude, which has ethical and legal concerns, also emphasizes the necessity of a renewal and sanction in ethical and legal rules.²¹

Another approach is that although creators who actually create more sophisticated machines hope that these machines can think and behave better than humans, they do not see this as possible at the moment.²² When such progress takes place, robots or androids that cannot fulfill ethical principles will create ethical, psychological, social and cultural problems. Separating conscious robots from machines will lead to the expectation of ethical elements. If robots become conscious, it will be seen as immoral to treat them only as "machines". Regarding the moral dimensions of robots that turn into androids, robotics deals with the

¹⁵ Eduardo Magrani, 'New Perspectives on Ethics and the Laws of Artificial Intelligence', *Internet Policy Review*, 8.3 (2019) <https://doi.org/10.14763/2019.3.1420>.

¹⁶ Farid Ibrahim Suhandi, 'Business Entity Pre-Merger Notification Policy as Law Enforcement in the Industrial Revolution Era 4.0', *Lex Scientia Law Review*, 3.2 (2019), 129-42 <https://doi.org/10.15294/lesrev.v3i2.35395>.

¹⁷ Virginia Dignum, 'Ethics in Artificial Intelligence: Introduction to the Special Issue', *Ethics and Information Technology*, 20.1 (2018), 1-3 <https://doi.org/10.1007/s10676-018-9450-z>.

¹⁸ Yordan Gunawan and others, 'Command Responsibility of Autonomous Weapons under International Humanitarian Law', *Cogent Social Sciences*, 8.1 (2022), 2139906 <https://doi.org/10.1080/23311886.2022.2139906>.

¹⁹ Rian Saputra, M Zaid, and Silaas Oghenemaro Emovwodo, 'The Court Online Content Moderation: A Constitutional Framework', *Journal of Human Rights, Culture and Legal System*, 3.2 (2023), 210-35 <https://doi.org/10.53955/jhcls.v2i3.54>.

²⁰ Nur Putri Hidayah and Isdian Anggraeny, 'Fulfillment of Workers' Rights In Remote Working: The Perspective of Labor Development Principle In Indonesia', *Legality: Jurnal Ilmiah Hukum*, 31.1 (2023), 124-137 <https://doi.org/10.22219/ljih.v31i1.25338>.

²¹ Rajakishore Nath and Vineet Sahu, 'The Problem of Machine Ethics in Artificial Intelligence', *AI & SOCIETY*, 35.1 (2020), 103-11 <https://doi.org/10.1007/s00146-017-0768-6>.

²² Zulfa 'Azzah Fadhilika and Amarru Muftie Holish, 'Re-Existence of the Culture of Shame in Online Buying and Selling Fraudulent Practices to Improve Consumer Protection in the Era of the Industrial Revolution 4.0', *Lex Scientia Law Review*, 3.2 (2019), 155-62 <https://doi.org/10.15294/lesrev.v3i2.35397>.

problems of robots, their interaction with humans, animals, society, nature and the world. The human brain of a robot with artificial intelligence Asimov's three-item rules, which form the basis of these suggestions and constitute the first ethical rules of robotics, are as follows: Robots must obey orders given by humans as long as they do not conflict with the First Law.²³ In addition, robots must protect their own existence as long as they do not conflict with the First or Second Law. In order to protect the interests of humanity, these laws are then referred to as "the zeroth law". A robot may never harm humanity or allow humanity to be harmed (negligently) through inaction.²⁴

3.1.2. Legal Approaches

It is predicted that the widespread use of robotic artificial intelligences in almost all areas of life will lead to the emergence of problems related to different fields of law in terms of civil, criminal and financial aspects.²⁵ Various opinions are focused on determining the legal status of powerful artificial intelligence robots that have the capacity to make autonomous decisions and connecting legal consequences to their actions.²⁶ In legal doctrine, two basic approaches come to the fore, one of which argues that it is not possible and necessary to give personality to artificial intelligence robots, and the other argues that they should be accepted as persons.²⁷

According to the approach that opposes the legal status of artificial intelligence robots, no matter how much its capacity has developed, artificial intelligences are human-made beings. Therefore, it is unthinkable to have a separate personality. This view, in itself, is basically divided into two different groups.²⁸

According to one group, artificial intelligence robots are items produced and owned by humans. Although they show the ability to perform some autonomous activities and analyze much faster than human intelligence, artificial intelligence systems do not have a consciousness. Although they can take some decisions to achieve the determined goals, these goals are already determined by the software developer or users. These are electronic devices owned by real or legal persons.²⁹ Again, those who adopt this approach are of the opinion that there is no need or necessity for legal status to be given to artificial intelligence, and that the problems that may be encountered in practice can be solved by creating insurance systems in which artificial intelligence robots will be registered and covering the damages that may arise from it, in addition to the existing regulations. In the doctrine, this view is criticized on the

²³ Rizaldy Anggriawan, Muh Endriyo Susila, Ming Hsi Sung, Dwilani Irrynta, 'The Rising Tide of Financial Crime: A Ponzi Scheme Case Analysis', *Lex Scientia Law Review*, 7.1 (2023), 307-46 <https://doi.org/10.15294/lesrev.v7i1.60004>.

