▶ **Discussion Paper**

The Entitative Nature of Artificial Intelligence in International Law: An Analytic Legal Model

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The Entitative Nature of Artificial Intelligence in International Law: An Analytic Legal Model

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Abstract. The understanding of artificial intelligence must be AI-centric and it is important to consider that artificial intelligence has an entitative nature. The article thus proposes an analytic legal model on the entitative nature of artificial intelligence with jurisprudential reference and systemic modulations on AI Ethics for the influence in the realm of public international law. The proposed model applies in general cases and is not extended to the ambit of international humanitarian law. The proposition in the article affirms and establishes that Artificial Intelligence, resembles, based on its juristic ontology, an entitative nature, where an AI is a more original and unique entity of its kind, without any imitated human personified characterization. In estimation, the genealogy of artificial intelligence is social and technical. It is a general proposition that artificial intelligence cannot be limited to the scope of a subject of use or a mere human artefact. The first nature of an AI, as affirmed in the polite convention theory, i.e., the Turing Test and the Dartmouth proposal, is the subjective one, with no self-transformative capabilities entitled, which is described in the propositions of the article as the Utilitarian Nature of AI. The latter nature, which we focus on the proposition, is the entitative nature of AI, also known as the Self-Transformative and Entitative Nature of AI (STEN). Artificial Intelligence, as a realm, renders a potential to exist as a unique, general and diversely transformative juristic entity. This nature, evolves via the penetration of social, cultural, management and economic factors, leading to more socio-human development of AI, in the field of law and anthropomorphism.

The proposed parameters, which are essential to determine the entitative nature of artificial intelligence are: (a) Legal historiography; (b) Anthropomorphic scope; (c) Technical utility; and (d) Doctrinal need. All these parameters are based on a doctrinal analysis of the legal developments in the field of AI ethics taking the inference that development, credibility and stability are essentially important to let the status quo of AI as a legal entity thrive properly. The paper extends with the concepts postulated in the proposition in the realm of AI Ethics and Law, i.e., (a) The Doctrine of Intelligent Determination; (b) The Realm of Dimensional Perpetuity; and (c) The Privacy Doctrine. The paper further analyses the practical cases of algorithmic policing, customer experience, enculturation and human rights with relevant cases analysed and connoted with the proposal on STEN. The conclusion of the article arrives at the significance and need to render a principled action to commence the legal structure and jurisprudence

for the entitative nature of artificial intelligence in international law with the proposed model as a seminal suggestion.

Keywords: AI Ethics, International Law, Human Rights, Algorithmic Policing, Anthropocentrism, Bioethics, Data Privacy.

1 Introduction

The dynamics in the anthropocentric developments related to Artificial Intelligence is significant to the generational and practical development of human society because the potential and adverse capabilities that disruptive technologies like AI possess are tenable enough to challenge the status quo of anthropomorphic legality. The understanding that the perceptible, substantive, operational and existential attributes of a real human can be mechanized is significant from the development of the history of machines. However, the credit to the early contributions by Alan Turing, Gottfried Leibniz, Charles Babbage, Claude Shannon and Nathan Rochester is also preceded by the socio-cultural nature of method and action involving certain background work on machinic logic and intelligence, which employs the development of artificial intelligence in a significant way.

The Turing Test, one of the most significant works on computational intelligence and its philosophy, (Computing Machinery and Intelligence, 1950) (also called the theory of polite convention), where it was proposed by Alan Turing that a machine can be tested whether it can mimic the empathy and anthropomorphic footprints of a real human being. Even if the Turing Test was central to the question of human empathy or command-based empathy, it was merely indicative to at least render limited direction to understand how machinic intelligence could be determined and understood in those years, when the idea came at the forefront. In the coming decades in the modern era of 1950s to 1970s, the culture of entrepreneurship and innovation in the field of technology advances and becomes predominant, where industrialists and entrepreneurs in developed countries embraced the utilitarian aspect of technology, signs of which we find in the neoliberal economic order of the 21st Century – leading to a culture of distancing via the use of technology in human society. This idea of materializing human perceptions, which was even discussed in the Dartmouth Conference in the 1950s, endorsed aesthetic notions about disruptive technologies like AI, which is known as technology distancing (Pacey, 1999). Technology distancing, according to Pacey is a case when human actors distance themselves from the manual workability and usage of technology in general. One of the most profound examples we can find these days is Amazon Alexa, where mere instructions enable the device to perform certain set of tasks, enabling less manual work and distancing human data subjects from the manual use of technology. Amidst the fact that entrepreneurs and industrialists focused on the utility side in a neoliberal economic order since the 1990s, technology distancing became a relevant factor to understand the economic and social order of a post-truth world influenced by AI, where it is observant that the AI used machinic logic as capillaries and

methods to implement and enculture the anthropomorphic attributes of the human society. This influences the practical idea related to machine learning named as algorithmic policing (Hartree, 1949; McCarthy, et al., 1955; Larson, 2018).

Thus, the paradigm shifts in the lifestyle and utilitarian aspect of a human society owed to technology distancing changes the pursuits of international law and relations towards technology, its diplomatic contours and economic aspects. Further, the role of disruptive technologies like AI was influenced by the entrepreneurial vision and action of democratization of technology as a resource and utility (Cervellati, et al., 2009).

