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Artificial Intelligence: A Study of Present Legal Status with Future Prospects

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Abstract

When an alien entity is added to a river it agitates the whole river and a pattern of ripples are sent across the river. After some time, the river digests the entity and the flow again becomes normal. Presently Artificial Intelligence is that alien entity in case of human life. In 1950s this alien entity was dropped in the river of human life and from that time onwards it is continuously agitating different parts of human life till now. One aspect of human life which is affected by the AI is the legal one. Since the dawn of Artificial Intelligence hereinafter referred as AI, legal side has suffered many hardships in its working domain by the hands of AI because it is a novelty introduced into the equation. Introduction of something new into a stable equation means destabilization and that's exactly what AI did to the legal systems. Now for balancing the same equation again, one of the most important factor to be considered is the legal status of AI and the same is important because, with the passage of time, AI is becoming autonomous and self-sufficient. The core issue addressed by this research work is the legal status of AI. The methodology adopted for the research work is descriptive, analytical, and to a certain extent, comparative in nature. The scope of the research mainly consists of jurisprudential side of law, the present position of the issue in different legal systems is also dealt with and mostly a dialectic method of argumentation is adopted throughout the work. At the very end of the research work, it is suggested that the AI must be awarded with some kind of legal personality. For now, bestowing them with dependent legal personality can solve many of our problems but in future, once the AI becomes fully autonomous it will be needed to revisit the same question again and this time answer it differently.

Keywords: Artificial Intelligence or AI, Legal Status, Law, legal personality, Human, Legal system, dialectic approach.

1.1. Introduction:

Artificial intelligence (Hereinafter AI) is the fiction of bygone times, the reality of now, and the indispensable thread of morrow's fabric. In antiquity, robots and AI were just a mythical fabrication of our bottomless imaginative abilities and thus part of our fiction literature and nothing beyond. Nevertheless, thanks to Alan Turing, who took the intrepid step of first writing about principles of modern computers[1] and then late about intelligent machines[2]. Christopher Strachey holds the esteem of writing and introducing the very first AI in the year 1951 after the theoretical work of Alan Turing.[3] It is said that Strachey took the first practical step after the theoretical work of Turing, which led to further advancements in the future.[4]

It is a celebrated fact that history cannot be redrafted. The creator created, and thus creation came into being (Period). The same assertion also holds ground in the case of AI. Nowadays, the AI became an integral part of our society and mundane life, to the extent that today it touches every facet of our lives. It is rightly said that definite classes of AI are already perplexing dogmas of social relations, rudimentary canons amid states, and all the more so foundation stones of the law.[5]

As of today, no one denies the importance or role played by AI in our lives. If, today, someone negates the assertion as mentioned earlier. Then it is our humble advice for him to get out of his cocoon of biases and parochial mentality to look at his surroundings and reconsider answering the abovementioned averment neutrally. If AI has begun to play that much of an essential role in our society, then it is inevitable that AI will hit the walls of our legal systems. And believe me, today the AI is not just hitting the walls of our legal systems but is shaking its whole edifice. So the legal systems need to address this issue in order to survive this technological outbreak and in order to maintain its esteem.

The issue abovementioned is the kernel concern of this research. The research surf through the present position of AI in the vast ocean of law, and then at the finding of the research, it analyzed the legal status of AI.

The legal systems today are not adequately regulating AI as it must be dealt with. The legal systems are trying to tackle the conundrum with the same retrospective approach but in reality, what they need to do to tackle the same correctly, is to use a prospective approach. By inverting Zeno's paradox, it seems that the stride of the Law is too slow to catch up with the pace

[1] A. M. Turing, "On Computable Numbers, with an Application to the Entscheidungsproblem," *Proceedings of the London Mathematical Society* s2-42, no. 1 (1937): 231, accessed November 25, 2021, doi:10.1112/plms/s2-42.1.230.

[2] B. J. Copeland, s.v. "Artificial Intelligence - Alan Turing and the Beginning of AI," in *Encyclopedia Britannica* (), accessed November 25, 2021, https://www.britannica.com/technology/artificial-intelligence/Alan-Turing-and-the-beginning-of-AI.

[3] Copeland, "Alan Turing,"n.d.

[4] Copeland, "Alan Turing,"n.d.

[5]UgoPagallo, *The Laws of Robots: Crimes, Contracts, and Torts* (Berlin: Springer Science & Business Media, 2013), 2, https://link.springer.com/book/10.1007/978-94-007-6564-1.

of science and technological inventions[6]. The problem of AI is sui generis, and thus it is pertinent that it cannot be dealt with the same way as the previous problems were. The AI is just a random mishmash of certain symbols or letters (0, 1) and is put inside an articulated metal body. In this aspect of AI, it resembles other machine tools. However, at the same time, AI is autonomous and automatic, almost free from human interference.

Moreover, thus in this aspect, it resembles the Humans. It can work more precisely, proficiently, and with swiftness as compared to humans; thus, that is why AI must be looked at differently and approached differently, and that is why it is seriously thought and believed that Categorization of AI as a simple machine tool and a non-legal entity is not a just decision to make. It is almost like saying that humans are in many aspects like other animals, and thus they must be treated and categorized as an animal in the eye of law provided that its few unique features which make them unique must be disregarded. Thus it must not be treated as a legal person. Does it look fair? If not, then why is the same a good line of argumentation if AI is placed as the epicenter of the problem? Therefore, our legal machinery needs to ascertain legal issues related to AI.

Jacob Turner rightly said that "the world needs to be as well prepared as it can be for what has been, sensationally if not inaccurately, described as the unstoppable march of the robots—and the sooner we start seriously preparing, the better."[7] So, in order to prepare in the province of law for this march of robots, at the outset, we need to answer questions like, what is the effect of AI on the legal side of our lives. Or the same question can also be coined as, where does the AI stand in the legal arena? In short, what is the legal status of an AI simpliciter? At the same time, a corollary which is also needed to be answered is that what must be the legal status of AI?

2.1. Current Legal Systems and Status of AI:

Now, if we talk about the legislation concerning AI, one statement can be given authoritatively, and it is that there is no single legal system in the whole world that has a codified law about AI and which controls, regulates, and guides AI's operations and function ultimately. At present, no legal system in the world bestow upon AI the status of a legal person[8] but they only consider it as a mere tool in hands of a hominid and that is the main reason due to which there is no law dealing with the rights, duties and obligations of AI. Even though, recently some countries have started to work on making some basic principles, rules, and guidelines to regulate AI-based technology in different domains of our lives.

[6]Pagallo, *"The Laws of Robots," 2.*

[7] Jacob Turner, *Robot Rules: Regulating Artificial Intelligence* (Basingstoke: Springer, 2018), VII.

[8]Tavawalla, "Can Artificial Intelligence Be Given Legal Rights And Duties?," n.d; Čerka, Grigienė, and Sirbikytė, "Is it possible to grant legal personality to artificial intelligence software systems?," 2.