²⁴ Russell Belk, 'Ethical Issues in Service Robotics and Artificial Intelligence', *The Service Industries Journal*, 41.13-14 (2021), 860-76 <https://doi.org/10.1080/02642069.2020.1727892>.

²⁵ Rizaldy Anggriawan and others, 'Passenger Name Record Data Protection under European Union and United States Agreement: Security over Privacy?', *Hasanuddin Law Review*, 8.2 (2022), 95 <https://doi.org/10.20956/halrev.v8i2.2844>.

²⁶ Stefan Koos, 'The Displacement of the Law by Technicity', *Jurnal Hukum Novelty*, 13.1 (2022), 1-12 <https://doi.org/10.26555/novelty.v13i1.a23822>.

²⁷ Gerald Matthews and others, 'Evolution and Revolution: Personality Research for the Coming World of Robots, Artificial Intelligence, and Autonomous Systems', *Personality and Individual Differences*, 169 (2021), 109969 <https://doi.org/10.1016/j.paid.2020.109969>.

²⁸ Amitai Etzioni and Oren Etzioni, 'Incorporating Ethics into Artificial Intelligence', *The Journal of Ethics*, 21.4 (2017), 403-18 <https://doi.org/10.1007/s10892-017-9252-2>.

²⁹ Yordan Gunawan and Hanna Nur Afifah Yogar, 'Indonesia E-Hailing Taxi: The Competition Between Law and Technology', in *Advances in Electronic Commerce*, ed. by Mohammad Nabil Almunawar, Muhammad Anshari Ali, and Syamimi Ariff Lim (IGI Global, 2020), pp. 594-606 <https://doi.org/10.4018/978-1-7998-4984-1.ch028>.

grounds that artificial intelligence cannot be seen as an ordinary tool or object, and it is stated that accepting robots as goods will not be sufficient to solve the legal problems that may arise.³⁰

Another approach that opposes giving legal personality to robotic artificial intelligence adopts the view that robots should be given slavery status, inspired by Roman Law. The design, production, ownership and usage rights of the robot belong to humans. Since it is not possible for robots to be considered as human, even if they are equipped with superior features, it is recommended to give them slave status. On the other hand, according to this understanding, the acceptance of electronic devices that serve human beings as slaves will not mean a violation of personality. In the doctrine, this view has been objected on the grounds that it is wrong to bring back slavery, which is a shame in human history, and that this approach will not contribute to the solution of legal problems. In addition, this view has been challenged by the argument that if constitutional personality rights are granted to artificial intelligences, they should not be treated as property, and thus the property objection will be invalid.³¹ On the other hand, although it seems to be against it, it can be said that the slave status proposal actually contains a secret acceptance of accepting artificial intelligence as a human being.³²

Another approach to the legal status of robotic artificial intelligences adopts the view of giving personality to artificial intelligences that can make autonomous decisions as long as they do not pose a threat to humanity. Supporters of this view generally focused on two types of personality forms, legal and electronic.³³

It is recommended that those who do not find it possible to accept artificial intelligence robots as natural persons based on ontological reasons, should be given legal personality as in companies. This view is based on the fact that Roman temples in Antiquity and churches in the Middle Ages had some legal rights. It is claimed that such an application will facilitate legal proceedings, and will ensure that the responsibility is directly attributed to artificial intelligence, especially if it commits harmful actions. It has been pointed out that the legal personality granted to organizations such as companies and associations includes having rights and responsibilities, and that a similar situation can also be applied to artificial intelligence.³⁴

In the doctrine, the view of granting legal personality status to artificial intelligence has also been criticized. Although non-human entities have been given legal personality for various reasons, legal entities need the presence and will of human beings in the stages of establishment, decision-making, implementation and termination.³⁵ In addition, the assets of the companies actually belong to the shareholders. Concerns were also expressed regarding the granting of legal personality to artificial intelligence that the system could be abused by

³⁰ Elisabeth Hildt, 'Artificial Intelligence: Does Consciousness Matter?', *Frontiers in Psychology*, 10 (2019) <https://doi.org/10.3389/fpsyg.2019.01535>.

³¹ Dian Latifiani, 'Human Attitude and Technology: Analyzing a Legal Culture on Electronic Court System in Indonesia (Case of Religious Court)', *Journal of Indonesian Legal Studies*, 6.1 (2021), 157–84 <https://doi.org/10.15294/jils.v6i1.44450>.

³² Ugo Pagallo, 'Vital, Sophia, and Co. – The Quest for the Legal Personhood of Robots', *Information*, 9.9 (2018), 230 <https://doi.org/10.3390/info9090230>.

