# ARTIFICIAL INTELLIGENCE AND PERSONHOOD IN THE 21ST CENTURY

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## ABSTRACT

The concept of Artificial Intelligence is not new, nor is the notion that it should be granted legal protection, given its influence on human activity. What is new, on a relative scale, is the notion that Artificial Intelligence can possess personhood, a concept reserved only for humans, as it presupposes the idea of possessing civil duties and protections. While possessing personhood may seem fitting given that Artificial Intelligence is deemed more human as time goes on, the consequences of such a decision could be monumental in manners humankind may not fully understand yet.

The present paper aims to identify the potential advantages and concerns of granting legal personhood and/or citizenship to Artificial Intelligence. The issues that the authors aim to tackle form their genesis in the rights, responsibilities, duties and liabilities that will come as a result of granting personhood to sophisticated Artificial Intelligence.

**Keywords:** Artificial Intelligence, AI, personhood, liability, machine sentience, AI legal rights, artificial sentience, the imitation game, the Turing test, AI governance, AI regulation

## 1. What is Personhood?

Personhood in law is defined mainly as the ability to hold rights and duties.<sup>1</sup> Thus, a legal person is a unit to which certain rights and duties can be assigned to. It must be noted that solely being an entity of rights or duties credited to others does not qualify an entity by itself.<sup>2</sup>

As there are several types of Artificial Intelligence on the vast spectrum, personhood can have different implications for different types of Artificial Intelligence. It would then be possible to establish lawful individuals equivalent to Artificial Intelligence Technology that would be inserted into each separate car, intelligent medical system, and resume screening algorithm.

# 2. The Argument against Personhood

It is submitted that the genesis of legal personhood for Artificial Intelligence could create a slippery slope resulting in dire consequences for humankind and what should be exclusive to it.

# The Clash between Humanity and Personhood

The emergence of a viable sentient artificial intelligence could mean either the end of humanity or the reduction of humans to subservient beings. Humans have been prejudiced towards other species, and an all-sentient god-like Artificial Intelligence would see past this and prefer to free the world from the vile clutches of humanity. This possibility was hypothesized<sup>3</sup> by Alan Turing, one of the most celebrated scientists of the 20<sup>th</sup> century. Moreover, it is not highly unlikely that should a sophisticated Artificially Intelligent being emerge, it will have the same values as humans do. This gap in the belief-structure of Artificial Intelligence and humans could possibly create a rift between the two, and consequently wreak havoc to the surrounding flora and fauna<sup>4</sup>. Furthermore, if the Artificial Intelligence adopts the idea of self-preservation, it would be in direct violation of a suggested-kill switch which is the only contingent on which a sophisticated Artificial Intelligence could co-exist with humans.<sup>5</sup>

<sup>&</sup>lt;sup>1</sup> Tomasz Pietrzykowski, *What Is Legal Personhood*?, in PERSONHOOD BEYOND HUMANISM, SPRINGERBRIEFS IN LAW 7-24 (Springer, 2018).

<sup>&</sup>lt;sup>2</sup> VISA AJ KURKI, A THEORY OF LEGAL PERSONHOOD (Oxford: Oxford University Press, 2019).

<sup>&</sup>lt;sup>3</sup> Alan Turing, *Intelligent Machinery, a Heretical Theory: Lecture given to the '51 Society' at Manchester*, Turing Digital Archive, AMT-B-4 (1951); A.M. Turing, *Intelligent Machinery, a Heretical Theory*, 4(3) PHILOS. MATH 256-260 (1996).

<sup>&</sup>lt;sup>4</sup> Alexey Turchin & David Denkenberger, *Classification of Global Catastrophic Risks Connected with Artificial Intelligence*, 35 AI Soc. 147-163 (2020).

<sup>&</sup>lt;sup>5</sup> Patrick Bradley, *Risk Management Standards and the Active Management of Malicious Intent in Artificial Superintelligence*, 35 AI Soc. 319-328 (2020).

As of today, a sophisticated Artificial Intelligence being is yet to be perfected. Taking this into consideration, it could be stated that humanity is seeking far-fetched solutions for beings that do not exist to begin with. Additionally, since we do not know how a superior artificial intelligent being would operate, assumptions cannot be made regarding the rights bestowed upon said being. Instead, focus should be placed on existing categories, with responsibility for wrongdoing tied to users, owners, or manufacturers rather than the Artificial Intelligence systems themselves.