In its resolution on civil law rules about robots, European Parliament dealt with AI more like a mere tool in the hands of a human.[9] They recommended that in case of any civil wrong by AI, the liability of the same wrong will be on the shoulders of the owner or manufacturer.[10] In the case of compensation, two types of approaches are recommended. One is the "strict liability approach," and the other is the "risk management approach."[11] They also forwarded a suggestion that all the AI-based robots have to be registered with proper authority just for the sack of traceability and to implement other related rules quickly.[12] Some ethical principles for AI-based robotics were also given. First, "robots should act in the best interests of humans."[13] Second, "the doctrine of 'first, do not harm,' whereby robots should not harm ahuman."[14] Third, "the capacity to make an informed, un-coerced decision about the terms ofinteraction with robots."[15] Fourth, "fair distribution of the benefits associated with robotics and affordability of home care and healthcare robots in particular."[16] Recently, the European Commission also introduced the "Artificial Intelligence Act," the main aim of which is to regulate AI in the union countries.[17] The Act mainly focuses on regulating the manufacturing, use, trade, and other AI-related services in its jurisdiction, for which it has introduced an advanced "Product safety Regime."[18] It also banned specific uses of AI techniques in the concerned states because of its violation of fundamental rights.[19] The Act also inflicts a fine on the people/manufacturer who violates the rules given in it, and the fine is said to be 6% of the total worldwide turnover of the corporation or company.[20]

[9]EU, "Regulation Of The European Parliament And Of The Council Laying Down Harmonised Rules On Artificial Intelligence (Artificial Intelligence Act) And Amending Certain Union Legislative Acts," COM/2021/206 final.

[10] EU, "Regulation Of The European Parliament," para. 49-56.

[11] EU, "Regulation Of The European Parliament," under heading "Civil Law Liability."

[12] EU, "Regulation Of The European Parliament," para.2 under heading "*General principles concerning the development of robotics and artificial intelligence for civil use."*

[13] EU, "Regulation Of The European Parliament," under heading "Code Of Ethical Conduct For Robotics Engineers."

[14] EU, "Regulation Of The European Parliament," under heading "Code Of Ethical Conduct For Robotics Engineers."

[15] EU, "Regulation Of The European Parliament," under heading "Code Of Ethical Conduct For Robotics Engineers."

[16] EU, "Regulation Of The European Parliament," under heading "Code Of Ethical Conduct For Robotics Engineers."

[17]Mauritz Kop, "EU Artificial Intelligence Act: The European Approach to AI," *Stanford Law School*, no. 2 (2021): 1, accessed January 26, 2022, https://law.stanford.edu/publications/eu-artificial-intelligence-act-the-european-approach-to-ai/.

[18]Kop, "EU Artificial Intelligence Act," 1,2; EU, "Regulation Of The European Parliament," in general.

[19] Parliament.UK, "AI in the UK: ready, willing and able?," Parliament.UK, accessed January 26, 2022, https://publications.parliament.uk/pa/cm5802/cmselect/cmeuleg/121-iv/12104.htm; ARTIFICIAL INTELLIGENCE ACT, COM/2021/206 final, n.d.

[20] Parliament.UK, "AI in the UK," n.d.

The UK in 2019 released a guideline regarding the use of AI in the public sector.[21] The guideline covers topics like how AI can be used more helpfully; it also lays down guidelines for the ethical, fair, and safe implementation of AI in the public domain.[22]

America is among the most advanced nations on earth, yet it, too, lacks comprehensive AI legislation. Many states of the U.S are still talking about the regulation of AI and lay down some basic ground principles for it. In 2019, Alabama enacted a law to establish "The Alabama Commission on Artificial Intelligence and Associated Technologies."[23] The commission's sole purpose was to forward suggestions and recommendations to the legislature and government on the subject of AI.[24] In the same year, the senate of the state of Hawaii passed a resolution in which the senate requested the state to form an advisory committee concerning AI, which will tackle the question of how development, regulation, and implementation of AI are to be taken out on the state level.[25] The committee was requested to submit its reports on the issue, accompanied by any findings, recommendations, and suggested legislation, to the legislature.[26] Besides these mentioned legislations, there are many other legislation in different states of the U.S regarding AI regulation, implementation, and effect of the same on state policies.[27] After a general perusal of all the legislation mentioned and referred to here, it can be said that states of the U.S are still working on AI to know about it its effect on states, policies, and government. That is why most of the enactments here mentioned talk about creating either commission or committees to explore the concept of AI and then guide government and legislature on how the same problem is to be dealt with.[28]

A draft law was introduced in 2017 by a "Global law firm" on robotics in Russia.[29] This draft proposed certain amendments in the "Civil Code of Russian Federation."[30] The Draft

[21] GOV.UK, "A Guide to Using Artificial Intelligence in the Public Sector," GOV.UK, accessed January 26, 2022, https://www.gov.uk/government/collections/a-guide-to-using-artificial-intelligence-in-the-public-sector; Arzak Khan, "Artificial intelligence and its impact on freedom of opinion and expression in Pakistan," Global Information Society Watch, accessed January 26, 2022, https://giswatch.org/node/6181.

[22] GOV.UK, "A Guide to Using Artificial Intelligence," n.d.

[23] Artificial intelligence, Ala. Comm. on, estab. to study and advise Governor and Legislature on state policy issues, (Alabama) 2019 AL SJR 71.

[24] Artificial intelligence, Ala. Comm. on, estab. to study and advise Governor and Legislature on state policy issues, (Alabama) 2019 AL SJR 71.

[25]SENATE RESOLUTION "requesting the state to convene an artificial intelligence advisory committee to investigate how to implement, develop, and regulate artificial intelligence in the State." (Hawaii) S.R. NO. 42.

[26]SENATE RESOLUTION "requesting the state to convene an artificial intelligence advisory committee to investigate how to implement, develop, and regulate artificial intelligence in the State." (Hawaii) S.R. NO. 42.

[27] NCSL, "Legislation Related to Artificial Intelligence," National Conference of State Legislatures, accessed January 26, 2022, https://www.ncsl.org/research/telecommunications-and-information-technology/2020-legislation-related-to-artificial-intelligence.aspx.

[28] NCSL, "Legislation Related to Artificial Intelligence," n.d.

[29]Dentons, "Dentons Develops First Robotics Draft Law in Russia," Dentons, accessed January 26, 2022, https://www.dentons.com/en/insights/alerts/2017/january/27/dentons-develops-first-robotics-draft-law-in-russia.

divided robots into two categories.[31] First, those robots which do not enjoy full autonomy and are under the control of Humans to an extent.[32] Those robots will be considered property in some ways like animals and will be dealt with as per the general property rules.[33] Second, those robots with the ability and level of autonomy to do entire transactions for themselves can enter into a relationship of legal nature, i.e., a contractual relationship.[34] This second category of robots will be endowed with legal status and unique legal personality.[35] A concept of "Robot agent" was also introduced according to which those robots built and or intended to take part in civil commerce will have separate property, and if the liability of any kind arises against it, same will be fulfilled from the property owned by the Robot agent.[36] At the same time, it can have and exercise rights and have duties in its name and can be a party to the civil proceedings if the same arises from the domain of civil commerce.[37] The draft also points out that the final responsibility of the robot agent will lie on the shoulders of the owner or possessor, as the case may be.[38] In the case of autonomous robots belonging to the second category as supra mentioned, the owner/possessor will be responsible to the extent of the property they have transferred in the name of a robot agent or for the use of the same robot.[39] In the case of robots that are dealt with as property, the owner/possessor will be responsible to the full extent for any damages caused by the robot.[40] The draft also lays down that a robot agent can represent the owner/possessor if certain requirements are met.[41]

If we talk about India, there are no laws yet enacted explicitly related to AI, and thus AI is almost an alien subject in the legal arena of the state.[42] Both in the criminal and civil side of the judicial system, the old principles are being stretched to cover the issues raised by advanced technology and cope with them, However, it is a well-known reality that this will not succeed in the future as AI evolves and its impact grows. The nearest thing to the law related to AI in India

[30] A. Atabekov and O. Yastrebov, "Legal Status of Artificial Intelligence Across Countries: Legislation on the Move," *EUROPEAN RESEARCH STUDIES JOURNAL* XXI, no. Issue 4 (2018): 779, accessed January 26, 2022, doi:10.35808/ersj/1245.