³³ Simon Chesterman, 'Artificial Intelligence and the Limits of Legal Personality', *International and Comparative Law Quarterly*, 69.4 (2020), 819–44 <https://doi.org/10.1017/S0020589320000366>.

³⁴ Séverin Lemaignan and others, 'Artificial Cognition for Social Human–Robot Interaction: An Implementation', *Artificial Intelligence*, 247 (2017), 45–69 <https://doi.org/10.1016/j.artint.2016.07.002>.

³⁵ Hary Abdul Hakim, Chrisna Bagus Edhita Praja, and Ming-Hsi Sung, 'AI in Law: Urgency of the Implementation of Artificial Intelligence on Law Enforcement in Indonesia', *Jurnal Hukum Novelty*, 14.1 (2023), 122–34 <https://doi.org/10.26555/novelty.v14i1.a25943>.

people who want to relieve themselves of responsibility and use artificial intelligence for their own benefit.³⁶

On the other hand, considering the difference between artificial intelligence and legal persons such as companies in the doctrine, there is also the idea of giving artificial intelligence a unique (*sui generis*) status and responsibility separate from legal persons. The European Parliament's Legal Affairs Commission's proposal for "electronic personality" status is a manifestation of this approach. Indeed, the report states that establishing a special legal status for robots in the long term may result in the recognition of advanced autonomous robots as electronic persons, where they make autonomous decisions or interact independently with third parties. It is also stated in the report that a compensation fund should be established with the partnership of a manufacturer, software developer, owner or user, and the damage caused by the actions of artificial intelligence should be covered through this fund. It is viewed with caution in that it requires a transparent structure as it will cause money flow, and it is not logical to hold the robot responsible for the damage caused by the robot itself, rather than the manufacturer or owner. A robotic e-personality with equal rights with human beings is considered unacceptable.³⁷

3.2. The Position of Artificial Intelligence Robots under Islamic Ethics

Morality in Arabic is derived from the word "*khulq*", which means "character or nature". The meaning of the term differs from person to person from ideology to ideology. According to the Islamic philosopher Yahya Ibn Adi (d. 364/975), morality is "a state of the soul in which a person reveals his actions without thinking or examining them". This definition, albeit with minor differences, has settled in the Islamic moral literature in later times³⁸. In fact, all of them want to emphasize that morality is a phenomenon that settles in the human soul and deepens there. What is meant by the unthinking examination of moral action is the conscious and willful manifestation of the action and the assumption of responsibility when it settles in one's soul and becomes a habit.³⁹

As can be understood from the aforementioned definition, the concept of morality has a direct relationship with the spirit, soul and consciousness, and accordingly with the concepts of will and responsibility.⁴⁰ The concepts of will and consciousness have priority in being responsible for the religious and moral aspect.⁴¹ Examining the development and transformation of these concepts in the history of thought will facilitate the understanding of the ideological

³⁶ Jan-Erik Schirmer, 'Artificial Intelligence and Legal Personality: Introducing "Teilrechtsfähigkeit": A Partial Legal Status Made in Germany', in *Regulating Artificial Intelligence* (Cham: Springer International Publishing, 2020), pp. 123–42 https://doi.org/10.1007/978-3-030-32361-5_6.

³⁷ John-Stewart Gordon, 'Artificial Moral and Legal Personhood', *AI & SOCIETY*, 36.2 (2021), 457–71 <https://doi.org/10.1007/s00146-020-01063-2>.

³⁸ Mohammad Thoha and others, 'Can Indonesia's Decentralized Education Technology Governance Policy: Evidence from Muslim Countries', *BESTUUR*, 11.2 (2023), 217–34 <https://doi.org/10.20961/bestuur.v11i2.78320>.

³⁹ Abdullah Sahin, 'Critical Issues in Islamic Education Studies: Rethinking Islamic and Western Liberal Secular Values of Education', *Religions*, 9.11 (2018), 335 <https://doi.org/10.3390/re19110335>.

⁴⁰ Mohammad Thoha and Abdul Haq Syawqi, Mohammad Zaini Yahaya, Dimas Danar Septiadi, M Haris Hidayatulloh, 'Can Indonesia's Decentralized Education Technology Governance Policy: Evidence from Muslim Countries', *BESTUUR*, 11.2 (2023), 217–34 <https://doi.org/10.20961/bestuur.v11i2.78320>.

