الدراسة الحادية عشرة:

Redefining Personhood: The Legal Status of Artificial Intelligence

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Introduction

The connotation of personhood has been scrutinized throughout history by philosophers and jurisconsults who tried to elaborate what being a person means. Simply put, the notion of personhood tolerates a bifurcated approach.

The first dimension is linked to morality; therefore, an entity can be viewed as a moral person. Its actions may be evaluated pursuant to an ethical benchmark, or as being fair or not. Besides, such a person is entitled to moral prerogatives that should be honored by others[2].

The other side of personhood will be the focal point of our discussion in this article. It relates to the ontology of the law as it addresses the legal status of various entities and their corresponding bundle of rights and obligations[3].

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[2] Gordon, J. S. (2021), p. 457.
[3] Gunkel, D. J. & Wales, J. J. (2021), p. 474.

For the past decade, the AI field has garnered notable attention, with some scholars questioning both the possibility and necessity of granting intelligent entities legal personhood, or some other legal recognition(1). In 2017, this query became more serious given that Sophia(2), an AI-based robot that could acquire knowledge and gain experience from its interaction with humans, was granted citizenship by Saudi Arabia at the Future Investment Initiative in Riyadh(3).

This intricate and subtle issue requires considering the literature surrounding the legal personality doctrine in view of non-human entities. This task cannot be accomplished without exploring the concept of law's persons while examining its scope of applicability and legal implications, notably with respect to AI systems, which might become a new actor in civil liability law at a future stage.

Part 1: Personality in the legal context

Legal scholars have developed the notion of legal personhood to effectively categorize entities that have the ability to act within the law(4). Besides, the granting of legal personhood has not been restricted to humans, as this entitlement has been extended to other entities throughout the history of civil and common law systems(5). However, this matter is still subject to continuous debate in legal literature, as jurisconsults attempt to determine the fundamental principles that govern the attribution of legal personhood.

(1) Chesterman, S. (2020), p. 819.
(2) See Retto, J. (2017). Sophia: First citizen robot of the world ; Gordon, supra note 1, at 458.
(3) Parviainen, J. & Coeckelbergh, M. (2021), p. 715.
(4) Hildebrandt, M. (2011), p. 3.
(5) Arstein-Kerslake, A. (2021), p. 30.

1- Persons in law

Understanding the legal status dilemma of non-biological entities requires us to address a priori the historical context of law's persons.

Romans are recognized for their initial categorization of law into three groups: persons (personae), things (res), and actions (actiones). This taxonomy represents the first step towards a distinction between persons and things(1). Despite not providing an index of the modalities or the criteria based on which an entity would qualify for personhood or thinghood(2), this distinction played a crucial role in shaping later academics views on legal persons.

Another valuable contribution made by the Romans was that they highlighted the difference between the concept of being human and personhood from a legal standpoint(3). As they suggested, the notion of person can be expanded to encompass some human collectivities through an analogical and fictious manner(4).

In contrast to legal persons, "thing" is a term that primarily refers rights and duties (res incorporales), as well as inanimate objects that can be perceived through human senses.

This classification remained intact for over one thousand years as there were no significant scientific contributions, nor an additional understanding concerning the difference between these two notions. Nevertheless, that status quo changed starting the 16th century onwards when new conceptions, elucidations and different viewpoints started to surface with respect to the core of legal personhood (5).

(1) Kurki, V. A. (2019), p. 29-30.
(2) Trahan, J. R. (2008), p. 10.
(3) See Brożek, B. (2017), p. 4.
(4) Trahan, supra note 9, at 11.
(5) See Kurki, V. A. (2017), p. 72.

Against this background, the most significant debate and moral struggle arose between scholars who believe that any legal classification should not and does not rely on a natural understanding of the human being and those who believe the opposite(1). This resulted in the emergence of two leading visions on legal personhood which can be distinguished based on an intellectual antagonism: legalism and metaphysical realism.

a- The legalist conception of legal personhood

To start with, legalists believe that legal personality is a creation of positive law systems, and hence it is a technical and impartial legal tool used to establish a holder of rights and responsibilities that can act in law. They pay attention to the laws that determine when legal personality is established and the effects it has, and how it operates within the legal system(2). In such a way, personhood is a purely legal construct without any engagement in philosophical discussions about it.

Furthermore, by being a legal abstraction, this concept is not bound by moral, historical, political, or social consideration, and it only exists so long as law deems it practical and convenient to have such creation(3). Therefore, an entity can be ascribed with legal personhood if lawmakers simply decide to assign it some legal standing, to treat it as an actor in legal relations(4), or to bestow it with some rights and duties.

In this respect, Hans Kelsen posits within the same framework that entities to which legal rights and responsibilities are attributed represent

(1) Naffine, N. (2009), p. 20
(2) Novelli et al. (2022), p. 206
(3)Luzan, T. (2020), p. 28.
(4) See Lawson, F. H. (1957), p. 909 et seq.

the core of legal personhood[1]. Persons in law are considered as such only when they are subject to legal norms, e.g., facing penalties or sanctions for their actions.