[31] A. A. Vasilyev, Zh I. Ibragimov, and E. V. Gubernatorova, "The Russian draft bill of "the Grishin Law" in terms of improving the legal regulation of relations in the field of robotics: critical analysis," *Journal of Physics: Conference Series* 1333, no. 5 (2019): 2, accessed January 26, 2022, doi:10.1088/1742-6596/1333/5/052027; Dentons, "Dentons Develops First Robotics Draft Law in Russia," n.d.

[32]Vasilyev, Ibragimov, and Gubernatorova, "The Russian draft bill," 2; Dentons, "Dentons Develops First Robotics Draft Law in Russia," n.d.

[33]Dentons, "Dentons Develops First Robotics Draft Law in Russia," n.d.

[34]Dentons, "Dentons Develops First Robotics Draft Law in Russia," n.d.

[35]Vasilyev, Ibragimov, and Gubernatorova, "The Russian draft bill," 2.

[36]Dentons, "Dentons Develops First Robotics Draft Law in Russia," n.d.

[37]Dentons, "Dentons Develops First Robotics Draft Law in Russia," n.d.

[38]Atabekov and Yastrebov, "Legal Status of Artificial Intelligence Across Countries," 779.

[39]Dentons, "Dentons Develops First Robotics Draft Law in Russia," n.d.

[40]Dentons, "Dentons Develops First Robotics Draft Law in Russia," n.d.

[41]Dentons, "Dentons Develops First Robotics Draft Law in Russia," n.d.

[42] Anna, "*Responsible AI*," 32.

is the "Personal Data protection bill (2019)" designed to protect privacy in the world of Data.[43] Thus, AI can be regulated by the same to the extent of the bill's scope. Nevertheless, beyond that, AI is not a subject much entertained in the field of law.[44] In Pakistan, the situation is like in India, and no law specifically regulates AI.[45] The main problem is that the private sector is already switching to AI and doing most of its work using AI-based technology. If any issue arises related to these AI-based technologies, how will we deal with it? The government is not adopting AI advancement, or if adopting the pace is very slow, we need to take specific steps to keep our pace with the world and secure our country legally from these new technological advancements.

1.1.1. Thaler V. Commissioner of Patents[46]:

The Federal court of Australia lately settled this case in July 2021.[47] In this lis, the approach made by the judges is different from former approaches towards AI. It can be called the first case law, which bolsters the AI in the legal arena to contest its legal status.

A corporation named "Imagination Engines"[48] created an AI software called DABUS[49]. The word DABUS stands for "Device for the Autonomous Bootstrapping of Unified Sentience."[50] Stephen Thaler[51] is the inventor of the DABUS and the founder and CEO of its

[43] Anna, "*Responsible AI*," 32.

[44] Anna, "*Responsible AI*," 32.

[45] Khan, "Artificial intelligence," n.d.

[46] *Thaler v Commissioner of Patents* [2021] FCA 879.

[47] *Thaler v Commissioner of Patents*, 1.

[48] "Imagination Engines incorporation" is U.S based corporation which solely work in the domain of computer technology with core focus on AI technologies like Neural networking etc.; Imagination Engines, "About IEI," Imagination Engines, accessed January 22, 2022, https://www.imagination-engines.com/about.html; Crunchbase, "Imagination Engines - Crunchbase Company Profile & Funding," Crunchbase, accessed January 22, 2022, https://www.crunchbase.com/organization/imagination-engines; Scout Archives, "Imagination Engines, Inc," Scout Archives, accessed January 22, 2022, https://scout.wisc.edu/archives/r9729/imagination_engines_inc; ALL BIZ, "Imagination Engines Inc," ALL BIZ, accessed January 22, 2022, https://www.allbiz.com/business/imagination-engines-inc_1F-636-724-9000?__cf_chl_jschl_tk__=dse9DplmNfk8ZS4ClqMU0dJbnqMWtZ7PlpHVrVCiHB4-1642852641-0-gaNycGzNCD0.

[49] DABUS is an AI based software which mainly rely on neural networking in order to create new ideas by stitching together available simple concepts into more complex ones. For further details reference can be made to the following; Imagination Engines, "DABUS," Imagination Engines, accessed January 22, 2022, https://imagination-engines.com/dabus.html; Inside Tech Law, "The Year That Was for DABUS, the World's First AI 'inventor'," Inside Tech Law | Global Law Firm | Norton Rose Fulbright, accessed January 22, 2022, https://www.insidetechlaw.com/blog/the-year-that-was-for-dabus-the-worlds-first-ai-inventor; Lexology, "Meet DABUS: An Artificial Intelligence Machine Hoping to Maintain Two Patent Applications in Its Own Name," Lexology, last modified August 22, 2019, https://www.lexology.com/library/detail.aspx?g=c8362459-4735-43af-b744-4495e239fd0e; The Artificial Inventor, "Artificial Inventors," The Artificial Inventor Project, accessed January 22, 2022, https://artificialinventor.com/dabus/.

[50] Jones Day, "When Innovation Invents: Artificial Intelligence Issues at the U.S. Patent and Trademark Office," Jones Day, accessed January 22, 2022, https://www.jonesday.com/en/insights/2019/09/when-innovation-

mother corporation.[52] DABUS created an innovative receptacle for cold drinks[53] and an emergency flare called "Neural Flame" without human intervention.[54] So, Thaler filed an application for a patent with the inventor's name of "DABUS."[55] The authorities rejected the application by taking the stance that an AI cannot be an inventor as per the law of the "*Patents Act of 1990"* and "*Patent Regulations of 1991"*.[56] Deputy Commissioner turned down the application by saying that according to section 15(1) of the "*Patents Act of 1990,"* an AI cannot be considered an inventor.[57]Thaler filed a judicial review as per *Administrative Decisions (Judicial Review) Act 1977* (Cth) and section 39B of the *Judiciary Act 1903*(Cth) against the decision of the Commissioner.[58] The stance taken by Thaler was that section 15 of the Act and the Regulations could treat AI as an inventor if a more general approach is adopted towards the matter at hand.[59] At the same time, he stated that the Commissioner had miscomprehended the concerned law here.[60]

The main question before the court was whether the word "Inventor" used in the concerned Act and Regulations cover an AI? Justice Beach, in judgment, laid down that:

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invents; ManagingIP, "DABUS: South Africa Issues First-ever Patent with AI Inventor," Managing Intellectual Property, accessed January 22, 2022,https://www.managingip.com/article/b1sx9mh1m35rd9/dabus-south-africa-issues-first-ever-patent-with-ai-inventor.