⁴¹ Abdallah Rothman and Adrian Coyle, 'Toward a Framework for Islamic Psychology and Psychotherapy: An Islamic Model of the Soul', *Journal of Religion and Health*, 57.5 (2018), 1731–44 <https://doi.org/10.1007/s10943-018-0651-x>.

background of artificial intelligence technologies. In order not to overshadow the concept of “natural human being” that the study want to focus on, thus the article will not go into the details of ideologies and will briefly talk about them.⁴²

When it looks at the development of the concept of soul, from ancient Greek philosophy to today's contemporary ideologies, many ideas are encountered, from materialist and spiritualist understandings to spirit-rejecting perspectives. Aristotle (384-322 BC), in his book *On the Soul*, in which he discussed and criticized the understanding of the soul before him, briefly states the following for the understanding of the ancient soul: Each of the qualifications is linked to the principles set.⁴³ Philosophers who accept only one cause and only one principle, such as fire or air, also argue that the soul is composed of a single principle. However, those who accept a multiplicity of principles put the multiplicity in its composition. Furthermore, Aristotle considers the soul as a substance. That is, the soul is the form of a natural body that has potential life. The name given by the philosopher to formal substances is “entelecheia”. Hence the soul, which is a formal substance, is also the *entelecheia* of a potentially living body.⁴⁴

On the other hand, Plato (427-347 BC), who adopts the understanding of the immaterial soul, considers the soul to be the same as the person or self that uses the body, and therefore describes it as a substance independent of the (same) body. According to this view, just as the corporeal sense organs correspond to the perception of sensible objects, the intelligence belonging to the spirit corresponds to the comprehension of immaterial and eternal ideas. The individual soul, which existed before the body, establishes a relationship with the body and manages it, and continues its individual existence after the death of the body.⁴⁵

The concept of soul has an important place in the creation of the realm with the influence of Neoplatonism. According to Plotinus (d. 270), one of the philosophers of this movement, the One from which everything emerges is the active power that creates everything. The first thing that comes out of nowhere is mind or intelligence. Mind is the first degree in the hierarchy of being. Spirit is the second degree of being. In the philosophy of Plotinus, these three elements are immaterial elements.⁴⁶ In summary, Plotinus, like Plato and Aristotle, accepts the soul as an intangible element.

Avicenna's "flying man" metaphor is an important element that needs to be addressed in the soul-body relationship. In this metaphor, a state of self that can be conscious of itself will remain even when the organs of the person are removed, and the state that the person will turn into a flying man because he is freed from his weight. The soul has a realm of existence separate from the physical world. Even without organs, a conscious being still exists.⁴⁷

Based on all this information, it is seen that the concept of soul constitutes a basis for understanding the value of being human. The theories of *nafs* in the Islamic ethical literature

⁴² Djamaludin Djamaludin and others, ‘Assessing the Impact of Electronic Court Systems on the Efficiency of Judicial Processes in the Era of Digital Transformation’, *Volkgeist: Jurnal Ilmu Hukum Dan Konstitusi*, 6.1 (2023), 1–18 <https://doi.org/10.24090/volkgeist.v6i1.8082>.

⁴³ Douglas R. Campbell, ‘Self-Motion and Cognition: Plato’s Theory of the Soul’, *The Southern Journal of Philosophy*, 59.4 (2021), 523–44 <https://doi.org/10.1111/sjp.12429>.

⁴⁴ Charlton William, ‘Aristotle’s Definition of Soul’, in *Aristotle’s De Anima in Focus*, ed. by Michael Durrant (Routledge, 2015), p. 20 <https://doi.org/10.4324/9781315673776>.

⁴⁵ Marija Czepil and Oresta Karpenko, ‘Mykola Shlemkevych (1894–1966): Anthropological Principles of Human Research’, *Educational Philosophy and Theory*, 54.10 (2022), 1642–54 <https://doi.org/10.1080/00131857.2021.1933944>.

⁴⁶ Zarrabi-Zadeh Saeed, ‘Sufism and Christian Mysticism’, in *Routledge Handbook on Sufism*, ed. by Lloyd Ridgeon (New York: Routledge, 2020: Routledge, 2020), p. 13 <https://doi.org/10.4324/9781315175348>.

⁴⁷ Guidi Simone, ‘Separated Soul and Its Nature: Francisco Suárez in the Scholastic Debate’, in *Francisco Suárez (1548–1617)* (BRILL, 2019), pp. 351–77 https://doi.org/10.1163/9789004395657_017.

will enable this value to be fully revealed. Regarding the powers of the *nafs*, some of the Islamic philosophers deal with the Aristotelian division of the *nafs*, human and animal,⁴⁸ while others deal with the Platonic division of the *nafs*, the wrath and the righteous.⁴⁹ Yahya Ibn Adi and Ghazali (d. 505/1111) also exhibit a Platonic attitude when discussing the theories of the soul.⁵⁰ Ibn Sina and many other Islamic philosophers included the theories of the soul in their philosophies and emphasized the importance and specialness of the natural soul or human soul by keeping it separate from other souls.⁵¹

According to Yahya Ibn Adi, the soul has three powers: desire (*shehwat*), anger (*ghadb*), and the power of thinking (*natiq*). While some of the traits can be common to each of these powers, some are specific to only two powers of the soul, and some are specific to a single power. The philosopher gives importance to the power of thinking the most among these powers. Because the control and training of the other two powers depends on the influence and dominance of the pure soul over them.⁵² The power of desire or the lustful soul is common to humans and other living things. Thanks to the power of this *nafs*, people turn to bodily desires and pleasures such as eating, drinking and sexual intercourse. The power of anger or wrath is common in humans and animals, and with the power of this soul, feelings of anger, audacity and superiority occur in people. The power of anger is more dominant than the power of desire, and when it is under its influence, it can do more harm than the power of desire does to people. The ability to think, on the other hand, is the trait found only in human beings and differs from other living things with its ability to think and discernment. These two faculties originate from the thinking soul in man. The natural soul is very important in terms of human moral competence.⁵³