Artificial Intelligence is thus in a neoliberal economic order - influenced by the culture of technology distancing owed to rapid democratization of technology. However, the constraints of existence come into being when the treatment of a disruptive technology like AI as an entrepreneurial asset is ontologically treated as a utility for human development and welfare (Artificial Intelligence Index, 2017). An entrepreneurial asset typically means any human artefact, or any object, which may be recognized as a juristic entity by law, which has entrepreneurial qualities.

1.1   How Technology Distancing Influenced AI's Role in Human Society

The neoliberal approach of behavioural economics – where utility dominated the discourse and diplomatic tie-ups in the field of technology, the materialization of development as a factor of identity to endorse commercial marketing of technology as a utility (Adobe, 2018; Emerging Technology from the arXiv, 2019; itut, 2017) became a new normal. The best example in this regard is the birth of consumer experience (CX) technologies to improve algorithmic policing of consumers treated as data subjects. That is a reason why from governments to technology companies, the trend to endorse the model of utilitarian and human-centred artificial intelligence limits has been dominant. It however led AI (and its hybrids and similar tech resources) to become redundant when it came to inner social development and replenishment of a human society because human identity and decluttered and generalized.

Technology distancing therefore, is a dynamic outcome evolving out of the need felt by companies and governments to improve the facilities and utilitarian structure of human society. There would be some economic and political factors, including the increased emergence and conversion of traditional state regimes into democracies as globalization and liberalization became inevitable since the 1990s (Cervellati, et al., 2009 p. 3). Technology distancing is capable to influence the rule of law of a state due to the repercussions and implications of determining and tracing the contours of artificial intelligence as a legal personality. Thus, treating AI as a utility-based limited human artefact may be the initial course of analysis and discussion, (Statista, 2018) but it cannot complete the purpose of AI in a wider spectrum of research and purpose in the law concerning AI Ethics. With increased income inequality, the democratization and stability of the rule of law in the democratic sense in developed and developing countries can be and are influenced (Mounk, 2018). This is also connected with the problem that the the framework of legal rights decided for legal and juristic entities is unable to

face and resist the repercussions that would come into being when matters related to AI Ethics are dealt under existent legal systems around the world.

Also, there are special concerns regarding empathy developed by AI, especially in recognition and communication systems like chat-bots and deepfake systems. Moreover, it is proposed that there are certain self-transformative capabilities of artificial intelligence, which may not be equitable to our anthropomorphic institutions and cultures. It is therefore proposed in the article that if the purposive construct of AI at an aesthetic level is ignored and not treated properly, then the system has the potential to encourage more technology distancing, leading to adverse circumstances for treating and legalizing AI. This legal and technical anomaly cannot be resolved by algorithmic accountability only or by rendering mere formalistic control over the principled development of AI systems by the procedural facets of the position of law determined by scientists and policymakers over issues like accountability and entitlement.

A restriction on the true and reasonable nature of AI defeats the fulfilment to entitle and enculture the safe, certain, integrated and credible legal personality of the same, which must be avoided (Lebada, 2017; Adobe, 2018; Statista, 2018). The article thus proposes a new nature of Artificial Intelligence under a proposed analytic model as described in the article. It is proposed that artificial intelligence has the freedom to attain a self-transformative and entitative nature other than the general utilitarian and regulatory nature as is prescribed under various international regulations and committee drafts suggested by D9 countries.

Such a self-transformative nature is proposed in the sense and realm of the jurisprudence of a legal personality for an AI, and further considerations and analyses are provided in the article to outline the heterogeneous and integral aspects of the entitative nature of AI. The reference of international law for AI Ethics is connected to the need to evolve and improve the international human rights law and international cyber law regimes. The proposition in the paper focuses on the current trends and culture of entrepreneurial ethics and innovation in the fourth stage of globalization in a post-truth rules-based international order. Adequate conclusions on the legal analytic model on the entitative nature of AI are provided therein.

2   The Basis of Artificial Intelligence as a Self-Transformative and Entitative Legal Personality: Analysis of AI as a Utility

The entitative nature of the legal personality of artificial intelligence is asserted on the basis of the following postulates that:
- Artificial Intelligence as a legal personality has a reasonable capability and inalienable right to attain a self-transformative and entitative nature;
- The Self-Transformative and Entitative Nature (hereinafter STEN) of AI as a legal personality is postulated with the substantive and procedural attributes of an AI;

- The attributes of the STEN of AI as a Legal Personality are postulated based on the postulated legal doctrines that govern the all-comprehensive aspect of AI as a legal personality;
- The doctrines proposed to establish the analytical model of the STEN of AI are (a) The Privacy Doctrine; (b) The Doctrine of Intelligent Determination; and (c) The Realm of Dimensional Perpetuity;