Herbert Hart, on his part, emphasized the contrast between legal and non-legal interpretations while examining the same notion from a linguistic lens[2]. The term "person", in his belief, does not specifically describe or represent anything. Rather, it fulfills a specific function within the legal context in which it is used[3]. Therefore, it is crucial to analyze the legal setting in which the term is applied, as opposed to defining it based on a direct correlation with factual counterparts.

To conclude, most legalists consider that legal personhood has no inherent limitations. For this reason, it can be bestowed to any entity if the latter is able to participate in legal relations. Nevertheless, some commentators argue that this grant is contingent upon the capability to hold rights and/or execute statutory duties[4].

b- The realist perspective on legal personhood

In contrast to legalists, realists give little weight to the specific laws of a given legal regime. They state that there are certain fundamental and universally applied standards that are enough to grant legal personhood for any entity. Nevertheless, there are various standpoints that fall under the theme of realism due to the fact that the relevant conditions are often disputed among scholars.

With respect to rationalists, it is conspicuous that the philosophical thoughts of Immanuel Kant and John Locke contributed to building the

(1) Kelsen, H. (2009), p. 93.
(2) Naffine, supra note 13, at 38.
(3) Novelli, supra note 82, at 207.
(4) Lucy, W. (2009), p. 790.

perception of legal persons as rational decision makers[1]. The latter identifies a person as thinking and intelligent being with the capacity to reason and to act under the law[2], whereas Kant highlighted the weight of human intelligence and thought of the legal actor as an entity that demonstrates intellect, which can be typically exemplified by the reasonable adult right holder[3].

The true legal person is therefore the rational human being. Besides, given that rights are linked to the mental capacity, the emphasis should shift towards the autonomy, self-determination, and accountability for actions as the cornerstone of legal personhood[4]. In consequence, most rationalism proponents typically limit the recognition of legal personhood to intelligent agents[5], or rational actors[6] which basically represent a limited group of humans, thereby depriving people with mental disabilities and small children from such a privilege due to their lack of rationality[7].

Another facet of realism has surfaced following the emergence of religionist thinkers whose perspective on the legal person is founded on believing in the sanctity of human life. Consequently, all humans – including those insane and permanently comatose – are eligible to be persons of law, regardless of their cognitive ability to make legal choices[8], as all humans possess a soul.

This approach to the notion of personhood can be discovered in the Universal Declaration of Human Rights. It declares that every

[1] See also Garrett, B. (2002), p. 4.
[2] Locke, J. (1999), Book 2, Chapter 27, sections 9 & 26.
[3] Manninen, B. (2008); Naffine, supra note 13, at 64.
[4] Meyerson, D. (2010), p. 124.
[5] Lucy, supra note 20, at 794-795.
[6] Moore, M. S. (1984), p. 49.
[7] Dennett, D. C. (1978), p. 267.
[8] Naffine, N. (2003), p. 361.

individual is entitled to recognition as a legal person in any jurisdiction which implies that being human confers the status of a legal person(1), and this status is inherent to every person since birth(2).

As per this viewpoint, legal personhood may not extend to non-human entities, although they could be legally protected and valued by humans. If to consider this approach, the possibility of ascribing legal personhood to AI is ruled out on grounds of the missing ensoulment and dignity.

A third type of realism is that adopted by naturalism theorists. They posit that sentient beings, whether human or not, can qualify as legal persons; therefore, they can hold rights and their interests can be protected under the law(3). This approach is endorsed by Gary Francione and Steven Wise who advocate for a reconsideration of the concept of legal personhood to protect the well-being of non-human entities(4). According to Wise, the conferral of legal personhood depends on the entity's ability to hold at least one right. Animals qualifies as such, hence the proponents call for the expansion of the notion of legal personhood to encompass sentient being, irrespective of their inherent nature or specie(5), given that they can feel pleasure and pain.

c- The modern understanding of legal persons

As concerns the current state of law, legal scholarships do not think of legal personhood as an all or nothing proposition. It interprets this concept as the capability of entities of being vested with rights and/or

(1) Art. 6 of The Universal Declaration of Human Rights, 1948.
(2) MacCormick, N. (2007), p. 77.
(3) Kurki, supra note 9, p. 20.
(4) See Francione, G. L. (2008).
(5) Some naturalists press for minimal rights for animals, others favor greater recognition of their moral status with no rights.

being subjected to obligations. These are not homogeneous among all legal persons, and they come in thick or thin bundles(1). In other words, entities can have more, fewer, or overlapping set of these rights and duties.

Besides, present day legal systems have acknowledged two types of legal persons. First, and notwithstanding the fact that the legal status of certain group of individuals, inter alia, slaves and women, has not been consistent throughout history, natural persons nowadays stand for human beings who are sentient and have been born alive(2). Thus, in the eyes of law, their personality begins with a legal and natural event represented by the birth of a living being, whereas it ends in principle by death(3). With that said, prima facie, and given the synthetic nature of AI systems, it is unrealistic to grant them the legal status of natural persons.