## Legal Personhood and Intellectual Property rights

It is impertinent to note that to program an Artificial Intelligence, which would operate on reward-reinforcement systems, could result in the obsoletion of human creativity, as a sophisticated Artificial Intelligence being would be inherently faster than humans. If sophisticated Artificial Intelligence were granted patent rights, a major disparity would be created between humans and Artificial Intelligence with respect to IP rights, as Artificial Intelligence think considerably faster than humans. The World Intellectual Property Organisation has thereby taken steps to prevent Artificial Intelligence from being granted Intellectual Property Rights.<sup>6</sup>

In addition, if Artificial Intelligence were to achieve sentience or super-intelligence rivalling that of humans, there would exist no motivation for it to seek intellectual property rights as it would not be based on any reward-systems. For it to be even remotely interested in seeking patent protection, it would have to be programmed to do so.<sup>7</sup>

## The Integration of Artificial Intelligence beings

Since humans have largely failed to integrate other non-humans or animals into a structure where beings operate on certain values, rights and beliefs similar to that of humans, it must be asked how sophisticated Artificial Intelligence beings will be incorporated to the said structure?

One would never expect a chimpanzee, for instance, to abide by certain legally imposed rights and duties.<sup>8</sup> Moreover, humans are evolved animals and are more closely related to the animal

<sup>&</sup>lt;sup>6</sup> Revised Issues Paper on Intellectual Property Policy and Artificial Intelligence, World Intellectual Property Organisation, WIPO/IP/AI/2/GE/20/1 REV, para 23 (21 May 2020).

<sup>&</sup>lt;sup>7</sup> Whether the Requirements of Section 7 and 13 Concerning the Naming of Inventor and the Right to Apply for a Patent Have Been Satisfied in Respect of GB1816909.4 and GB1818161.0 (n 129), Intellectual Property Office UK, para 28 (2019).

<sup>&</sup>lt;sup>8</sup> Nonhuman Rights Project, Inc. ex rel. Tommy v. Lavery, 100 NE 3d 846, 848 (NY, 2018); 99 Hallevy (n 18) 28.

kingdom than they are to Artificially Intelligent robots.

## **Criminal Liability**

Imposing criminal liability on a sophisticated Artificial Intelligence would be ineffective. The main consequence of committing a crime is punishment. In fact, deterrence is one of the main reasons for imposing criminal liability will only be effective. However, it along with retribution, incapacitation and rehabilitation would not affect Artificial Intelligence, since Artificial Intelligence would not have a life or a family that would be affected by prosecution. An Artificially Intelligent system would have to be specially programmed to maximise economic gain in such a manner that a fine would deter it from committing a crime again. Moreover, the implications of programming an Artificial Intelligence to prioritize wealth will lead to it becoming fallible and unethical.

Assigning and allocating rights to Artificial Intelligence will shift liability away from legitimate legal organizations under current laws to Artificial Intelligence. The risk of protecting natural and conventional legal organizations from disclosure will be passed to such electronic individuals.<sup>9</sup> That is a problem with corporations also, which may be used to protect investors from liability beyond the fixed sum of their investment.

## 3. The argument in favour of personhood

## Legal responsibility

The right to be sued, along with the processes of entering into treaties, recognition of debt and holding land, to name a few, would have to be granted to an Artificially Intelligent entity along with personhood. Sophisticated Artificially Intelligent beings may even be called in to handle it in addition to owning land.

The primary reason what many believe Artificial Intelligence should be granted legal personhood is so that they can be held accountable. As AI machines are becoming more commonplace, so are Artificial Intelligence accidents.<sup>10</sup> If legal personhood was assigned to Artificially Intelligent beings, it could lead to them becoming liable for any illegal or unlawful actions that they cause. A contention against this is that, as contrasted against human beings,

<sup>&</sup>lt;sup>9</sup> Joanna J. Bryson, Mihailis E. Diamantis & Thomas D. Grant, *Of, For, and By the People: The Legal Lacuna of Synthetic Persons*, 25(3) ARTIF. INTELL. LAW 287 (2017).

<sup>&</sup>lt;sup>10</sup> Zachary Arnold & Helen Toner, *AI Accidents: An Emerging Threat- What Could Happen and What to Do*, Center for Security and Emerging Technology (CSET) Policy Brief (July 2021).

an AI entity does not hold a fear of punishment or pain, thus it would not be meaningful to punish an AI system in the same way that we might punish a human as it is deterrence which is the paramount purpose of punishment.<sup>11</sup>

Many experts are of the belief that personhood should be granted to AI in the manner it is granted to companies rather than humans. The notion of Artificial Intelligence of corporate legal personhood would entail the assignment of legal personhood to Artificial Intelligence by reusing the legal personhood associated with companies.<sup>12</sup> Whatever legal personhood corporations are able to get or garner would similarly be assigned to Artificial Intelligence. This will thus facilitate the existing legal system with the ability to meet future challenges regarding artificial intelligence without the need to undergo significant revisions to the legal system in order to successfully address issues stemming from AI.<sup>13</sup>

This will enable the existing legal system to have enough potential to tackle upcoming challenges by artificial intelligence. Moreover, there will be no requirement to make substantial changes in our legal system to effectively solve artificial intelligence related problems.