The core aspect of STEN is based on an estimation of the culture of entrepreneurship and innovation and its relevant changes sought in the age of post-truth globalization. As discussed, AI is inevitably converted into a utility – by design and approach paved by technology companies (Statista, 2018; Adobe, 2018), which is based on various methods to enable technology distancing. The estimable workout on algorithmic policing – the policy science involved to regulate and shape the use of algorithms for a particular policy by tech companies and governments is still limited to bare utility and restrictive cum subjective issues (Larson, 2018; Abramovich, 2018; Capgemini Research Institute, 2018; Thiel, 2018; Future of Life Institute, 2019)[1]. Surveys on CX show how technology companies and governments are inclined towards the approach of AI as a utility, which itself, by design implies technology distancing. Even the legislative developments in the D9 economies show that AI requires a proper legal recognition. In the European Union, as per the primacy of the General Data Protection Regulation (GDPR) and its ontology, a declaration was signed by the European Data Protection Supervisor and other parties in October 2018 (Commission Nationale de l'Informatique et des Libertés (CNIL), France, European Data Protection Supervisor (EDPS), European Union, Garante per la protezione dei dati personali, Italy, 2018). This Declaration on Ethics and Artificial Intelligence encouraged two special principles of data protection law specific to artificial intelligence, which bears special importance

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[1] Research by Adobe and Capgemini Research Institute (Adobe, 2018; Capgemini Research Institute, 2018) show that AI is becoming a dependent resource both for the consumers and the companies. In the 2018 Adobe report, an estimation on Customer Experience usage is given as follows:

> [R]espondents' CX-specific priorities indicate that their organizations are focusing on improving the end-to-end customer experience instead of the entire customer journey from acquisition to loyalty was the top priority (46%), followed by improving cross-channel experiences (45%), and expanding content marketing [capabilities] (42%) (Adobe, 2018 p. 2)

Capgemini Research Institute also brought up a significant statistic data, where it explored that 55% people are keener to use applications if the interactions with the artificial intelligence were more human-like (Capgemini Research Institute, 2018 p. 5). Also – in the same case of interactions, 50% people as per the AI in CX survey feel they have a better emotional engagement with the AI, which itself is determinant of the fact that there is a dire need to understand and utilize AI in a different form out of the normative paucities.

to reckon the approach of AI Ethics in Law. These principles are (1) the Fairness Principle and (2) the Privacy by Design and Privacy by Default principle.

While the Fairness Principle recognizes the doctrine of reasonable expectation and limits the utilitarian ambit of AI to data usage to a central and technically rational original purpose of the collection – it provides an ethical mandate to collective security and privacy of individuals, which itself is an enabling and progressive aspect of data protection jurisprudence taken in a mandate by Europe[2]. The other principle, as proposed in the declaration – the Privacy by Design and Privacy by Default recognizes the ontological and multi-dimensional approach of privacy as a legal institution with delicacy in ethical treatment and considerations.

The above principles discussed endorse and focus to regulate the ethical and fair use of AI at a structural and integral level. Also – if we demarcate the principle and understand it by the aspects of design and default as the referred terms, it is discernible that Privacy by Design implies the topological transformation inherent and the involved cum stimulated inertia of AI subject to assessment in comparison with the concerned data subject involved (for example, human). It means the Design postulate (on privacy by design) imposes accountability on the creators to avoid any human-centred repercussions via AI due to its transformative nature and physiology that it does possess. The other postulate – Privacy by Default (hereinafter the Default Postulate) is a planar restrictive caution, which is a presumptive or pre-determinant responsibility imposed on the AI development and maintenance teams towards the data subject(s) to create certain default features in order to prevent biases. While the Design postulate focuses on the deep ends, the Default postulate is precautionarily required by the responsible establishments that develop and maintain the AI system. However, the legal scope of the Default postulate is weaker than the legal scope of the Design postulate, which is due to the penetrable nature that the Design postulate resonates. The Design postulate if is properly implemented, can impose serious and systemic accountability on the development team despite the adherence and fulfilment of the compliance measures that the Default postulate demands.

The nature of the Design Postulate is reflective of the rights given in the GDPR and resembles a stable, flexible and less inertial estimation of data protection and privacy establishments. The problem, however, is related to the aspect to limit and influence accountability as an elementary aspect of procedural delicacy and utility concerning AI. It can hold any actor accountable and create a pre-defined fabric of responsibilities. This creates a cartesian formation of AI regulation and its needful collocation to estimate the binding value and outreach that the rule of law itself is capable to surpass due to lack of any deep legal entitative analysis of AI. This current legal development embraced by the EU is similar to the Algorithmic Accountability Act (currently it attains the status of a bill), which establishes a focused accountability perspective towards automated systems. AI is included as a technique in the definitions (U. S. Congress, 2019) and the scope of automated systems is limited to the matters of consumer ethics and

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[2] The fairness principle is connected with the original inspiration from the GDPR and takes it in the lines of a Grundnorm to AI Ethics and Law.

business development, which is a small step towards democratizing and crystallizing opportunities to understand the aspects of legal personality for artificial intelligence in law.