[51] Stephen Thaler is a U.S based pioneer in the field of artificial intelligence who did his PhD in physics from University of Missouri-Columbia. For further details reference can be made to the following; Imagination Engines, "Founder," Imagination Engines, accessed January 22, 2022, https://www.imagination-engines.com/founder.html. ResearchGate, "Stephen THALER | President & CEO | Ph.D., Physics," ResearchGate, accessed January 22, 2022, https://www.researchgate.net/profile/Stephen-Thaler.

[52] Imagination Engines, "Founder."

[53] Rita Matulionyte, "AI as an Inventor: Has the Federal Court of Australia Erred in DABUS?," *SSRN Electronic Journal*, November 2021, 03, accessed January 23, 2022, doi:10.2139/ssrn.3974219.

[54]Twobirds, "Australian Court Finds AI Systems Can Be an "inventor"," "Bird & Bird," accessed January 23, 2022, https://www.twobirds.com/en/news/articles/2021/australia/australian-court-finds-ai-systems-can-be-an-inventor; WIPO, "In the Courts: Australian Court Finds AI Systems Can Be "inventors"," WIPO - World Intellectual Property Organization, accessed January 23, 2022, https://www.wipo.int/wipo_magazine/en/2021/03/article_0006.html.

[55]*Stephen L. Thaler*[2021] APO 5, para. 1; WIPO, "In the Courts: Australian Court Finds AI Systems Can Be "inventors"," WIPO - World Intellectual Property Organization, accessed January 23, 2022, "https://www.wipo.int/wipo_magazine/en/2021/03/article_0006.html"; Twobirds, "Australian Court Finds AI Systems Can Be an "inventor"," Bird & Bird, accessed January 23, 2022, https://www.twobirds.com/en/news/articles/2021/australia/australian-court-finds-ai-systems-can-be-an-inventor.

[56]*Stephen L. Thaler*[2021] APO 5, para. 31,32,34.

[57]*Stephen L. Thaler*[2021] APO 5, para. 26; WIPO, "In the Courts: Australian Court Finds AI Systems Can Be "inventors"," WIPO - World Intellectual Property Organization, accessed January 23, 2022, https://www.wipo.int/wipo_magazine/en/2021/03/article_0006.html; Twobirds, "Australian Court Finds AI Systems Can Be an "inventor"," Bird & Bird, accessed January 23, 2022, https://www.twobirds.com/en/news/articles/2021/australia/australian-court-finds-ai-systems-can-be-an-inventor.

[58]*Thaler v Commissioner of Patents*, para. 5.

[59]*Thaler v Commissioner of Patents*, para. 5.

[60]*Thaler v Commissioner of Patents*, para. 5.

> "The Deputy Commissioner held that an artificial intelligence system cannot be an inventor because "[s]ection 15(1) is clear, but not capable of sensible operation in the situation where an inventor would be an artificial intelligence machine as it is not possible to identify a person who could be granted a patent". The effect of his reasoning is that an artificial intelligence system can invent something that satisfies all of the requirements of patentability in terms of novelty, inventiveness and utility, but such an invention will be unpatentable because the Act requires a human inventor."[61]

Following the same line of argumentation, justice Beach said that DABUS is owned by the Thaler because he has the copyright to its source code.[62] It is also true that the software operates on the computer owned by Thaler, but the software itself solely did the invention without any human intervention and help.[63] After that, justice Beach forwarded three reasons that the word "Inventor" is an agent noun which cannot only be a person but a thing can also be an agent noun.[64] Secondly, he said that there are many other real cases where it seems insensible to say that the inventor is a human.[65] His final reason was that "nothing in the Act dictates the contrary conclusion."[66] Based on the same reasons, the court rejected the stance taken by the lower authorities and held that AI could be the creator as per the Act and Regulations.[67] The court further elaborates that the Deputy Commissioner's stance confuses two questions. First, who can be the owner and patentee of an invention? Second, who can be an inventor?[68] He thinks that a patent or ownership can only be vested in a legal person; therefore, the only legal person can be the inventor. The Court called this line of argumentation fallacious and opined that it is not necessary that the inventor, too, be a legal person or human. An AI can be the inventor, but at the same time, it cannot be the patentee or owner of an invention.[69]

Another vital thing highlighted by the court was the reference made by the Deputy Commissioner to the dictionary meaning/definition of the word "Inventor."[70] Justice beach said that:

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[61]*Thaler v Commissioner of Patents*, para. 7.

[62]*Thaler v Commissioner of Patents*, para. 8.

[63]*Thaler v Commissioner of Patents*, para. 8.

[64]*Thaler v Commissioner of Patents*, para. 10; WIPO, "In the Courts: Australian Court Finds AI Systems Can Be "inventors"," WIPO - World Intellectual Property Organization, accessed January 23, 2022, https://www.wipo.int/wipo_magazine/en/2021/03/article_0006.html; Twobirds, "Australian Court Finds AI Systems Can Be an "inventor"," Bird & Bird, accessed January 23, 2022, https://www.twobirds.com/en/news/articles/2021/australia/australian-court-finds-ai-systems-can-be-an-inventor.

[65]*Thaler v Commissioner of Patents*, para. 10.

[66]*Thaler v Commissioner of Patents*, para. 10.

[67]*Thaler v Commissioner of Patents*, para. 11.

[68]*Thaler v Commissioner of Patents*, para. 12.

[69]*Thaler v Commissioner of Patents*, para. 12.

[70]*Stephen L. Thaler*[2021] APO 5, para. 9,10,11,12; *Thaler v Commissioner of Patents*, para. 15.

> "More is required of me than mere resort to old millennium usages of that word. If words are only "pictures of ideas upon paper" (*Dodson v Grew* (1767) Wilm 272 at 278; 97 ER 106 at 108 per Wilmot CJ) and if, as Holmes J described it, they are not "crystal[s], transparent and unchanged, [but] the skin of a living thought and may vary greatly in color and content according to the circumstances and the time in which [they] are used" (*Towne v Eisner,* 245 US 418, 425 (1918)), I need to grapple with the underlying idea, recognizing the evolving nature of patentable inventions and their creators. We are both created and create. Why cannot our own creations also create?"[71]

In this case, the approach adopted towards AI is more of an advanced and open-minded approach towards the up-rising of AI. However, unfortunately, this kind of approach is sporadic in legal systems around the world towards AI. The legal systems and concerned people want to stick to their normative approaches, which, as per my conception, is not always the best option. Therefore, we need an approach like the one adopted in this case to help our legal systems cope with the advancements in our societies, as in this case was AI.

1.1.2. Stephen Thaler V Andrew Hirshfeld:[72]

This case is part of the same DABUS's invention patent registration process, but this time in the U.S.[73] , Stephen Thaler, for the same purpose, filed two applications on 29th of July, 2019 in the United States Patent and Trademark Office (hereinafter referred to as "USPTO").[74] Just like Australia, Thaler mentioned "DABUS" as the inventor in the U.S.[75] He also attached a statement to the application he filed in which he explicated why DABUS be awarded the title of an inventor in the light of the U.S *Patent Act and USPTO's Regulations.*[76]

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[71]*Thaler v Commissioner of Patents*, para. 15; WIPO, "In the Courts: Australian Court Finds AI Systems Can Be "inventors"," WIPO - World Intellectual Property Organization, accessed January 23, 2022, https://www.wipo.int/wipo_magazine/en/2021/03/article_0006.html; Twobirds, "Australian Court Finds AI Systems Can Be an "inventor"," Bird & Bird, accessed January 23, 2022, https://www.twobirds.com/en/news/articles/2021/australia/australian-court-finds-ai-systems-can-be-an-inventor.