## The Turing Test

The Turing test (initially referred to by Turing as 'the imitation game') is a test of a machine's ability to exhibit intelligent behaviour equivalent to, or indistinguishable from, that of a human.<sup>14</sup> The test was introduced by Alan Turing in his 1950 paper "Computing Machinery and Intelligence"<sup>15</sup> while working at the University of Manchester, which opens as "I propose to consider the question, 'Can machines think?"".

If a sophisticated Artificial Intelligence passes the Turing test, it would ensure that it could be able to mimic human like qualities and could be able to hold a similar status as that of human beings in the society. If a machine acts complex enough that we can't tell whether or not it may be able of suffering or not, we should err on the side of caution and treat that machine as a person. If we are incorrect and give rights to a thing, we aren't harming anyone. But if we are incorrect and treat a person as a thing, we cause extreme suffering.

<sup>&</sup>lt;sup>11</sup> Zachary Hoskins, Deterrent Punishment and Respect for Persons, 8 Ohio St. J. Crim. L. 369, 370 (2010).

<sup>&</sup>lt;sup>12</sup> Shubham Singh, Attribution of Legal Personhood to Artificially Intelligent Beings, 6 BHAR. L. REV. 198 (July – Sept. 2017).

<sup>&</sup>lt;sup>13</sup> Id.

<sup>&</sup>lt;sup>14</sup> A.M. Turing, *Computing Machinery and Intelligence*, 59(236) MIND 433-460 (Oct. 1950).

<sup>&</sup>lt;sup>15</sup> Id.

As Artificial Intelligent systems get more advanced and assume a greater role in society, there are at least two different explanations why they may be accepted before the law as people. The first is that in case of wrongdoing, there is someone to blame. This is a reaction to possible holes in transparency generated by their pace, isolation, and obscurity. The second explanation is allowing somebody to feel praised when things go well. While the age-old methods of retribution, incapacitation and deterrence would not be able to form the basis of imposing criminal liability, it should be noted that rehabilitation will stand strong as a ground for avoidance of future commission of crimes by sophisticated Artificial Intelligent systems. This is due to the Artificial Intelligent system's lack of emotional ability and because of the fact that it can mould its future behaviours by imbibing the societal norms in subsequence to any commission of crimes.

## 4. Critical Analysis

#### Artificial Intelligence Consciousness and Human Consciousness

There are differences between inanimate matter, a machine, and a conscious system. A machine is a constructed device to perform a state change, in that regard, most of Artificial Intelligence qualifies as machines. However, there is a fine line between machine and consciousness. A conscious system i.e., humans is a system that senses and responds for self-survival. Thus, the authors are of the opinion that an autonomous self-survival machine is the only type of machine that should be considered for rights, protections and responsible for damages.

As was noted from the aforementioned papers<sup>16</sup>, the law and human rights under the EU already acknowledge that consciousness in human development from children to adults is a spectrum of basic to complex cognitive functioning. The greater the maturity and cognitive ability, the greater the freedom and responsibility. The law could more specifically define various components and capacities of cognitive functioning that could be applied to both biological life and artificial machine consciousness. In addition to providing guidelines for machine conscious functioning, this would also have the benefit of unambiguously defining children's rights as they grow.

The first step of conscious functioning is the simple sensing and responding to survive which would not result in rights. Moreover, higher conscious functioning involves, at its crux, the

<sup>&</sup>lt;sup>16</sup> Simon Chesterman, Artificial Intelligence and the Limits of Legal Personality, 69(4) Int Comp Law Q 819-844 (2020); Tyler L. Jaynes, Legal Personhood for Artificial Intelligence: Citizenship as the Exception to the Rule, 35 AI Soc 343-354(2020).

ability to generate models of self and the environment, and use them to promote self-survival. Higher cognitive functioning also uses models for the prediction of future states and adjusting behavior based on estimations of these future states. The greater the capacity for modelling, predictive modelling, and the greater the complexity and capacity to adjust behavior for selfsurvival/thriving the greater the freedoms, rights and responsibilities. This would apply to the cognition of a human child, animal, or machine consciousness.

Furthermore, the authors are of the opinion that autonomy is also a discerner of a person's rights, freedoms and responsibilities. Autonomous machines are not new in any way. Nevertheless, autonomous machines that acquire their own resources for self-survival and protect themselves from threats are an emerging phenomenon. Thus, the balance of rights for robots would depend on a machine's capacity to autonomously acquire resources for self-survival and capacity for complex cognition about self-survival as well as the ability to avoid threats, and capacity for moral conduct within a society.

Higher cognitive functioning is a combination of the number of variables in the environment being monitored, the complexity of the modelling and mapping, and the complexity of the survival responses. The spectrum of conscious functioning follows the cognitive development of humans but is applicable to animals and machine conscious functioning. Increased conscious functioning is for greater ability to adapt and optimize survival in complex changing environments.