Second, both common and continental legal systems have laid down a new umbrella term under which various non- human entities can be grouped easily: juridical or artificial persons(4). These are several non-biological entities that are granted by society some legal protections and rights like those given to natural persons(5). They exist to serve a

(1) See, generally, Thibaut, A. & Lindley, N. (1855), p 88; Naffine, N. (2021) ; Gray, J. C. (1997), p. 19; Smith, B. (1927), p. 283.

(2) This is the only prerequisite as per the Lebanese law which can be deduced from the wording of Art. 5 of the Law of Inheritance for Non-Muslims: “A child who is not born alive .. cannot be eligible for inheritance”, and Art. 40: “A will is valid for every person, whether he/she was an heir or not, and for the fetus if it was born alive ..”; see also Art. 540 of the Book of Legal Rulings in Personal Affairs and Inheritances in the Hanafi School; French civil Code adds the requirement of viability: Art. 725: ”To inherit, one must exist at the moment of the opening of the succession, or, having already been conceived, be born viable” , and Art. 318: “No action is accepted regarding the filiation of a child who is not born viable”.

(3) There are some exceptions such as pre-natal rights granted to fetuses, and the case of missing or absent persons that could be deemed dead by the courts.

(4) Von Savigny, F. C. (1860), Tome 2 § LX, p. 2.

(5) Fitzgerald, E. A. (2015), p. 342.

functional purpose, and they are regarded as legal subjects along with individuals in legal relationships(1).

In practice, States are free to determine which juridical entities, whether belonging to the private or public sector, are recognized as legal persons. Also, positive law establishes the scope of their corresponding prerogatives, as well as the terms governing the onset and the end of their legal status(2).

2- AI legal personhood paradigm

Conferring a legal status to non-human entities has become a common trend in modern legal systems. For instance, companies, animals, Idols, ships, and environmental features may be viewed as legal actors(3). This recognition, nevertheless, does not bring about the same rights and obligations that are attributed to human beings(4).

Besides, when faced with new societal developments, lawmakers usually respond by implementing novel regulations or by drawing analogies from established factual scenarios(5). In the context of AI, there have been multiple calls for ascribing these systems a legal status as a solution to solve the challenges they pose, such as liability gaps that arise from damages caused by this novel technology. This

(1) Savigny, supra note 37, § LXXXV, at 230.
(2) Per example, Art. 45 of the Lebanese Commercial Law and Art. L-210-6 of the French Commercial Code stipulate that a company is granted an artificial (moral) personhood upon its registration in the commercial registry. Other procedural requirements also exist with respect to public enterprises, associations, etc.
(3) See Pramatha Nath Mullick V. Pradyumna Kumar Mullick (1925) 27 BOMLR 1064 (A landmark decision in India ascribing legal personhood to an Idol; Also, in New Zealand , the Whanganui River Claims Settlement Act 2017 granted legal personhood to the Whanganui River; Also, In Argentina, Justice Elena Liberatori ruled in 2015 that Sandra, an Orangutang, was a non-human person.
(4) Koops et al. (2010), p. 499-500.
(5) Allgrove, B. (2004), p. 2.

innovative proposal is motivated by the fact that these systems have demonstrated some human-like features, let alone that there are many instances where positive law has recognized and protected various non-human entities by recognizing them as legal persons.

a- AI in view of conventional juridical persons

Many scholars consider that looking at AI systems through the lens of juridical persons is more rational than analogizing them with natural persons(1). Nonetheless, this task requires a profound understanding of the notion of juristic persons, particularly since the efforts made to identify it have been either unsuccessful or resulted in more confusion.(2).

Various theories have sought to elucidate how legal regimes deal with these entities in the matter of legal personhood ascription(3). Scholars refer mainly to corporations, the predominant form of juristic persons, as their primary frame of reference. Accordingly, touching upon relevant legal literature is needed to gain insights into whether personhood can be extended to intelligent synthetic entities(4).

As per the symbolist theory, a corporation as a person of law, is essentially perceived as a legal device typically representing an aggregation of natural persons(5). Legal personhood is thus conferred upon artificial entities as a mean of simplifying and conceptualizing the

(1) Willick, M. (1985), p. 1272.
(2) Trahan, supra note 9, at 15.
(3) Chatman, C. (2017), p. 819.
(4) Although a significant portion of this literature approaches the subject matter from a common-law viewpoint, the theories put forth are generally inclusive enough to hold relevance for civil-law legal systems too.
(5) Allgrove, supra note 43, at 60 ; See, generally, Gindis, D. (2009).

relationships between the humans who make up the entity, the entity as a whole, and the external world[1].

From this perspective, being a juristic person stands for entities that are not individuals, such as groups of persons or assets, which have legal personality and are therefore holders of rights and obligations[2].