[72]*Thaler v. Hirshfeld*, 1:20-cv-903(LMB/TCB) (E.D. Va. Sep. 2, 2021).

[73] Jennifer Davidson and Steffi Tran, "US Federal Court Rules AI Cannot Be An "Inventor" Under US Patent Law," Deeth Williams Wall, accessed January 25, 2022, https://www.dww.com/articles/us-federal-court-rules-ai-cannot-be-an-%E2%80%9Cinventor%E2%80%9D-under-us-patent-law.

[74]*Thaler v. Hirshfeld*, 6; Lexis Nexis, "Thaler V. Hirshfeld," Lexis Nexis, accessed January 25, 2022, https://www.lexisnexis.com/community/case-opinion/b/case/posts/thaler-v-hirshfeld; Casetext, "Thaler V. Hirshfeld," Casetext, accessed January 25, 2022, https://casetext.com/case/thaler-v-hirshfeld.

[75]*Thaler v. Hirshfeld*, 6; Lexis Nexis, "Thaler V. Hirshfeld," Lexis Nexis, accessed January 25, 2022, https://www.lexisnexis.com/community/case-opinion/b/case/posts/thaler-v-hirshfeld; Casetext, "Thaler V. Hirshfeld," Casetext, accessed January 25, 2022, https://casetext.com/case/thaler-v-hirshfeld.

[76]*Thaler v. Hirshfeld*, 6; Lexis Nexis, "Thaler V. Hirshfeld," Lexis Nexis, accessed January 25, 2022, https://www.lexisnexis.com/community/case-opinion/b/case/posts/thaler-v-hirshfeld; Casetext, "Thaler V. Hirshfeld," Casetext, accessed January 25, 2022, https://casetext.com/case/thaler-v-hirshfeld.

In the application's explanatory statement, he accepted that DABUS, without any doubt, is a machine having artificial intelligence.[77] In the application, he expressly referred to it as "Creativity Machine."[78]he furthered another argument in the statement stating that Congress had not paid proper attention to the AI and their capability to invent when they were restricting the inventorship to natural persons only.[79] Therefore, USPTO must, for encouraging innovation, interpret and define the word "Inventor" in such a way to include AI and AI-based machines.[80] A document was also made part of the application through which all the intellectual property rights were assigned to Thaler by the DABUS.[81]

USPTO issued a notice to the applicant to submit adequate information pertaining to the inventor.[82] Instead of addressing the deficiencies in the application, a petition was filed by the applicant with the Director of the USPTO against the notice issued. USPTO turned down the petition by stating that Congress used a language quite clear and free of ambiguities in the Patent Act, and thus the word "Inventor" meaning as a natural person, clearly shows the legislature's intent. Therefore, its meaning cannot be stretched further just for the sake of including something new into it that the legislature does not even intend.[83]Thaler further pursued the petition in USPTO by asking for reconsideration of the decision given, but the authorities denied the same again on the 22nd of April, 2020.[84]After that, Thaler filed a civil action in the District Court, where the whole matter was perused again more extensively.

Now, before the district court, the focal point of the issue is whether the word "Inventor" can be defined in such a way to cover AI under its ambit?[85] The court laid down that what meaning is to be attached to the word "Inventor" is the sole authority of the legislature, and the court can find the same by statutory construction.[86] Nevertheless, in the case of statutory construction, the judiciary has to adopt the clear, plain meaning of the law, and in the case of the

[77]*Thaler v. Hirshfeld*, 7.

[78]*Thaler v. Hirshfeld*, 7.

[79]*Thaler v. Hirshfeld*, 7.

[80]*Thaler v. Hirshfeld*, 7; Casetext, "Thaler V. Hirshfeld," Casetext, accessed January 25, 2022, https://casetext.com/case/thaler-v-hirshfeld; Lexis Nexis, "Thaler V. Hirshfeld," Lexis Nexis, accessed January 25, 2022, https://www.lexisnexis.com/community/case-opinion/b/case/posts/thaler-v-hirshfeld.

[81]Casetext, "Thaler V. Hirshfeld," Casetext, accessed January 25, 2022, https://casetext.com/case/thaler-v-hirshfeld; *Thaler v. Hirshfeld*, 7; Lexis Nexis, "Thaler V. Hirshfeld," Lexis Nexis, accessed January 25, 2022, https://www.lexisnexis.com/community/case-opinion/b/case/posts/thaler-v-hirshfeld.

[82]*Thaler v. Hirshfeld*, 8.

[83]*Thaler v. Hirshfeld*, 9.

[84]*Thaler v. Hirshfeld*, 9.

[85] SCC, "Everything You Need to Know on Why AI Machine Can't Be "Inventor": US District Court Rules AI Still to Reach Sophistication to Satisfy Meaning of Inventorship," SCC Blog, accessed January 25, 2022, https://www.scconline.com/blog/post/2021/09/15/artificial-intelligence-machine/.

[86]*Thaler v. Hirshfeld*, 12,13.

Patent Act, the statute is quite clear that inventor can only be a "natural person".[87] The same proposition aforementioned is backed up by the definition of the word "Inventor" given in the *Patent Act* in which the word "Inventor" and "Joint Inventor" specifically refer to "individual" and "individuals," respectively.[88] Besides that, the legislature in other sections of the same Act used the word "Inventor" to refer to "individual."[89]

Now, for further elaboration court referred to *Mohamad v. Palestinian Auth.*[90]in which the court also dealt with the definition of the word "Individual," but there the Act in question was Torture Victim Protection Act.[91] However, in this case, the court mentioned step-by-step ways in which "Canons of Statutory Construction" can be applied for finding out the definition of the word "Individual."[92] In the case of *Mohamad*, the Act in hand also did not define the word "Individual." So, the court laid downthat we will first refer to the ordinary meaning of the word in reputed dictionaries.[93] The court finds out that "[a]s a noun, 'individual' ordinarily means '[a] human being, a person."After that, the court looked at the use of the same in the mundane parlance of native speakers and found out that "individual" refer unmistakably to a natural person."[94] The Court also referred to the Dictionary Act in which the word "Individual" meant "something separate and apart from non-human beings."[95] Lastly, the court also pointed out that if Congress wanted to attach a meaning that is broader in scope or different from the word's ordinary meaning of the word, then the legislature has to provide some clear indications of it so intending.[96]

Here, in this case, the court adopted the same four-step interpretation as supra mentioned and concluded that the word "Individual" must be given its ordinary meaning, a "Human Being."[97] Following the *Muhamad*case footsteps, the court also pointed out that nobody calls a

[87]*Thaler v. Hirshfeld*, 13; SCC, "Everything You Need to Know on Why AI Machine Can't Be "Inventor": US District Court Rules AI Still to Reach Sophistication to Satisfy Meaning of Inventorship," SCC Blog, accessed January 25, 2022, https://www.scconline.com/blog/post/2021/09/15/artificial-intelligence-machine/; Casetext, "Thaler V. Hirshfeld," Casetext, accessed January 25, 2022, https://casetext.com/case/thaler-v-hirshfeld; Lexis Nexis, "Thaler V. Hirshfeld," Lexis Nexis, accessed January 25, 2022, https://www.lexisnexis.com/community/case-opinion/b/case/posts/thaler-v-hirshfeld.