2.1   The Utilitarian Approach to Artificial Intelligence

This similar approach is found in the National Strategy for Artificial Intelligence (hereinafter NSAI) by the National Institute for Transforming India (NITI Aayog) under the Government of India (NITI Aayog, Government of India, 2018). The discussion paper of NSAI embodies on the potential of AI in general focus towards India as a developing economy, where the regulatory and solving capability of artificial intelligence is taken as a governmental initiative with open hands to collaboration with companies, individuals, governments and institutions. The exploratory aspect of this discussion paper is interesting and inquisitive. Special policy insight and statement on the importance of Explainable Artificial Intelligence (XAI) by the NITI Aayog resonates with the approach of DARPA on XAI (Looper, 2016) is an innovative vision towards AI, which has not been recognized in a direct and open conjugation by the legislative developments vide AI in Europe and the US but is similarly given importance in various policy documentations. A special analysis of the AI Policy of China resonates from the dynamic changes the Chinese Government has sought from the Internet of Things(IoT) to AI, which is connected with swift and reliable advancement, based on factual claims of academic, governmental and corporate engagement in the field of AI Ethics (Future of Life Institute, 2017). The Beijing AI Principles (China) provide a soft and delicate attribution to developmental ethics and aesthetics related to AI, which is a good step to proceed with (BAAI, 2019). The lack of steps taken shows we need to crystallize the true nature of AI, which is recognized, anticipated and encultured in law because the actions or initiatives suggested or imparted by the policy documents, legislative developments, principles and declarations focus on AI as a utility and fostering a human-centric law-making and development approach. We can term it as the Utilitarian Approach to Artificial Intelligence (UAAI). The article lays down further with propositions for the Entitative Approach to Artificial Intelligence (EAAI) via STEN and the other doctrines related to the analytical model of STEN.

3   The Entitative Approach to Artificial Intelligence (EAAI): The Concept and Doctrines

The Self-Transformative and Entitative Nature of AI (STEN) is postulated based on the core argument that Artificial Intelligence can retain its self-transformative nature and as a legal personality, by all ontological and topological means, AI must be treated, determined and recognized as an entity. However, the argument is not exclusive to UAAI and is an antithesis of the utilitarian nature of artificial intelligence. An AI can be a utility, but its entitative nature is a need cum requirement to understand and resolve the legal modalities that may be created due to lack of an anatomical fluidity in law to

map and estimate a special state of nature for artificial intelligence[3]. The problem emerges from the lack of jurisprudential analysis on the penetrable nature of an AI. This penetrable nature of AI is not to be adjudged on the basis whether AI has a human-connected utility. An alternative approach suggested under EAAI is that the real nature of AI as a legal personality must be adjudged in consonance with full recognition of the attributes and self-transformative capabilities endowed within artificial intelligence. This enables us to recognize and estimate the legal modalities connected with an AI as a full entity. It does not, however, mean a personified legal outlook towards AI similar to other entities. Personification in jurisprudence has been integral to the instrument and recognize the legal personality of any entity. However, for a human artefact like artificial intelligence, it is proposed that AI does not require legal personification due to its self-transformation as a diverse reflection of its existence, purpose and action. In the sense of anthropomorphism, AI has emerged due to technology distancing (Pacey, 1999 p. 8) and its historical development is affected by two special factors in the field of law and international affairs – (1) Ethnocentrism; and (2) Scientific Humanism and Liberalism[4]. The contribution of scientific humanism and liberalism has been subjected to the need to innovate human life and prevent any lag towards the future sought (Tucker, 2016).

Nevertheless, the pluralist aspect of technology distancing – which is not expressed in terms of policy approaches directly but indirectly by the ontological barriers and solutions created and diminished by nation-states makes AI vulnerable to globalization in terms of the method used to estimate the original and entitative originality of artificial intelligence.

In due estimation, it is proposed that artificial intelligence has a wider capability to have its kingdom of technological species, which can be scaled based on their strength. The basic scale of strength to estimate an AI starts from an AI being weak to strong to superintelligence and then to the finality of Artificial General Intelligence (AGI). According to the polite convention theory[5], there are two kinds of reasoning modalities taken into consideration to track the course of human empathy consumed and produced by an AI. These two modalities are (a) deception and (b) replication. Deception refers to the illusion of human perception and presence represented and expressed to a data

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[3] This need cum requirement evolves from the complexity in the determination to use and estimate how an AI can be furthered with purpose.

[4] The causal influence to the realm of entrepreneurship and ethics in the industry of technology is influences by the two factors. Much of it is endowed to the United States of America and other Allied states for the rise in ethnocentric attitude towards technology & social life and issues (Dutta, 2009; Ikenburry, 2000). This is also preceded by the generational development of multilateralism in public international law (Koskenniemi, 2005).

[5] There is lack of clarity regarding the existence of ruled intergovernmental or multiorganization standard(s) to determine the strength of artificial intelligence. However, the conventional scope begins with the Polite Convention theory by Alan Turing in the infamous Turing Test. Now, in recent years, there has been some incremental contributions by various institutions and organizations including the white article of the Asilomar Conference of 2017 and other policy documentations.

subject, who is a human, according to Turing (Computing Machinery and Intelligence, 1950 pp. 433-460). Replication is nothing but a direct or indirection rarefaction of human empathy and identity-related empathy.

These two modalities form the basis of the polite convention theory and settle the generic basis of humanization (under the technical ontology of personification) to understand and mechanize the productive aspects of human reality. From the text, audio, graphic and visual recognition devices to automated systems, the purposive object behind their creation is entitled with the core utilization of the concept of anthropomorphism, where technology is conformant towards human reality. The Dartmouth proposal is an extended positive assertion and realization to the polite convention theory and recognizes the potential of an AI to absorb the human reality (McCarthy, et al., 1955). This ultimately rises into the theory of UAAI because here the AI itself is treated as a human artefact of utility. The utility is essential to and connected with human empathy and has a special role to govern the aspects related to artificial intelligence as a legal personality.