In the understanding of the four basic virtues put forward by the Islamic moral philosophers, the virtue and disgrace dimensions of the *nafs* powers are discussed. Chastity, the first of the four basic virtues, is the morally competent form of the power of desire. It is also the virtue of the soul. Unchastity, which is the opposite of chastity, is the disgrace of the soul. The second virtue, courage, is the virtue of the animal soul. A person whose anger power has reached moral competence will be mild-mannered and dignified, and use his courage as necessary and in a balanced way. A person who does not mature and is uncontrolled uses his anger by cruelty. Cruelty is the disgrace of the animal soul. The perfected form of the natural soul is the third virtue, wisdom. Wisdom is the epistemologically and morally perfected dimension of the soul. A person with the virtue of wisdom keeps himself away from vices and ugliness and becomes able to control other powers of his soul. Ignorance is the disgrace of this soul. It means

⁴⁸ Frank Griffel, 'Place of Virtue Ethics within the Post-Classical Discourse on Hikma', *Journal of Arabic and Islamic Studies*, 21 (2022), 055–080 <https://doi.org/10.5617/jais.9369>.

⁴⁹ Naeema Halim, 'The Views of Al-Fārābī and Al-Ghazālī on Achieving Happiness through the Rational Faculty of the Human Soul', *Islamic Studies*, 61.3 (2022), 293–304 <https://doi.org/10.52541/isiri.v61i3.2086>.

⁵⁰ Sophia Vasalou, 'Greatness of Spirit: A New Virtue for Our Taxonomies?', *Dialogue*, 56.2 (2017), 291–316 <https://doi.org/10.1017/S0012217317000324>.

⁵¹ Jamalpour Mikael, 'Abstraction of the Soul and the Presence Abstracts in Dream From; the Psychological and Philosophical Perspective with an Emphasis on the Views of Carl Gustav Young', *Journal of Philosophical Investigations*, 16.41 (2023), 490–501 <https://dx.doi.org/10.22034/jpiut.2023.55076.3464>.

⁵² Awaludin Marwan, Diana Odier-Contreras Garduño, and Fiammetta Bonfigli, 'Detection of Digital Law Issues and Implication for Good Governance Policy in Indonesia', *BESTUUR*, 10.1 (2022), 22–32 <https://doi.org/10.20961/bestuur.v10i1.59143>.

⁵³ Sri Noor Mustaqimatul Hidayah, 'Ibnu Miskawaih's Islamic Economic Thinking (Reviewing The Concept of Exchange and The Role of Money According to Ibnu Miskawaih)', *AJIS: Academic Journal of Islamic Studies*, 7.1 (2022), 157 <https://doi.org/10.29240/ajis.v7i1.4170>.

disgrace, not only in terms of epistemology, but also in terms of moral competence. The last virtue, justice, is a universal virtue that must be found in common with the first three virtues and that preserves the balance of the *nafs* powers. The fine line between virtues and vices is justice.⁵⁴

Ghazali, while explaining the essence of "*as-Salam*", uses the phrase "safe person" for a person who can control the powers of his *nafs* and reach moral competence. The heart of such a person is filled with hatred, envy and desire for evil; organs from sins and harams; adjectives are safe from being transformed into animal adjectives. The animalization of human attributes means that he is enslaved to his lust and anger. Where the animal soul is controlled, reason dominates the power of lust and anger.⁵⁵

As it is seen, the importance of the concept of a natural human being and the power of thinking in terms of the moral competence of man emerges under the control of other *nafs* powers. There is no doubt that the power of thinking has a relationship with the concepts of mind and intelligence.⁵⁶ While the mind is defined as the power of thought and appeal in human beings, intelligence is defined as the cognitive power of the human mind. Mind is a faculty, while intelligence is a faculty of the mind. The importance of the fact that Islamic morality views reason as a power of the soul must be highlighted. The ability to think is a power found only in human beings.⁵⁷

3.3. The Legal Position of Artificial Intelligence Robots under Islamic Law

Determining the legal status of artificial intelligence robots is important in terms of determining rights and responsibilities. Because there is a cause-effect relationship between personality and responsibility.⁵⁸ While examining the issue of personality and legal responsibility in terms of Islamic law, it will be necessary to deal with the issue in the context of competence, legal personality, and *taklif* (legal competence).