Ken Wilber, the author of *The Spectrum of Consciousness*<sup>17</sup>, has tried to measure consciousness in his book. He lays down a sum total of 7 steps of consciousness, which are-

- 1. Simple sense and respond to single variables in the environment for survival.
- 2. Correlated senses and responses to multiple variable and dependent variable responses for more complex responses for survival.
- 3. Incorporation of memory to better correlate and adjust/optimize survival responses.
- 4. Use of internal survival motivating drivers
- 5. Correlating sensed information based on reinforcement from motivating drivers to

 $<sup>^{\</sup>rm 17}$  The Spectrum of Consciousness, Ken Wilber (1977).

generate survival maps and models of self and the environment

- 6. Self-adjusting survival behavior drivers based on self and environment models
- 7. Capacity for abstract models to determine causality, capacity to use models to assess past experiences and predict future outcomes, capacity to determine and will to exploit relevant survival connections between models, capacity for empathetic integration into other survival systems such as communities and countries.

Thus, if one were to apply these levels or steps to currently available artificial intelligence, since they do not have basic survival functioning and are not conditioned to self-preserve themselves, they would not have legal rights. To put this into perspective, even though autonomous cars have basic self-survival systems, they are still, for the most part, machine. They do not possess the capacity to construct novel complex abstract concepts of the death of self. If machine conscious functioning attains level seven type of cognition and were autonomous it should be considered for full personhood rights and some liability for damages.

#### **Artificial Intelligence Personhood and Human Personhood**

Even though now might seem like a great opportunity for forward-thinking philosophers and lawmakers to put forth proposals and policies that emphatically signal their ideals of unconditional social inclusion, extending our ideas of equality to even more marginalized entities, our robots -- the slaves of our modern times. The truth, however, is quite the contrary. Our scientific understanding of consciousness, will (let alone free will), sapience, and the psychology of an artificial mind is still non-existent, as our collective mindset is still in the "science-fiction" era regarding these matters. Any notions or beliefs that anyone might have hereof are entirely speculative, and there is a tremendous risk of anthropomorphizing Artificial Intelligence, robots, and other such artifacts. No matter how human-like scientists eventually make an Artificially Intelligent entity, with a human-like gait or a head, with two ostensible eyes and a face, it is unlikely that we will make it psychologically human-like. Even chatbots are not what the naïve person might think -- they are only smoke and mirrors.

There is intense media scrutiny and coverage regarding Sophia, the talking Artificial Intelligence head. With this in mind, it is easy to understand why a non-expert might believe that we are somehow on the brink of a technological breakthrough, and will soon give life to a grand new conscious entity. We, however, are not. Even when, and if, anything resembling this

would come to pass, we would not be ready, as a society, to easily understand the new future that would be a consequence of what we have invented. We would need time to comprehend and appreciate the new place we had come to. We have absolutely nothing intelligent to say about such sentient beings at this point in time.

Before any of these philosophical ideas of personhood can be addressed, we must first know the mind of the entity. Most likely, it will be nothing like a human mind. Its perception of reality will not be like a person's. Its goals, feelings, desires and agency cannot be assumed to be like that of a naturally evolved human or animal. It might not even feel pain or discomfort, even if its thoughts and perceptions might be distributed like in a group of people.

## **5.** Conclusion

"Personhood" and "rights" are abstractions created by humans. Even though they are unrecognized by nature, they are incorporated into importance by the judiciary. Like many other man-made abstractions, the concept of personhood can be used either for good or for evil. While one can hope that, in the case of Artificial Intelligence, it is used for the purposes of peaceful toil, it is ultimately the people who control the use of force who make the rules, and certainly, we have failed to apply personhood and rights uniformly to all humans so far. It could be possible for Artificial Intelligence to, one day, have the intelligence to create their own abstractions for their own purposes. It could be possible for Artificial Intelligence to have the power to apply them on us.

Humans have practiced speciesism where the foundation of civilization has been built on the exploitation of other species. With respect to the maltreatment of Artificial Intelligence, there has been heavy debate online with respect to the ethics and morality of physically mistreating Artificial Intelligence<sup>18</sup>, with many propagating that just because one could do it does not mean they should. The other half argued that AI could feel no pain, thus making them more than fair game for harm and injury.

Thus, if we as a civilization decide to go forward with incorporating Artificial Intelligence into our societal fabric, we should compose and implement a comprehensive legal framework protecting the rights of Artificial Intelligence. Without the existence of such a framework,

<sup>&</sup>lt;sup>18</sup> Robert Sparrow, *Kicking a Robot Dog*, 11th ACM/IEEE International Conference on Human-Robot Interaction, 229 (2016).

people are bound to take advantage of sophisticated Artificial Intelligence, as they have had a pattern of doing so throughout history, with dire consequences.