[88]United States Code Title 35 - Patents 35 U.S.C. §§ 100(f)(g); "Sec.100 (f). The term "inventor" means the *individual* or, if a joint invention, the *individuals* collectively who invented or discovered the subject matter of the invention. Sec.100 (g). The terms "joint inventor" and "coinventor" mean any 1 of the *individuals* who invented or discovered the subject matter of a joint invention."

[89]35 U.S.C.§ 115(a)(1);35 U.S.C. § 115(b)(2).

[90]*Mohamad v. Palestinian Auth.*, 566 U.S. 449, 453-61 (2012).

[91]*Mohamad v. Palestinian Auth.*,n.d.

[92]*Thaler v. Hirshfeld*, 14.

[93]*Mohamad v. Palestinian Auth.*, 3.

[94]*Mohamad v. Palestinian Auth.*, 4.

[95]*Mohamad v. Palestinian Auth.*, 4.

[96]*Mohamad v. Palestinian Auth.*, 5.

[97]*Thaler v. Hirshfeld*, 14.

machine an "Individual in common parlance."[98] Further, the Dictionary Act as aforementioned also applies to the *Patent Act*, which excludes machines from the meaning of "Individual."[99]

Thus, after taking all these things into consideration court held that the word "Individual" was used in its commonly used sense which only refers to a natural person, and at the same time, the Congress meant to employ the same term in its commonly understood gist and not to increase its reach.[100] The court cannot go beyond the plain meaning of a word while adjudicating, especially when the meaning is free of any doubt.[101] Therefore, the AI "DABUS" cannot be considered an inventor as per the concerned statute.

Thaler also filed for the same patent in the name of DABUS in the UK, Germany, Japan, South Africa, European Property Office, and China.[102] The UK "Intellectual Property office" (Afterwards denoted as "UKIPO") and "European Property Office" (Afterwards denoted as "EPO") accepted the invention to be new and possibility of its industrial applicability.[103] However, they rejected the application on the same ground as the US patent office that the inventor is not a natural person.[104] In support of the aforementioned proposition, they laid down that granting status of an inventor to a person has some inevitable and necessary legal outcomes in the form of some legal rights and duties/obligations.[105] For the enjoyment of attached rights and fulfillment of attached obligations/duties, it is a core requirement that the inventor must have a legal personality that AI and a machine cannot have.[106] A mere giving of a name to AI is not enough and does not entitle the same to be considered a legal personality and thus an inventor in the eye of law.[107] Lately, in September 2021, the court of Appeal also withheld the patent office's decision and rejected Thaler's appeal in this regard.[108]

At the same time, South Africa granted DABUS the status of an Inventor and issued a patent in its name.[109] In July, the patent was made public in South African Patent Journal

[98]*Thaler v. Hirshfeld*, 14.

[99]*Thaler v. Hirshfeld*, 14.

[100]*Thaler v. Hirshfeld*, 22.

[101]Casetext, "Thaler V. Hirshfeld," Casetext, accessed January 25, 2022, https://casetext.com/case/thaler-v-hirshfeld; Lexis Nexis, "Thaler V. Hirshfeld," Lexis Nexis, accessed January 25, 2022, https://www.lexisnexis.com/community/case-opinion/b/case/posts/thaler-v-hirshfeld

[102]Inventa, "DABUS: the 'natural Person' Problem," Inventa, accessed January 29, 2022, https://inventa.com/en/news/article/681/dabus-the-natural-person-problem.

[103]Stephen L Thaler's Application, Patent Act 1977 (The Patents Rule 2007), BL O/741/19, para. 15; Inventa, "DABUS," n.d.

[104]Stephen L Thaler'sAplication, BL O/741/19, para. 18,20,21; Inventa, "DABUS," n.d.

[105]Stephen L Thaler's Application, BL O/741/19, para. 21; Inventa, "DABUS," n.d.

[106]Inventa, "DABUS," n.d.

[107]Inventa, "DABUS," n.d.; Dogar, "AI and Law," n.d.

[108]*Stephen Thaler v Comptroller General of Patents Trade Marks and Designs* [2021] EWCA Civ 1374.

[109]Meshandren Naidoo, "In a World First, South Africa Grants a Patent to an Artificial Intelligence system," Quartz, accessed January 29, 2022, https://qz.com/africa/2044477/south-africa-grants-patent-to-an-ai-system-known-as-dabus/; Paulina M. Starostka and Daniel J. Schwartz, "South Africa and Australia Break

showing the name of DABUS as the inventor and that of Thaler as the applicant.[110] Some said that the patent laws of South Africa did not focus much on the inventor but on the invention; that is why DABUS was granted the status of an inventor.[111]

The patent laws of Pakistan are bit different in its body of text. The "Patent Ordinance 2000" define the word "Inventor" as "means the actual devisor of an invention, and joint inventor shall be construed accordingly."[112] The word "Person" is defined as "means any natural or judicial person and includes any association or body of individuals, whether incorporated or not."[113] The wording of Section 11, which is about patent's application, is that "Any of the following persons, whether alone or jointly with any other person, may make an application for a patent."[114] Now, if section 11 and the definition of inventor supra mentioned is read in accordance to the definition of person given in the ordinance then the word "inventor" can be both a natural and a juridical person because the ordinance does not confine the meaning of the word "person" to Humans/ natural person only. In this aspect the patent laws of Pakistan are different from UK because in Patent Act of 1977 of UK the word "person" used in section 7 is not specifically defined by the Act[115] and thus they attach literal meaning to same.[116] In case of US, same is the case as in UK. No explicit definition of the word "person" is found in the Patent Act of US.[117] As for now, no application for patent in name of DABUS or other AI is filed in the Patent office of Pakistan but if in future something like this happens, I think there is a good chance of granting the status of an inventor to AI. The main backing, I have behind my assertion is that the way word "person" is defined in patent ordinance 2000 which does not restrict the meaning of the word "person" to Humans only.

2.2. AI and Corporation:

In history, a corporation concept was introduced, which revolutionized the field of business. The concept of modern corporations can be traced back to 1844 when the "Joint Stock Companies Act" was introduced in the British legal system.[118] This Act provided the basic

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from U.S. and U.K. to Give DABUS Its First IP Breaks," Nixon Peabody LLP, accessed January 29, 2022, https://www.nixonpeabody.com/en/ideas/blog/artificial-intelligence/2021/08/10/south-africa-and-australia-break-from-u-s-and-u-k-to-give-dabus-its-first-ip-breaks; Inventa, "DABUS," n.d.

[110] Govt. of South Africa, "Patents," *Patent Journal (part II) including Trademarks, Designs and Copyright in Cinematograph Films* 54, no. 7 (July 2021): 225, accessed January 29, 2022, https://iponline.cipc.co.za/Publications/PublishedJournals/E_Journal_July%202021%20Part%202.pdf.

[111]Inventa, "DABUS," n.d.

[112]Patent Ordinance 2000 of Pakistan, Sec. 2(j).

[113] Patent Ordinance 2000 of Pakistan, Sec. 2(p).