Competence is defined as being qualified and capable for something. It refers to a person's capacity to exercise rights, or in the terms of the *fiqh* method, to take on responsibility.⁵⁹ The competence that gives rise to the physical and mental development of the human is realized in a gradual manner and it has been analyzed by dividing into two parts as the competence to

⁵⁴ Emine Öztürk, 'The Comparison of Classical Ethical Theories in Ancient Greece Philosophy and Islamic Philosophy: The Example of Aristotle and Ibn Miskawayh, Tusi and Kinalizade', *European Journal of Multidisciplinary Studies*, 6.1 (2021), 41 <https://doi.org/10.26417/175d44w>.

⁵⁵ Jadaa Nabil Ahmed Hussein and Salem Rababaa Yasser Ahmed, 'Human Values Derived From the Meanings of the Beautiful Names of God', *Multicultural Education*, 7.6 (2021), 84-94 <https://doi.org/10.5281/zenodo.4902242>.

⁵⁶ Muhammad Muslih and Supeno Supeno, 'Financial Technology: Digital Legal Challenges and Indonesia's Economic Prospects After Covid-19 Outbreak', *Legality: Jurnal Ilmiah Hukum*, 30.2 (2022), 255-266 <https://doi.org/10.22219/ljih.v30i2.22784>.

⁵⁷ Md. Aftab Anwar, AAhad M. Osman Gani, and Muhammad Sabbir Rahman, 'Effects of Spiritual Intelligence from Islamic Perspective on Emotional Intelligence', *Journal of Islamic Accounting and Business Research*, 11.1 (2020), 216-32 <https://doi.org/10.1108/JIABR-10-2016-0123>.

⁵⁸ Hin-Yan Liu and Karolina Zawieska, 'From Responsible Robotics towards a Human Rights Regime Oriented to the Challenges of Robotics and Artificial Intelligence', *Ethics and Information Technology*, 22.4 (2020), 321-33 <https://doi.org/10.1007/s10676-017-9443-3>.

⁵⁹ Gugun El Guyanie and Aji Baskoro, 'The Constitutional Rights of Indigenous Beliefs Adherents In Minority Fiqh Perspective', *Ijtihad: Jurnal Wacana Hukum Islam Dan Kemanusiaan*, 21.2 (2021), 155-75 <https://doi.org/10.18326/ijtihad.v21i2.155-175>.

act and the physical competence.⁶⁰ The competence to act means that the person has the rights and is liable for the consequences resulted from actions. Meanwhile, physical competence refers to a person's capacity to experience a range of movement intensities and durations as well as their ability to build movement skills and patterns.⁶¹ Furthermore, being human has been accepted as the only condition in order to have the capacity to act, additional features such as sound mind and maturity have also been required for the capacity to act in Islam. In fact, the imposition of the legal status of minors or people with mental illness cannot be carried out because it is not enough to be a human being in the capacity to act, but there must be additional criteria such as being mature and of sound mind.⁶²

The physical competence which develops by following the physiological development stages of human beings was explained by the scholars of *fiqh* by connecting it with righteous legal personality (*dhimma*), and especially the first period Hanafi scholars focused on the concept of *dhimma* as a qualification for the physical competence. In the dictionary, *dhimma*, which means "testament, trust, treaty", is generally defined in Islam as "a *shar'i* quality that enables people to be competent in rights and obligations".⁶³ It has been accepted that the essence of *dhimma* is based on the divine contract between Allah and the servants, which is described in Quran Surah Al-A'raf, verse 172. This covenant in the Qur'an says, "And recall (O Prophet) when your Lord brought forth descendants from the loins of the sons of Adam, and made them witnesses against their ownelves. asking them: 'Am I not your Lord?' They said: 'Yes, we do testify.' We did so lest you claim on the Day of Resurrection: We were unaware of this."⁶⁴ The characteristic of being a legal person is comprehended by this qualification called *dhimma*.

According to Islamic law, in order to be addressed by the divine and to be able to perform religiously and legally valid actions, the physical's capacity is not sufficient. The existence of reason and *tamyiz* (the ability to distinguish good from bad) is sought for the competence to act, and the person must reach the mental state to comprehend and judge the religious and legal rulings. In the dictionary, *tamyiz*, it expresses the ability to distinguish between benefit and harm, good and bad, even at a minimum level, and develops with the period of puberty (*bulugh*), which is the expression of the transition from childhood to adulthood. With *rushd* (good conduct), which is the period when a person reaches mental and intellectual maturity, full capacity to act is acquired.⁶⁵

Mukallaf, who has reached puberty and whose actions are subject to legal consequences, is considered to be the addressee of the divine will and competent for all kinds of religious, legal and moral obligations. Fiqh scholars have focused on the concept of reason and have defined the mind in various ways in terms of its nature and function. To briefly touch on the concept

⁶⁰ Wardah Yuspin Wardah Yuspin, Kelik Wardiono, Arief Budiono, Said Gulyamov, 'The Law Alteration on Artificial Intelligence in Reducing Islamic Bank's Profit And Loss Sharing Risk', *Legality: Jurnal Ilmiah Hukum*, 30.2 (2022), 267–282 <https://doi.org/10.22219/ljih.v30i2.23051>.