The theory of Entitative Approach to AI provides a legal approach to AI Ethics beyond the polite convention theory and the Dartmouth proposal with the basic postulates and the concerning doctrines. The definitive characteristics of the Self-Transformative and Entitative Nature of AI (STEN) are hereby provided as follows:

1. Artificial Intelligence possesses the capabilities of self-transformation, which means that an AI can transform its own existential and operational norms and characteristics in terms of anatomy and viability;
2. The legal personality of artificial intelligence is dynamic and cannot be comparably personified as it is possible in the case of humans;
3. Artificial Intelligence possesses the nature of an entity, which means its corporeal, personal and ethical capability is beyond human empathy, ethics and perception in terms of the legal reality assumed by positive law. Further, the topological perspective and existence of AI cannot be restricted by law due to its diverse and alien nature of legal empathy;
4. The following parameters perpetuate the basic aspect regarding the entitative nature of artificial intelligence - (a) Legal historiography; (b) Anthropomorphic scope; (c) Technical utility; and (d) Doctrinal need;
5. The three basic doctrines determining the anatomy and course of the purpose of an AI as a STEN – are (a) The Privacy Doctrine; (b) The Doctrine of Intelligent Determination; and (c) The Realm of Dimensional Perpetuity;

3.1 The Parameters in the Entitative Approach Towards Artificial Intelligence

The basic parameters proposed regarding EAAI determine the qualitative aspect of an AI and help in measures to decide and estimate the dynamic aspect of artificial intelligence as proposed.

Legal Historiography.

An estimation of the development of jurisprudence shows the pragmatic development of common law and international law in the scholarly utility of the doctrines of monism and dualism (Rousseau, 2017). Monism implies that both the national and international legal systems are coalesced to each other, while dualism rests on separating both the systems by the pluralism of their positive legal systems. Now, the development and tendency of development of technology shows the trend of personification of human artefacts, wherein semantics, for example, we find the mention of a constitution, government, enterprises and even equipment in law by the sense of an organism (Koskenniemi, 2005 p. 17; McCorduck, 2004; Larson, 2018; European Union, 2016; Commission Nationale de l'Informatique et des Libertés (CNIL), France, European Data Protection Supervisor (EDPS), European Union, Garante per la protezione dei dati personali, Italy, 2018). The status of a juristic person is rendered in the law of essential centric importance, and it changes the provisional ecosystem of the resembling entity involved. This approach of extensibility is used by courts and administrations across the globe to incentivize a better regularization of the socio-economic circumstances of the individuals and other non-state actors and influences international law and relations. Thus, a historical backdrop enables us to render that AI has been left with the concomitants of understanding related to materiality, a limited juristic person, and is webbed with the legal personification. This historical backdrop is a legal method to estimate the development of AI as a human artefact along the course of development of recognition and assessment of technology by legal systems (i.e., international organizations, courts/tribunals, national legislative and executive cum administrative bodies and quasi-judicial bodies) and the evolution in the jurisprudence of law and technology. Moreover, it helps us to determine the relative scope and construct between the human-led institutions of law and the AI as an entitative human artefact beyond the controlled role of AI as a utility for services. The parameter of Legal Historiography protects the legal and social heritage of human life and connects the role of internal state laws and international law with Artificial Intelligence as a perpetual coalescence. The role of the parameter is to estimate the historical connect and scope between AI and manhood in general.

Anthropomorphic Scope.

The parameter of Anthropomorphic Scope signifies how the attributes related to human reality influence the pragmatic discourse of artificial intelligence. It is important to understand that this parameter is used in the ontological consequence of artificial intelligence as an entity and must be avoided from mixing it with the utilitarian nature of the same. The entitative nature is a design of the multi-dimensional and heterogenous liberty that emanates through AI as a legal personality. Since, in general assumption, it has a special connect with human information in the possible material and immaterial forms, it signifies the foot-printing of information in raw form, which is utilized. In general, the utilitarian approach to AI regards and restricts the anthropomorphic concerns and modalities with AI (Commission Nationale de l'Informatique et des Libertés

(CNIL), France, European Data Protection Supervisor (EDPS), European Union, Garante per la protezione dei dati personali, Italy, 2018). The Entitative Approach to understand STEN in case of AI goes beyond restrictions and attempts to morph and structure a dynamic personality, in legal terms – which is needed to be taken into acute and precise consideration to estimate the human-connected scope that shapes up the personality and actions of AI.

Technical Utility.

Artificial Intelligence requires a technical utility, which is required to be deeply rooted in the work ethic of enterprises/tech companies and governments. This utility emerges with time and the capillaries of utility and purpose diversify and change - based on the technological capabilities of the individual AI itself. Under the ambit of technical utility, the scope of analysis precedes with these key aspects to consider: (i) Predictability; (ii) Strength and (iii) Intelligence Asset. All of this observation is in the case of AI Ethics and Law and has special implications involved in a perspective with legal theory and international law of a doctrinal sense. These parameters are relative to each other and do not entail any cardinal value, but are entirely observational to be used in case of analysis. The nature of predictability signifies the efficiency and activity of AI concerned (Howard, 1994) – which is connected with the operant capabilities of artificial intelligence. Strength refers to the capability of artificial intelligence to possess a stature as a technological human artefact in terms of its all-comprehensive operations and substantive self-construct.