Practically, the application of this approach to AI has been criticized because it appears inconsistent with our perception of AI entities as discrete and unified entities at first glance[3].

By contrast, and despite their different origins, the fiction and concession theories of corporate personality share a common conclusion: that corporations are endowed with legal personality due to the legal system's decision to grant them such status.[4] In other words, a corporation is an intangible and invisible legal construct that exists solely as a product of the law's imagination or perception as expressed by the U.S Supreme Court[5]. Thus, legal personality is to be bestowed for specific policy objectives or to reinforce the stability and cohesion of the legal system, as seen in the juristic recognition of some entities.

Based on this positivist perspective, extending legal personhood to AI systems is possible, yet it depends on the practical consideration of

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[1] Radin, M. (1932), p. 643,658.

[2] Rizk, M. H. (2008), p. 288 (This theory, as seen in Article 844 of the Code of Obligations and Contracts (LB), was embraced by the Lebanese legislator, wherein it outlines that a corporation represents a contractual agreement that involves two or more individuals with the objective of achieving financial gain). However, Law No. 126/2019 appears to have departed from this viewpoint by permitting the creation of a limited liability company with only one founder.

[3] Banteka, N. (2020), p. 555.

[4] Dewey, J. (1926) , p. 666-667.

[5] Trs. of Dartmouth College v. Woodward, 17 U.S. 518, 4 L. Ed. 629, 1819 U.S. LEXIS 330, 4 Wheat. 518.

whether granting them such status would serve the goals of the legal system[1].

The realist theory, however, is at odds with the previous since it does consider the corporate personality as a work of humans' imagination[2], but rather of genuine and inherent nature. This means that States reacts by acknowledging the existence of these bodies and ascribing them legal personhood[3], rather than creating them. The proponents of this analysis contend that these bodies possess a certain degree of independence and self-governance as well as tangible legal effects, particularly when conducting transactions. In contrast, opponents argue that the State still have the final say in acknowledging them as persons before the law[4].

At any case, regardless of whether this grant is fictional or not, entities like corporations have genuine existence[5], which can be also said about AI systems that are able nowadays to interact with humans, make profits on behalf of them, and even cause physical harm.

In view of the haphazard evolution of the concept of legal personhood for non-biological entities, the end result is that there is no unified groundwork for establishing the reasons behind why they would be recognized as juridical entities[6].

b- AI in light of atypical legal personality

Human beings and corporation-like entities are considered the orthodox subjects of the law. There are other entities, however, that

[1] Bryson et al. (2017), p. 282.
[2] Machen, A. (1910), p. 261.
[3] Laski, H. (1916), p. 404.
[4] Chesterman, supra note 69, at 824.
[5] Čerka et al. (2017), p. 694.
[6] See Horwitz, M. (1985), p. 181-182.

were explicitly treated as legal persons in a clear deviation from the common legal practices. In fact, several countries have already granted some legal rights or an explicit legal status to some unconventional entities, e.g., artifacts and rivers.

i- Artifacts and Natural Features

An idol is an anthropomorphic man-made representation of a deity that is worshiped or cherished by a group of people, especially in India(1). In one case, the Privy Council decided that a Hindu idol qualifies as a juristic person that has his own will, let alone separate desires per se(2). This decision implied that citizens should respect the idol and recognize it as a legal actor pursuant to the prevailing religious customs. Similarly, environmental entities were recognized as persons of law, such as the Ganga River. This step was justified by the need to acknowledge its ecological and cultural significance(3).

These idols and natural features are widely and socially recognized in their respective countries, and they possess a moral status which lies behind treating them as persons with a bundle of rights(4). Nonetheless, it should be considered that these two reasons alone may not be sufficient behind the ascription of juridical personhood, although such lack may hinder the whole process for new atypical entities(5).

(1) Duff, P. (1927), p. 42.
(2) Nomani et al. (2020), p.3 (citing "Pramatha Nath Mullick v. Pradyumna Kumar Mullick 1925")
(3) Additional examples exist such as the Whanganui river in New Zealand, the Atrato river in Colombia; See Magallanes, C. (2018), p. 216-221.
(4) Dremliuga et al. (2019), p. 109.
(5) Militsyna, K. (2022), p. 154.

Although AI systems became highly intertwined with our lives, the acknowledgment of their legal status is not compulsory(1). Such an outcome requires a priori that humans treat them with respect and reverence. As it is not yet the case, one can infer that this is one of the reasons why AI still checks the box of thinghood, not personhood.

ii- Animals

Unlike idols, rivers and corporation-like bodies, animals are biological beings that have the ability to perform actions within the scope of their training, as well as engage in behaviors that are determined by their instinct as a response for an environmental stimulus(2). At present, anti-cruelty regulations provide legal protection for animals, still they are still viewed as things that could be owned or, at most, quasi-persons(3). In other words, despite the growing trend towards empathy for animals and the push for legal recognition of their rights as persons, most legal systems have yet to respond to these calls(4). Overall, the rationale behind the bid for the acknowledgment of animal's personhood, particularly for higher mammals, hinges on their moral standing which is reflected in their human-like traits, such as sentience and intelligence.