[114] Patent Ordinance 2000 of Pakistan, Sec. 11.

[115]Patent Act 1977 of UK, Section 7.

[116]Dogar, "AI and Law," n.d.

[117]United States Code Title 35 - Patents ,35 U.S.C., in General.

[118] Phillip Lipton, "The Introduction Of Limited Liability Into The English And Australian Colonial Companies Acts: Inevitable Progression Or Chaotic History?," *Melbourne University Law Review* 41, no. 3 (2018):

framework for modern corporations.[119] Later, the "Limited Liability Act of 1855" was passed, which limited an investor's liability up to the limit of his investment.[120] Later, in a verdict, the House of Lords granted the corporation a legal personality different from that of the owners/investors.[121] It is also laid down that the liability of a corporation is distinct from that of owners.[122] Thus, a new legal personality was born to whom the law attached a fictitious will.[123]

In the case of AI struggling for legal status, the corporation and its past can be of good help. If we compare AI with a corporation, it can be seen that as AI is a new technological creation of modern times which challenges the legal systems, back in the past, the concept of the corporation was also an innovation introduced in the life of people. The legal systems recognized corporations as a legal person in the past because it was necessary to advance humans and their wellbeing.[124] By recognizing the corporation as a distinct legal person and attaching rights and liabilities of its own, it encouraged people to invest more in it safely and with limited liability if things go wrong.[125] Before corporations, there was only one kind of recognized personality in law, and that was a natural person (Humans), but with the recognition of the corporation as a legal personality created a whole new group of persons called fictitious/legal person which contain those personalities which was the creation of legal fiction.[126] Now, if we look at the present case of AI, it is also an innovation, something out of the box for today's legal systems, just as the corporation was in the past. If a comparison is to be made between the corporation and

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12, accessed February 3, 2022, https://law.unimelb.edu.au/__data/assets/pdf_file/0005/2655428/Lipton-413-Advance.pdf; StartupDecisions, "History of Corporations," StartupDecisions, accessed February 3, 2022, https://www.startupdecisions.com.sg/blog/history-of-corporations/.

[119] M. S. Rix, "Company Law: 1844 and To-Day," *The Economic Journal* 55, no. 218/219 (1945): 242, accessed February 3, 2022, doi:10.2307/2226083; StartupDecisions, "History of Corporations," n.d.

[120] Lipton, "The Introduction Of Limited Liability Into The English And Australian Colonial Companies Acts," 20.

[121] ***Salomon v A Salomon and Co Ltd* [1897] AC 22.**

[122] ***Salomon v A Salomon and Co Ltd*, page no. 51.**

[123] Čerka, Grigienė, and Sirbikytė, "Is it possible to grant legal personality to artificial intelligence software systems?," 9.

[124] Leonardo Davoudi, Christopher McKenna, and Rowena Olegario, "The historical role of the corporation in society," *Journal of the British Academy* 6, no. s1 (2018): 39, accessed February 3, 2022, doi:10.5871/jba/006s1.017.

[125] Guillermo C. Jimenez and Elizabeth Pulos, *Good Corporation, Bad Corporation: Corporate Social Responsibility in the Global Economy* (New York: Open SUNY Textbooks, Milne Library (IITG PI), 2016), 15, https://pk1lib.org/book/11718639/f63880; Shubham Singh, "ATTRIBUTION OF LEGAL PERSON-HOOD TO ARTIFICIALLY INTELLIGENT BEINGS," *Bharati Law Review*, 2017, 198,201, accessed February 6, 2022, https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwi5j9jGiev1AhUwhf0HHY9aDrwQFnoECAMQAQ&url=http%3A%2F%2Fdocs.manupatrAIn%2Fnewsline%2Farticles%2FUpload%2F7E399602-D4A0-4364-BE11-F451330BFDB5.pdf&usg=AOvVaw16eOSjPDaHJ4dMvNJVOedh.

[126] Even though it is right that even before corporation different legal systems also extended the concept of person to include religious idols, spirits and other entities but they were not recognized by all the legal systems around the globe like corporation and natural person or in other words we can also say that corporation was the first legal person on which all the legal systems of the world agreed to be considered so.

AI in case of producing positive impacts on humans and bringing advancements. It can be said that AI in this aspect is not just one step but many steps ahead of the corporation because the direct impact of the corporation was and is on the business and economy of humans. However, in the case of AI, the impact range is quite wide, from the medical field to engineering, law enforcement to the music industry, and industrial use to space missions.[127] So, if a corporation can be given legal personality just for legal ease and for people's good, I think AI should also be considered for the legal status because its impact, importance, use, and need is more significant than the corporation in society.

An objection raised in a philosophical and moral context is that AI is just a programmed machine with no free will, and without free will, how can they be considered a person even for legal purposes.[128] They have no freedom to make their choices as we humans do. The counter of the same argument can be of two different types. First, in the eyes of the law, when granting legal personality, the ingredient of free will is not an essential component worthy of consideration[129] because the law has granted legal status to many entities which lack the very same thing. The corporation is one of the prominent examples, as it is a fictitious entity with no substantial body of its own like humans have but still law considers it a legal person.[130] The corollary of the same is that if it has no tangible bodily and resides in legal fiction, then how can the same entity have free will. Free will, in general, is the ability to make free choices and take decisions free from external influences[131] , which is only possible if an entity has a mind/ reasoning faculty of its own. In the case of a corporation, the same criteria are not met but still, the law granted the status of legal person to a corporation and at the same time also bestowed upon it the fictitious free will of its own apart from its directors and shareholders.[132] It seems that law does not give weightage to the above philosophical and moral requirements. The corporation is not the only case in which law deviated but there are other examples like trade unions,[133] religious idols,[134] ships and temples.[135] If we have some precedents in the past, then I do not

[127]Yogesh K. Dwivedi et al., "Artificial Intelligence (AI): Multidisciplinary perspectives on emerging challenges, opportunities, and agenda for research, practice and policy," *International Journal of Information Management* 57 (2021): 1-2, accessed February 3, 2022, https://doi.org/10.1016/j.ijinfomgt.2019.08.002.

[128] Chopra and White, *A Legal Theory for Autonomous Artificial Agents*, 178,179.

[129] Chopra and White, *A Legal Theory for Autonomous Artificial Agents*, 155.

[130] F. W. Maitland, *Maitland: State, Trust and Corporation* (Cambridge: Cambridge University Press, 2003), 65, https://p302.zlibcdn.com/dtoken/21a366a399c93bbd6dcdd23e03d347bb.

[131] California State University, "Chapter 8: The Case Against Free Will," California State University, Sacramento | Sacramento State, accessed February 3, 2022, https://www.csus.edu/indiv/g/gaskilld/intro/free%20will.htm.

[132] V. D. Mahajan, *Jurisprudence and Legal theory* (Lahore: Civil and Criminal Law Publications, 1987), 385.

[133] Arthur Handerson, *Trade Unions and The Law* (London: The Camelor Press Limited, 1927), 17, https://dspace.gipe.ac.in/xmlui/bitstream/handle/10973/22135/GIPE-.