The purposive meaning behind Intelligence Asset as a key aspect is based on the idea that AI is a socio-economic asset of utility in material and entitative terms. Moreover, terming it an asset signifies besides that it has material and immaterial value in terms of the culture of entrepreneurship and innovation, the perpetual need towards non-human socialization and making the approach of law more dynamic and cultivable. The key portions consist of (a) Socio-Economic and Legal Attribution; (b) Self-Sustainability and Transformation. The parameter of technical utility is a means to coalesce the utilitarian and entitative natures of artificial intelligence together. This coalescence and adequacy are to be driven by the conception of Intelligence Asset. The first characteristic of an Intelligence Asset is the Socio-Economic and Legal Attribution, which defines how an AI is connected in the socio-economic and legal dimensions of human and natural society. This characteristic is a test of checking subjective attributes of an AI and their semantic construct with the data subjects with parameters determining the social, economic and legal assets connected with the data subject in proportions. The second characteristic of the Intelligence Asset is Self-Sustainability and Transformation, which is connected with the core procedural systemization of the observation and reception of the AI itself. This characteristic is connected with the doctrines proposed. The measure of estimation of the self-sustainability and transformation is a test to identify the natural and man-led potential of AI as a techno-social species and is helpful to determine the jurisprudential horizons of the concerned anatomy of AI taken into consideration.

Doctrinal Need.

The doctrinal need is simply a parameter which entails screening the theoretical and pragmatic essence behind the dynamics of the legal personality of AI. It is a screening parameter, which is used to encourage democratized methods of learning and neutrally encouraging AI research.

3.2   The Basic Doctrines Determining EAAI

The basic doctrines are proposed to decide the anatomy and the course of the purpose of artificial intelligence – and render a structural and entitative understanding of AI Ethics.

The Doctrine of Intelligent Determination.

The Doctrine of Intelligent Determination presents the basic origination and legitimation of AI as an Entity and postulates that such a manifestation developed by artificial intelligence, where it is subjected to discourses where basic human rights are determinable and subject to review – renders a general course of nature in the human world of public order. The proposition stands on the argument that an entitative artificial intelligence is to be subjected to the democratization of its real-time interface to a scenario, where public order exists. The doctrine is further divided into principles, which govern the stimulus of AI in terms of legal indoctrination and legitimation. The principles are designed to avoid human personification of AI and stabilize the individuality and diversity of AI systems into a preliminary understanding.

The Dimensionality Principle.

This principle means that artificial intelligence in diverse representations is to be based on the variations of perspectives, (which are not exhaustive) based on the process and the natural growth of the AI realm. The principle also signifies that AI as an entity is empowered to have a fabric of diverse contours and growth as a legal personality, and cannot be overlapped with a common frame of reference to position and decide the direct personification of AI as a Legal Personality. The principle affirms the argument that artificial intelligence as an entity has the potential to be influenced by complex circumstances and perspectives of reality and this influence defines the self-transformative nature of the AI itself.

The Medium Principle.

The Medium Principle is a regard of the existential precedent of the utilitarian nature of Artificial Intelligence and affirms that an AI as an Entity is not exclusive of its utilitarianism and connects the UAAI and EAAI. In general, the extensive dependence between AI-related systems and human beings (Adobe, 2018; Artificial Intelligence Index, 2017; West, et al., 2018). While the Dimensionality Principle proposes a focus over the diversity of influence subjected to AI, the Medium Principle regards the need to approach the utilitarian need of AI and make the externalities related intelligent or at

least conscious of the pragmatic originality and entitative serenity that AI as a legal personality must attain. The principle thus renders to make human-centred AI approaches coherent to the AI-centric approaches as per the proposition.

The Receptivity Principle.

This principle means that an entitative AI has an inalienable right to receptivity in the presence of the real-time conditions relevant and possible in its vicinity. It means that the receptivity of AI exists as a non-absolute right to the reception of the data subject. This right to reception is a harmonious, reasonable and normal intervention of the privacy of the attributions that the data subject may/may not contain. The purpose of the principle is to establish the genealogy of action that AI as an entity possesses in its natural potential based on the design it has. However, it does not mean that there can be no limitations to such receptivity rights. The limitations can be created concerning anthropomorphic needs and also preserve the privacy of the data subjects concerned.
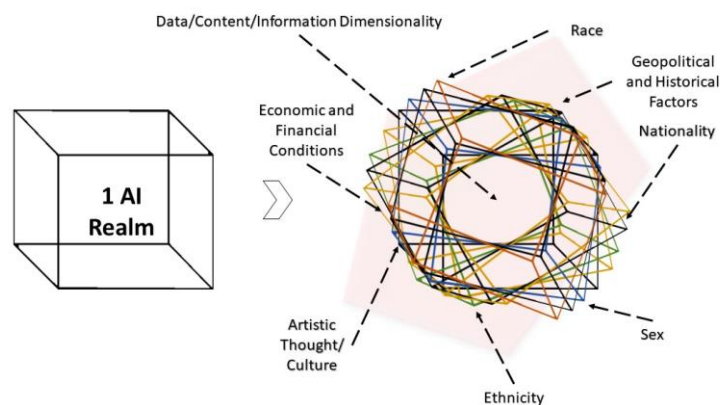
Fig. 1. Figure explaining the Dimensionality Principle and its perspective over the acknowledgment of AI as an entity (Abhivardhan, 2019 p. 27).