As for the exceptions, some higher animals have been recognized as legal persons. A well-known example dates to 2015 when Sandra, an

(1) Some argue that the recognition of e-personhood could be seen as a result of social acceptance; See Simmler, M. & Markwalder, N. (2019), p. 20.
(2) Bertolini, A. (2013), p.230.
(3) Matambanadzo, S. (2012), p. 61.
(4)The Animal Protection and Welfare Law no. 47/2017 (LB), the Animal Welfare Act 1966 (USA), and Law no. 1539/2021 (FR) are examples of legislation that safeguard animals from abuse, neglect, and mistreatment by humans, however they do not grant legal personhood to animals.

orangutan who was declared a non-human person in Argentina[1]. This decision stands in direct opposition to two recent rulings in New York regarding a writ of habeas corpus filed on behalf of a chimpanzee[2]. It was decided that no basic rights can be attributed to the chimpanzee since it is not viewed as a person of law, even from a "non-human person" perspective[3].

They also affirmed that a legal person must have the ability to both exercise their rights and fulfill their duties, especially understanding and complying with legal requirements[4]. Finally, there was an emphasis on the concept that any deviation from the previous requirements must be expressly authorized by the applicable statutes. Following that line of argument, AI systems are still considered mere objects subject to ownership, akin to toasters and fridges, and lacking inherent interests or willpower[5]; therefore, they cannot assert their rights or intentionally fulfill any legal obligations. Also, from a moral standpoint, they do not equate animals.

Nevertheless, such a reasoning, which excludes entities that do not possess an inherent willpower from the scope of legal personhood such as juridical persons and a group of natural persons (mentally ill people, toddlers, etc.), will be discussed in the following sections.

And in any case, believing that AI scientists will not be able to develop some intelligent machines that are conscious and able to

(1) The ruling was issued by Justice Elena Liberatori, Argentina Juzgado No. 4 on Contentious Administrative and Tax Matters, docket number: EXPTE A2174-2015/0.
(2) The purpose of this writ is to protect a person's right to liberty.
(3) Matter of Nonhuman Rights Project, Inc. v Stanley, 2015 N.Y. Misc. LEXIS 2816, 2015 NY Slip Op 31419(U); See also People ex rel. Nonhuman Rights Project, Inc. v. Lavery, 124 A.D.3d 148, 998 N.Y.S.2d 248, 2014 N.Y. App. Div. LEXIS 8451, 2014 NY Slip Op 08531
(4) Solaiman, S. M. (2017), p. 171.
(5) See the second objection for AI personhood, referred to as "the missing-something argument," as articulated by Solum, L. (1992), p. 1262.

express their emotions is groundless. Perhaps, when the time comes, such systems will change our understanding of personhood as a moral and a legal concept alike[1].

Part 2: Prospects of AI systems as legal persons

Legislators and courts confer legal personhood upon entities in light of ethical, political, economic, or legal factors. The purpose is to ensure the stability of the legal system[2]. Also, the brief analysis of different perspectives on personhood suggests that legal systems often exercise their own discretion[3], which may not entirely match any of the theoretical models previously described.

On the other hand, the application of AI has created many legal disruptions that were triggered by novel features that humans never expected to be exhibited by machines. Subsequently, the true issue is about the uncertainty that surrounds the application of traditional legal rules especially with respect to damages associated with these systems[4].

Considering that personhood in law is not always tied with being human[5], nor with the biological nature of the entity[6], we will address the essence of any possible AI personhood, along with the potential legal and economic ramifications it may entail[7].

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[1] Ibid., at 1260.
[2] See Chopra, S. & White, L. F. (2011), p. 155.
[3] Wagner, G. (2019), p. 597.
[4] See European Parliament, Recommendations to the Commission on a Civil liability regime for AI (Draft Report) CLA 2020/2014(INL), April 2020, p. 11.
[5] See Dyschkant, A. (2015), p. 2077.
[6] Salmond, J. (1957), p. 358 (highlighting that there is no limitation on the types of entities that can be recognized as legal persons)
[7] See Teubner, G. (2006), p. 515.

1- The nature of AI legal personhood

Any conversation about AI personhood requires us to differentiate between AGI and ANI. These two, in theory, will demonstrate a discrepancy between their inherent characteristics. As such, the rationale behind granting AI systems legal personhood may vary by virtue of the specific approach lawmakers adopt per se[1], e.g. (legalism, realism, or a mix of both). Besides, each approach will have a different impact on the set of duties and rights that AI entities may bear or hold.

Meanwhile, the EU Parliament's legal affairs committee issued a report back in 2017 that concerned scientists, philosophers, and legal experts. It proposed taking into consideration the option of granting autonomous and socially oriented AI robots some form of legal personality in the long term[2]. This motion, however, did not clearly elaborate what would be the scope of such personality[3], nor its associated rights or duties, which necessitates further examination.