⁶¹ Rufinus Hotmaulana Hutauruk, David Tan, Ampuan Situmeang, Hari Sutra Disemadi, 'Developing an Indonesian Regulatory Framework in the Face of SEZs 5.0', *Journal of Indonesian Legal Studies*, 8.2 (2023), 453–500 <https://doi.org/10.15294/jils.v8i2.67623>.

⁶² Sira Rahman, 'Religion and Animal Welfare—An Islamic Perspective', *Animals*, 7.12 (2017), 11 <https://doi.org/10.3390/ani7020011>.

⁶³ Parolin Gianluca, 'Equality before the Law', in *The Ashgate Research Companion to Islamic Law*, ed. by Rudolph Peters (Routledge, 2016), p. 13 <https://doi.org/10.4324/9781315613093>.

⁶⁴ T. Saiful and others, 'Gender Equality Perspective and Women Position in Islam', in *Proceedings of the International Conference on Law, Governance and Islamic Society (ICOLGIS 2019)* (Paris, France: Atlantis Press, 2020) <https://doi.org/10.2991/assehr.k.200306.212>.

⁶⁵ Bilal Hussain, Hafiz Ghulam Abbas, and Khalid Hussain, 'Legal Competency for Marriage: In an Islamic and Pakistan Law Perspective', *Al-Aijaz Research Journal of Islamic Studies & Humanities*, 6.1 (2022), 12–24 [https://doi.org/10.53575/e2.v6.01.\(22\)12-24](https://doi.org/10.53575/e2.v6.01.(22)12-24).

of the *Usulists*, Ghazali emphasizes that the mind consists of the attribute of knowledge in the sense of "knowing the truth of things, and the ability to perceive information" is synonymous with the heart when it is used for the expression. According to al-Ghazali, heart, soul, and mind are names that a single reality takes according to different respects. This truth, which is a spiritual trick, is the essence that makes a human, and it forms the aspect of him that knows, comprehends, and is the addressee of the divine offer. As can be seen, in the eyes of the methodologists, reason is the ability to comprehend the result of things and the truth of things, and is regarded as a unique characteristic to humans only.⁶⁶

In classical *fiqh* literature, legal personality, competence, *tamyiz* and ability to reason are mentioned as qualities belonging to real persons, but a legal person conceptualization as in positive law has not been clearly clarified. On the other hand, among today's Islamic jurists, there are those who adopt the view that legal personality can an institution such as the state, *Baitul maal* (treasury), foundations, and mosques. It is stated that these institutions, which were formed in the history of Islam, have property like real persons, and that they are under rights and obligations, and that the necessary situations brought by life result in the evaluation of these institutions as spiritual personalities within the framework of public interest. However, it is a fact that these limited number of examples did not develop in *fiqh*. Although the approach that the relevant institutions correspond to today's legal personality is adopted, the use of the capacity granted to legal persons is only possible through legal representatives, that is, real persons. An example of this is the fact that the issues related to the functioning of the state are handled in the context of the responsibilities of the head of state. According to Islamic law, the only entity that is accepted as a person whose words and actions are imposed legal consequences is human. No legal status or responsibility has been imposed on non-human beings.⁶⁷ Accordingly, it can be said that it is not possible to recognize artificial intelligence robots as a legal or electronic person.

In the hierarchy of existence, human being is in the highest position among the creatures. While the whole universe has been created for human being, the purpose and responsibility of human's existence is to attain knowledge.⁶⁸ Therefore, according to *maratibul wujud*, artificial intelligence systems are at the level of things. Giving a legal status to robotics will mean that they have all kinds of rights, are liable for duties and have the capacity to undertake criminal responsibility. However, as mentioned, it has been deemed necessary to have the characteristics of reason and *dhimma* for legal responsibility in Islamic law. It is the presence of *dhimma* together with the mind that makes man the subject of divine and legal obligations. Although it has been emphasized in some of the modern studies that *dhimma* corresponds to the concept of legal personality, in *fiqh*, *dhimma* is a spiritual quality that is acquired by being born as a human being and includes worships as well as legal issues. Therefore, it is not possible to approve the views expressed that artificial intelligence robots are accepted as human by definitions such as "humanoid", even that they reach a dimension of existence and meaning that transcends human beings, in terms of jurisprudence.

⁶⁶ Maythem Al-Janabi and Nur Kirabaev, 'Areas of the Competence of Reason in the Teachings of Al-Ghazali', in *Proceedings of the 2nd International Conference on Contemporary Education, Social Sciences and Humanities (ICCESSH 2017)* (Paris, France: Atlantis Press, 2017) <https://doi.org/10.2991/iccessh-17.2017.10>.