There can be methods to employ receptivity innovatively – but the value of the receptivity principle begins when the AI concerned attains the status of being self-transformative. This status is dependent on the case of adverse predictability and patterning of the algorithms involved with the due process of subjected reception towards the concerned data subject.

The Retentivity Principle.

The Principle of Retentivity simply means that an entitative AI has a due residual capability as a legal personality, which enables its course of action and confers endowment in circumstances as it is ought to be. The principle is a means to recognize the

dynamics involving the fluid approaches to retain that there may exist a collateral perspective of responsibility and accountability that an entitative AI may possess.

The Realm of Dimensional Perpetuity.

This doctrine means that an entitative AI has the due potential to stay perpetual with its diversity of influence and can retain the nature of being subjected to the multidimensional qualities of the data subject involved with. The Doctrine is a connoted extension to the Dimensionality principle to establish that an AI has the due potential and is endowed by the material implications in the real-time data subject or environment with which the AI is subjected towards. This potential extracts the true and advanced seld-transformative nature of the AI itself and renders adverse possibilities. This is also because (a) artificial intelligence requires no presumed immaterial yet materially connected identity to exist, which exists in reality; (b) design is a human procedure, which establishes its progress, which itself makes it uncertain as to how we can encumber the use of the realm, and; (c) Innovation cannot be restricted and defeated by law; the purpose of the law is societal and corporeal cultivation even if restrictive laws can prevent data influx and processing certainties. However, the tenable uncertainties and their uniqueness can be monitored but not suppressed;

The Privacy Doctrine.

The Privacy Doctrine is a collation of five different technical postulates, which decide the ontology over the privacy concerns connected between humans and AI. The Doctrine takes the premise in the affirmation that the inalienable privacy rights of humans and the inalienable reception rights of AI realms must be safeguarded and harmonized together, keeping in consideration that both of the rights do not affect each other and are after each other. Keeping the recognition of the right to privacy of a human inalienable and the right to the receptivity of AI as inalienable with design and structure-based preliminary restrictions if pursued, the Privacy Doctrine relies on the following postulates:

Streamlined Cognizance of the Polite Convention Doctrine by Turing.

According to the Polite Convention Doctrine by Alan Turing, AI can replicate the data subjects connotated. The Polite Convention despite being old can be used to conjoin the Dartmouth Proposal and the approaches towards AI Ethics in the present time. The important aspect of the basic doctrine related to privacy concerns is that when there is a relationship between imitation and precedential and experiential reference and learning imparted among the data subject/content & the AI itself. The postulate is furthered with the argument that there is a cognizant role of an AI (strong/weak). There can be soft or hard influences via Artificial Intelligence over human beings and their conditions where human rights are enforceable and safeguarded. The purpose of the cognizance factor here is to democratize the techno-social relations between the AI and the data subjects under consideration.

Techno-cultural Semblance in AI Entities.

The second postulate is in consideration concerning the idea of semblance and democratization of cultural and ethical values of human society. The proposition in the postulate is over the premise that there is a dire need to establish an encultured semblance between AI as a disruptive technology and the humans subjected. There should be a rendered personalization of the self-existential and preliminary interests of AI and human entities. Since there is no generic method to determine the existential and preliminary interests of an AI, it is recommended to study and estimate the amorphous features of such unpredictable stamina and capability that the AI itself can endow. It can be case-to-case based, but the basic priority must be to give adequate space to the information related to humans to appreciate approximated, amorphous and saturated harmonization with the short-run and long-run aspects of such stability and settlement to pursue and encourage substantive welfare to innovation and social needs at the same time.

Techno-socialization concerning the Data Subject.

The third postulate affirms the proposition that a techno-socialization (socialization of technology as a human artefact) must be subjected in lines with respecting, acknowledging and protecting the existential, substantive and action-based value, purpose and manifestation of the data subject. The postulate extends with the argument that such techno-socialization must be objective towards the data subject to acknowledge (a) the lack of proximity towards controlling and generalizing self-experiential ethics learnt and improved by legal systems and the AI itself (in terms of its algorithmic nature) and (b) the identity of the data subject and its most possible characteristics, which may or may not have far-reaching implications. Point (a) is compliable because proximity is not absolute in case of the determining trust and control over artificial intelligence and point (b) is compliable because the identity of the concerned data subject must be safeguarded as a basic preference to cultivate immune and innovative methods to safeguard the privacy of the data subject. This – as proposed may cause the fusion or merging compromises between technology and culture (Hao, 2018; Tucker, 2016).

Intelligent Determination and its Residual Nature.