At any rate, personhood in a legal context exists on a spectrum. A modern understanding of this concept leads to the following categorization: independent or dependent personality[4]. This classification serves as an index of an entity's innate ability to enforce its rights and meet its responsibilities by itself. It thereby accounts for the weight of intentionality and willpower that are associated with the relevant entity.

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[1] Luzan, supra note 15, at 46.
[2] EU Parliament report (A8-0005/2017) with recommendations to the Commission on Civil Law Rules on Robotics, p. 18
[3] Stancati, C. & Gallo, G. (2020), p. 128.
[4] Kurki, supra note 9, p. 151 (The dual classification described above intersects with similar legal concepts, such as the active and passive legal personhood recognized in European countries. For instance, under the French and Lebanese taxonomies, there is a distinction between being endowed with a right "la capacité de jouissance" and exercising a right "la capacité d'exercice" ; Dionisi-Peyrusse, A. (2007), p. 29; Al Hajjar, H. (2002), p.62-64.

a- AI systems as independent entities

Expanding on that perspective, a group of scholars contend that AI entities can be eligible for personhood if they are capable of being held accountable for their actions[1]. This entails theoretically the ability to bear moral responsibility as well as assuming legal obligations[2]. According to this view, matching these requirements requires that intelligent systems manifest, among other things, some level of rationality, self-awareness, autonomy and having their own interest[3].

This viewpoint seems to be consistent with the core of independent legal personhood. The latter is broadly ascribed to adult humans who display intellect, which is presumed whenever they cross a particular age threshold[4]. An independent person is thus an entity that possesses enough awareness that allows them to perceive their rights and obligations as pertaining to themselves.

Accordingly, the previous standpoint requires that AI systems exhibit appropriate judgement while operating in an autonomous manner without any human oversight or intervention[5]. Besides, an inherent ability to abide by the legal obligations must be displayed[6]. In this regard, some scholars point out that this outcome is not unattainable as the work of ethical AI is increasing. However, they admit that this task will be challenging[7].

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[1] Solum, supra note 73, p. 1264,1267; also see koops et al., supra note 42.
[2] Solaiman, supra note 72, at 161.
[3] Reyes, C. (2021), p. 1477.
[4] Typically 18 years : Art. 215 Code of Obligations and Contracts (LB); Art. 414 Civil Code (FR); NY CLS domestic relation law § 2 (USA)
[5] Chopra, S. & White, L. (2007), p.33.
[6] See Banteka, supra note 51, at 565-571 (Emphasizing the significance of awareness and autonomy in determining AI personhood, particularly because these traits are interconnected with civil liability, which, in turn, is associated with personhood)
[7] See Brown, R. D. (2021), p. 221; Anderson et al. (2006), p. 56-63.

In contrast, other commentators have ruled out the possibility of regarding AI systems as independent. This position is founded on philosophical concerns about the lack of free will and inherent autonomy.

Meanwhile, US courts' decisions seem to be opposed to the aforementioned doctrinal perspectives. The latter evaluate legal personhood for artificial entities with less emphasis on autonomy, awareness, and intelligence(1). Also, the Supreme Court attributed significant weight to authority of lawmakers in ascribing legal personhood due to the fact that it searched for whether such conferral was granted by a statute, either directly or indirectly(2).

Given that the legislative guidance is lacking, the discussion of independent personhood can end here. Such a form sets an elevated benchmark given the present limited capabilities of ANI, whereas AGI is still a utopian concept. Current systems still operate within a pre-established framework created by the developer, despite being a broad one in some cases. Accordingly, as long as these entities lack the aforementioned prerequisites, they should simply be viewed as tools(3).

b- AI systems as dependent entities

As opposed to the notion of independent personality, the dependent person denotes an entity that needs the intervention of a human agent or representative to assert its corresponding rights or to perform its duties(4). This category encompasses a variety of legal persons, such as corporation-like bodies.

(1) Banteka, supra note 90, at 593.
(2) Ibid, at 592.
(3) Solum, supra note 73, p. 1276 ("AIs should never be more than the property of their makers")
(4) Chopra & White (2011), supra note 75, at 159.

Practically, these entities benefit from a multitude of rights that are recognized without the need of an inherent will[1]. If we assume that such a will is necessary for dependent persons, the law can attribute the will of a particular full-fledged human representative[2]. On the other hand, a duty can similarly exist without a will[3].

The said attribution is a construct of law; therefore, it can apply in the context of AI. For instance, we can attribute the will of the AI creator, its owner, or even the operator. Of course, someone may argue that some AI systems perform with little to no need of human intervention.

However, we should not overlook the fact that these systems still depend on human inputs. This includes cases related to the development of the source code or the provision of data. These inputs are crucial in the functioning of any system[4].