[134]*PramathaNathMullick v. Pradyumna Kumar Mullick*, 1925 LR 52 Indian Appeals 245; *YogendraNathNaskar v. Commissioner of Income Tax*, (1969) 3 SCR 742.

think that the objection of "free will" will be a thorn in the AI's side in present times. Secondly, if free will is perused closely, it can be seen that humans too have no free will in the strict sense because our choices and decisions are heavily affected by external factors[136] like our environment, social norms, economic problems and people around us if this is the case with us then how can we demand same from other entities. If it is said that AI has no free will because it runs on a confined set of codes and binary numbers, how is it different from ours because our so-called free choices are also being controlled. Even though the controlling or manipulating factors are different in both cases, the net results are almost identical, which is that of affecting free choice. One more important thing is that free will can be attributable to AI if the concept is approached from a scientific and technological point of view rather than a mere philosophical one.[137] But, unfortunately, for the sake of brevity, I have to confine myself to the mere stating of this proposition and not to plunge deep further.[138]

2.3. Recommendations:

Artificial intelligence is indubitably a newfangled budding technological entity profoundly indenting our lives from the very cradle to the crypt. With this impact factor, AI creates legal glitches and concerns that induce us to volte-face towards the same entity from a legal standpoint. As the succinct discourse has previously been carried out, why AI's legal status is indispensable. Now, the query is, what kind of legal status will resolve our problems here? In this regard, the option of dependent or limited legal personality[139] seems a good and viable option. There are myriad reasons to back the same proposition. Independent legal personality cannot be bestowed upon AI currently since AI is not much autonomous and progressive yet to be considered for it, nonetheless in future, if they cross a certain threshold point on the autonomy graph, they can be considered for the same. Contemporarily, a dependent legal personality will do the job. First, this will locate AI underneath the class of natural person and thus, the dread and complexion that we humans have that AI will dwarf and out-smart us will be soothed by putting AI under the control of hominids. Second, it will categorize AI in the similar category as that of a corporation which will aid us extend many legal notions applicable to corporations further to the AI. Thirdly, recognizing AI as legal personality will ascribe a certain set of rights and duties/obligations to AI utterly reliant upon the province in which they are utilized, which will help us in our engagements with AI in different domains and will also be of good help for legal

[135] Tom Allen and Robin Widdison, "Can computers make contracts?," *Harvard Journal of Law & Technology* 9, no. 1 (Winter 1996): 42, accessed February 4, 2022, http://jolt.law.harvard.edu/articles/pdf/v09/09HarvJLTech025.pdf.

[136] Chopra and White, *A Legal Theory for Autonomous Artificial Agents*, 178.

[137] Douglas R. Hofstadter, *Godel, Escher, Bach* (New York: Basic Books Inc., 1979), 710-714, https://swab.zlibcdn.com/dtoken/e97c7921038a12c458761afa2f54ff2c.

[138] But for the sake of more on this point reference can be made to the following: Chopra and White, *A Legal Theory for Autonomous Artificial Agents*,173-177.

[139] That kind of legal personality which can have legal rights and duties but in the exercise of same, the entity is not fully independent but depend on others. For example, corporation, child, insane etc.

systems. They will be provided with an exact and curbed set of rights and duties, and thus it will be easy for them in taking verdicts. Besides that, a certain level of consistency, obviousness and precision will be fashioned in litigation.

Bestowing limited legal personality can help us in civil and criminal issues. As far civil issues are concerned, if an AI is programmed for contracting with people or other AI-based systems and it enters into a contract on its own on the owner or possessor's behalf without taking his accord or bringing it to his knowledge, then who will be accountable in case of contract violation. Will it be right, just and reasonable to hold the possessor liable for the same? In another picture, if a company made a smart home AI that controls all things in the house and if the same AI did something that damages the house or appliances, then will it be right to hold the manufacturer liable for the same? These problems can be solved if the legal status of AI is recognized. By doing so, some kinds of law can be fashioned to make it obligatory to transfer some assets in the name of AI or insurance, as it is now a legal entity like a corporation, before making it functional. If a civil breach of some kind arises, then the liabilities can be paid off using the AI-owned assets or insurance money. This kind of approach will help in two ways. First, the aggrieved party will not be divested of their due rights and compensated. Second, it will liberate the owner, manufacturer, or possessor of AI from boundless liability and unjust financial burden. This will work the same as that of limited liability in the case of corporations. So, they will be shielded from unlimited liability and encouraged to invest more in the AI field and help the economy grow, and the human race flourish.

Another significant thing is that this legal status will permit the AI to enter a contract on their own even though it is fitting that all AI cannot enter into a contract on their own, but they, just like a corporation, can enter the same through its agent or guardian. Besides that, another boon of granting dependent legal status to AI is that it will be able to sue or be sued in the court of law, which means that AI, through its council, will be able to protect and enforce its rights and to defend itself against claims. This will help shift the burden from the shoulders of the owner, possessor or manufacturer. They will be protected personally from intense exposure to legal litigations. At the same time, the work burden will also be reduced on them, which will make them able to give time to something more useful.

Granting dependent legal status can also help regulate AI as an agent. If an AI is working as an agent for a person and has done something that creates civil liability. In that kind of situation, the legal recognition of AI will provide ease for courts in justly deciding cases. They will look at the nature of the act done by the AI. If they found out that AI executed its function as an agent correctly and adequately the way it is programmed, then the principle can be held responsible. If they find out some malfunctioning or other abnormal activity on behalf of AI as an agent, they will hold AI liable. This way, protection can be provided to both the principal and aggrieved party.

In criminal law, the dependent legal status of AI can bring some positive changes too. If an AI did something criminal, which give rise to punishment in the form of a fine, then the same recommendations as supra mentioned will hold good. Nevertheless, if an AI committed a crime in which fine or compensation is not a passable relief, what has to be done then? In that case, the option that the owner or possessor will be punished is not quite a good option because most of the crimes require mensrea and actusrea, which can not be found on the owner or possessor's behalf. For the sake of punishment, we can avail options like reprogramming the AI under the strict supervision of authorities or shutting the AI system. Another essential question firmly connected with this option is that what if the AI is being used as a shield to do criminal activities by humans? The concept of "lifting the veil" in corporation can be extended to AI. If the court finds out about the mala fide intentions of the humans behind AI in a crime during the examination, then it will just lift the veil of AI and punish the actual wrongdoers.

So, it can be seen that granting dependent legal status to AI can solve most of our legal problems related to AI both in the civil and criminal domains. Therefore, it looks like a good, acceptable and practical option at this stage. But in the future, if AI reaches a general level of intelligence and autonomy, then an independent legal personality can be a strong candidate compared to the dependent one.

2.4. Conclusion:

AI was just a dream in the past, but in today's world, AI is the reality. Dreams can be disregarded and discarded, but reality cannot be just neglected. Neglecting AI will be like a pigeon shutting its eye when it sees a cat. However, the pigeon needs to know that shutting its eyes will not do any good for it. In the same way, we cannot just overlook the rising AI and even if we do, that will not change the reality. We need to face the problem and tackle it gracefully. The same goes for the law; it needs to take appropriate steps to solve problems and issues arising with AI development. The first and foremost step of that initiative is to consider AI for legal status. A Dependent/limited legal personality can be the best viable option for AI at present, which will solve many of the issues arising with the AI. Legal systems will know the boundaries within which they have to deal with it and how it should be tackled. Granting legal status to AI today is just a preparatory step, an inception point towards the future legislation related to AI.