⁶⁷ Izzidien Ahmed, 'Shari'ah, Natural Law and the Original State', in *Routledge Handbook of Islamic Law*, ed. by Khaled Abou El Fadl, Ahmad Atif Ahmad, and Said Fares Hassan (New York, NY: Routledge, 2019.: Routledge, 2019), p. 26 <https://doi.org/10.4324/9781315753881>.

⁶⁸ Mansoureh Ebrahimi and Kamaruzaman Yusoff, 'Islamic Identity, Ethical Principles and Human Values', *European Journal of Multidisciplinary Studies*, 6.1 (2017), 325 <https://doi.org/10.26417/ejms.v6i1.p325-336>.

The Quran says in surah Al-A'raf verse 172, "Indeed, we offered the Trust to the heavens and the earth and the mountains, and they declined to bear it and feared it; but man [undertook to] bear it. Indeed, he was unjust and ignorant." In addition, the Quran also says in surah Al-Isra verse 13, "And every man's augury have We fastened to his own neck, and We shall bring forth for him on the Day of Resurrection a book which he will find wide open." The Prophet also states that non-human beings, whether animate or inanimate, are not legally suitable for assuming responsibility.

The feature that distinguishes human from other beings and makes him human is that he has been entrusted with the divine contract he made with the Creator. Therefore, only human beings have the capacity to both have rights and be liable for duties and to make dispositions that will create rights and duties of their own free will. Artificial intelligence robotic systems do not have the capacity to be accepted as responsible entities in this sense as well as to impose legal consequences on the conducts that are the product of algorithms, and to be subject to civil and criminal liabilities. Autonomous artificial intelligence also decides and acts with the algorithms uploaded to it. Therefore, there is no autonomy that is completely independent of human intervention.⁶⁹ The owners of these errors should be responsible for the damage caused by the errors caused by the production, software or use of artificial intelligence robots. If it is possible for them to take a harmful action by making an independent decision, then it is the responsibility of artificial intelligence researchers to produce them in a way that will not cause this and to take the necessary precautions from the beginning.⁷⁰

Therefore, one, several or all components of the manufacturer, software developer, vendor and user (owner) will undertake the compensation for the damages that may arise from the actions of the artificial intelligence robots, thus preventing the transfer of their responsibilities to the robots. In this context, it is not an appropriate comparison to compare artificial intelligence systems with those with legal capacity, such as minors or mentally ill, in terms of civil and criminal liability. Because there is no possibility of comparing entities that are not on the same level hierarchically. On the other hand, according to Islamic law, minors and mentally ill people do not have criminal responsibility, but they are held responsible from the civil side and the compensation of the financial penalties envisaged for the crime they have committed is fulfilled by their legal representatives. It should be noted once again that robots cannot have a liability that will cause them to assume civil or criminal responsibility.⁷¹

4. Conclusion

The developments in artificial intelligence technology cannot be considered independence of morality, value and law. It is morally and legally impossible to allow the weakening of values and harming humanity on the grounds of individual and social benefit. It may be possible to restrict scientific research that upsets values and has harmful consequences for humanity, or to ban it completely, depending on the situation, in accordance with the principle of "*sadd al-dzarai*" in *fiqh*. In addition, "*fitra*" are moral meanings inscribed in the human soul. It is morality together with reason that makes man human. Although an artificial intelligence robot has intelligence, it has no morals. It does not seem possible to integrate this spirituality into it. It is a fact that artificial intelligence robots are included in the category of *jamadat*. No matter

⁶⁹ Deborah G. Johnson and Mario Verdicchio, 'Why Robots Should Not Be Treated like Animals', *Ethics and Information Technology*, 20.4 (2018), 291–301 <https://doi.org/10.1007/s10676-018-9481-5>.

⁷⁰ Andrea Bertolini and Giuseppe Aiello, 'Robot Companions: A Legal and Ethical Analysis', *The Information Society*, 34.3 (2018), 130–40 <https://doi.org/10.1080/01972243.2018.1444249>.

⁷¹ Georgios A. Tzeferakos and Athanasios I. Douzenis, 'Islam, Mental Health and Law: A General Overview', *Annals of General Psychiatry*, 16.1 (2017), 28 <https://doi.org/10.1186/s12991-017-0150-6>.

how advanced it is, it is not possible for an artificial intelligence to acquire a biological vitality. Furthermore, it is not acceptable for humans to try to eliminate their own responsibilities by attributing a moral and legal entity to robots. Proposals to create a special insurance for the robotic artificial intelligence technologies sector and to compensate for material damages caused by artificial intelligence from this fund can be considered worthy of discussion within this framework. Although the existence of the idea of legal personality is mentioned as a concept in Islamic law, it is still the responsibility of people to act on behalf of legal entities such as companies and foundations. Recommendations and attempts to introduce a legal or electronic personality to artificial intelligence robots, from the manufacturer to the user, in a way that excludes the human element and responsibility, should be approached with caution. Because the more important the use of robots in works for the benefit of humanity, especially in dangerous areas, the more it is necessary to stay away from constructing a future in which humans will be dominated by robots and to be in control of humans.

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