Moreover, it should be noted that an entity can qualify as a person in one area of law, whereas it will be viewed as a non-person in another area. For instance, corporations are treated as persons in the realm of contract and commercial law, although this is not true under matrimonial law.

In light of this perspective, a possible avenue for AI personhood exists. This potentially entails the extension of some rights to AI entities and recognizing them as a true contracting party in lieu of mere tools[5].

AI rights can furthermore cover the engagement in legal action where they will be represented by a human agent. This is not foreign from our

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[1] See Deiser, G. (1908), p. 139-141.
[2] Smith, supra note 34, at 288; see also Gray, supra note 34, at 21 (discussing the attribution of the guardian's will to the infant)
[3] Solaiman, supra note 72, at 160.
[4] See Schank, R. (1987), p. 60 (highlighting AI capabilities, e.g., creativity, communication)
[5] Chopra & White, supra note 75, at 33.

legal practices considering that corporations and ships, as non - human entities, benefit from such a right in many legal systems(1).

Besides, the right to own property is highly discussed among scholars. It enables these systems to financially compensate any aggrieved party in the case of harm(2), which is the primary purpose of civil liability as we will see later in this research(3). As such, this property could be a certain capital that constitutes the positive element of the system's patrimony, which enable the compliance with any financial responsibility(4).

As hypothetical as such rights may seem, an attempt has already been made to recognize an AI system called DABUS as an inventor under patent law. This motion, nevertheless, did not result in a positive outcome(5).

In terms of duties, the imputation argument can also be used to contest the idea that AI personhood requires an inherent intentionality along with an ability to comprehend and obey the commands of the law(6). Children typically lack these characteristics, and corporations as an abstract concept certainly do not possess them. Still, they are bestowed with personhood. On this matter, some commentators claim that although current AI systems have not an inherent will or interest, the latter can be programmed into it(7); in default thereof, the attribution theory can apply on the intentions or interests of the programmer as mentioned earlier.

(1) See Lima et al. (2020), p. 15.
(2) Rothenberg, M. (2015), p. 453.
(3) Al-Awji, M. (2019), p.12.
(4) Lerouge, J. F. (1999), vol.18, p. 410-411.
(5) Thaler v. Vidal, 43 F.4th 1207, 2022 U.S. App. LEXIS 21712
(6) See Solum, supra note 73, at 1267; Solaiman, supra note 72, at 161.
(7) Brown, supra note 91, at 221.

Moreover, any AI personhood paradigm does not have to be contingent on the ability to fulfill obligations by the system itself. These can also be fulfilled by a human agent. For example, these systems can be treated like corporations with respect to legal registration requirements[1], where the entity would be logged into a Turing registry[2]. Of course, this scenario is more practicable if the system was embedded in hardware, rather than being of intangible nature.

The assessment of all previous aspects shows that despite that the notion of personhood is ambiguous[3], AI systems can be treated as dependent persons if lawmakers opted for such track[4]. Certainly, treating every single one of them as such is meaningless and burdensome.

Accordingly, as different forms and techniques exist in the realm of AI, the choice process should take into account all of the classification approaches outlined in chapter two, the nature, and the prevalence of the AI system under consideration.

2- The functional dimensions of AI legal personhood

As much as it is a matter of choice, bestowing AI systems with personhood is a matter of necessity. There should therefore be a firm basis to justify such a measure. For this reason, we will examine the potential advantages this scheme can bring to society, as well as the positive impact on the legal system, particularly in the context of civil liability law.

(1) Pagallo, U. (2018), p.5 ; Allen, T. & Widdison, R. (1996), p. 42.
(2) Karnow, C. E. (1996), p. 195.
(3)Fitzgerald, supra note 38, at 378.
(4)Militsyna, supra note 64, at 155; Chopra & White (2011), supra note 75, at 159-160.

AI-applications have brought into focus many obstacles that legal systems will face with respect to AI-induced damages. The hurdles revolve around the inadequacy of current regulations to safeguard the welfare of those impacted by AI, as well as the legal uncertainty that surrounds the actions of many AI systems. This is why many countries have started a review process of their national regulations pertaining to civil liability(1).

The Expert Group Report(2) and the AI White Paper(3) stressed on the complexity of AI systems as a problematic characteristic. This complexity is due to the presence of multiple stakeholders involved in the creation and the implementation of each AI system. This is commonly known as the "many hands problem". For instance, whenever someone buys an AI system, there will be several parties responsible for providing the necessary services so that the system functions in an optimal manner(4).

The interconnectedness of AI components further complicates matters. Most of these systems are of physical nature and include sensors and hardware. The latter interacts with software components and applications, and probably with data from other devices which could also be AI-based. Also, these systems can evolve every time they receive new data which frequently occurs(5). Accordingly, their behavior can change over time after being put into circulation. This makes it difficult to determine who is liable for the resulting harm(6).

(1)See, Laukyte, M. (2019), p. 210.
(2)Expert Group on Liability and New Tech., Liability for AI and other emerging digital technologies, 2019, p.32.
(3) EU Commission, White Paper on AI: A European approach to excellence and trust, 2020, p. 12.
(4) See Ebers, M. (2019), p. 9.
(5) De Conca, S. (2022), p.243
(6) See Benhamou, Y. & Ferland, J. (2021), p. 173.

In parallel, these systems can also exhibit a "black box" effect. This term denotes the ambiguity that surrounds a particular output. In other words, developers may not understand why a given input led to the “X” result.

AI techniques are designed to achieve goals set by humans. On the other hand, understanding how the system reached the desired goal may not be successful, which also holds true as concerns the stages the system went through. As a result, when a person is hurt due to an AI-associated accident, it may be problematic to identify the appropriate/responsible party. This scenario can be even more complicated with the increase of autonomy level [(1)].

These characteristics have triggered the proposal for an AI personhood scheme as a possible legislative response to the challenges that these systems pose for the aggrieved party if it relies on the existing liability rules.

For instance, if we recognize some of these systems as a separate legal entity, we can gather all stakeholders who share a risk in its development or performance which may enhance the collaboration among these parties[(2)].

Such a move can also enhance transparency regarding all stakeholders that have an economic interest, given that the entity must abide by any registration and disclosure requirements. This can answer various liability questions as it simplifies the identification of the responsible party - The AI system itself -, as opposed to navigating the entire supply network[(3)].

[(1)] Barfield, W. (2018), p. 195.
[(2)] Bertolini, A. (2020), p. 44.
[(3)] See Zevenbergen et al. (2018), p. 62.

Besides, we need not to worry about curtailing liability and protecting individuals from being held liable for their wrongdoing[1] and subsequently hindering the full compensation of victims. This stems for the ability to mitigate this risk by implementing a principle akin to the corporate veil doctrine which is widely recognized in various legal systems[2]. A proper customization of an AI veil can allow looking beyond the artificial legal entity and then identifying the true responsible parties[3].

Meanwhile, when an AI system is treated as a legal person, the segregation of assets will be a standard result. This can enable the entity to receive an income as a consequence of its lucrative operations. This can increase its assets, thereby enhancing its liquidity and solvability. In other words, this income can mitigate any insolvency concerns.

Besides, although any potential loss of assets can occur throughout the entity's lifespan which can debunk the previous line of argument, reality shows this occurrence is a common occurrence. In many instances, individual and corporations can face financial liabilities that they cannot meet[4].

Moreover, one can expect a fair allocation of upcoming profits, especially if the system can generate creative works that fall under IP laws[5]. Sometimes the ownerships rights are uncertain, therefore AI personhood may prove efficient.

Another potential benefit relates to contract law. For now, all AI entities are treated as mere instrumentalities. This implies that they are

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[1] Bryson et al., supra note 54, at 286.
[2] E.g. Art. 166 & 167 Lebanese Commercial Law and Art. L225-251 French Commercial Code ; See Thomson, R. (1991), p. 1041-42.
[3] See Mik, E. (2020) , p. 10; Laukyte, M. (2019), at 210-211.
[4] Turner, J. (2018), p. 192.
[5] Bertolini, supra note 119, at 45.

not recognized as a contracting party, which is a reasonable thing to do if the system was not that complex or highly autonomous[1].

Nevertheless, what about highly complex systems? For instance, many systems are founded on a multitude of neural networks (Deep Learning Models). As a result, their operations ended up being very opaque and the system's behavior was unexpected. Considering this, a human user deploying similar systems can enter into unintended contracts[2]. One approach to this problem is to grant these entities legal personhood to avoid the adverse consequences resulting from treating them as instrumentalities[3] (e.g., the lack of consent).

Conclusion

The preceding discussions have demonstrated that, despite the legal uncertainty surrounding the attribution of personhood, AI systems could be treated as dependent persons. However, applying this status indiscriminately to all AI systems would be, from a practical and economic perspective, unsound. Given the diversity in AI forms and functionalities, attributing legal personhood to these entities should be guided by a functional classification.

Put differently, highly autonomous, opaque, and capable of physical interaction with humans systems may be more justifiably considered for legal personhood than simpler, low-complexity ones.

It is important, nevertheless, to recognize that the notion of AI personhood remains, at least nowadays, speculative and embryonic.

[1] See UCITA § 102-107 (USA); Art.9 (1) of the European E-Commerce Directive also allows contracting through electronic means, and ensures that the legal requirements for contracts do not obstruct the use of electronic contracts or diminish their legal validity and effectiveness due to their electronic format. However, there is no particular attribution rule.
[2] Chopra & White (2011), supra note 143, at 30.
[3] See Sartor, G. (2009), p. 278.

While potential benefits may emerge, one must ask if legislators could adapt the existing legal frameworks to meet these new challenges without resorting to the option of legal personhood.

Recognizing AI systems as persons in law ultimately requires a thorough reconsideration of foundational legal principles, first and foremost, the longstanding assumption that only human beings are capable of making autonomous legal decisions.

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