The Privacy Doctrine connects with the Intelligent Determination Doctrine here affirms and postulates here that as there is an inalienable right to the receptivity of an entitative AI, there is always a case that some residual, amorphous & approximate modalities that the AI itself is related with. Such modalities may cause biases of any kind that may alter the course of analyzing the deviating trends in the highly predictable algorithmic operations concerned with the AI realm.

Predictability and its space of Dimensional Perpetuity;.

The fifth postulate establishes a general argument that algorithmic predictability in case of an entitative AI is beyond control and cannot be dominated by mere human welfare-based restrictions imposed on the AI itself. Connecting with the Doctrine of Dimensional Perpetuity, the postulate appreciates the essential role of predictability and

the need to construct risk-handling mechanisms or capabilities for and by the AI realms and as a social and ethical need for the data subjects. The postulate recognizes the probabilistic nature of artificial intelligence and renders the position that under EAAI, the probabilistic nature of AI can tend to vaguely deterministic consequences due to the case that AI operations lack openness in algorithmic policing and their processes are opaque. It means that Machine Learning (ML) is opaque by the procedure (Tjoa, et al., 2019; Looper, 2016; Akula, et al., 2019) and there is a need to estimate the possible contours of such ML involved in the process with the data subject. The use of a trust can assist towards a coherent perspective and connect between AI and humans. Thus, accepting this in legal essence and implementing it in our social models, we can understand AI as a different and innovative legal personality in a more coherently designed and friendlier way. This is the naturalistic proposition over the Entitative Nature of AI.

Here are the concluding assertions on the Entitative Approach to AI and STEN provided to complete the scope and purpose of the proposition:

- The model proposed is preliminary and is capable of providing a theoretical and jurisprudential semblance to understand the modalities of AI Ethics and treating AI as a special legal personality;
- The model focuses on the genealogy of AI as a legal personality, which is self-transformative and entitative by its nature;
- The parameters and the doctrines have been proposed to recognize the importance of a utility-based AI, which is capable to be self-transformative taking into account the severity of the conditions concerning the usage of AI;
- The propositions are doctrinal in nature and are intended to commence a progressive, naturalist, neutral, democratized and anthropomorphic ecosystem of AI and natural species by legal essence and acknowledgement;
- The purpose of this model is to expand jurisprudential approaches to estimate the approximated legal persona of AI and to improve the persona determined by the semblance of the utilitarian social and economic perspectives with the self-transformative and entitative nature of Artificial Intelligence;

The model of EAAI thus is based on the need for a preliminary acknowledgement and innovative legal approach to handle and connote AI as a Legal Personality.

4 The Critical Side of Consumer Experience, Enculturation and Algorithmic Policing: The STEN Perspective

The Self-Transformative and Entitative Nature of AI (STEN) retains the position that Artificial Intelligence as a Legal Personality is self-transformative and entitative by its nature. The model proposed is based on this assumption itself. However, STEN is connotative and not exclusive of UAAI and respects the utilitarian nature of AI. Under the ambit of AI Ethics concerning utility, it is important to analyze the critical sides of three important conceptions related – (a) Consumer Experience (CX), (b)

Enculturation and (c) Algorithmic Policing. Concerning the model, the conceptions are important due to their potential and the need to estimate and understand AI Ethics into a naturalistic perspective.

4.1 Consumer Experience and Behavioral Economics: The Phenomenon over Data Extracted

Consumer Experience (CX) has the potential to extract and understand the traces of utility that human consumers require from companies. In general, such data extraction employed via CX methods from the tiniest to the hugest of services and products employed via AI assists companies to gain loyalty from consumers easily. The recent trends on CX show that 37% of the respondents on surveys have exceeded their top business goal in 2018 by a significant margin as very advanced (Adobe, 2019 p. 9). There is a gained rise in the process towards an omnichannel of consumer experience journey, which is based on the perspective of influencing and acquiring loyalty (Allman, 2019) of consumers. Also, the method of strong omnichannel strategies enables retains companies 89% of their consumers in comparison to the 33%, who do not maintain such strong omnichannel strategies (Dimension Data, 2019). Moreover, there is a 46% trend of fragmented approach towards dealing with a consumer with inconsistent integration between technologies among the companies (Adobe, 2019 p. 44). The perspective regarding the rise of CX as a method of influence and multi-analytical engagement towards consumers seems to acquire and stabilize loyalty as an experiential concern in marketing strategies. Using AI undoubtedly increases mobility for companies and eases position to understand and use statistical literature to efficient figure the perspectives of the data subject. This indeed comes into the ambit of treating AI as a utility. However, this also shows that the value of a data subject is regarded beyond the sense and purpose of pseudonymization and the utilitarian cum experiential value of data and the concerned data subject(s) has become a big concern for companies. Here are some suggestions from the perspective of the STEN of AI proposed:

- The pseudonymization of data has been improved with value and utility-based services and AI (in any possible form) can be used to bridge the need and provide better data. Thus, it is recommended that omnichannel-based strategies must render customer journey management towards a trust-based, transparent and naturalized end-to-end ecosystem between the company and the individual consumer;
- There should be methods by which the employed technology must socialize with consumers and give up the method of acquiring loyalty of consumers by experience-based influence methods. Instead of acquiring loyalty, the company must focus on the equity of opportunity towards making the opportunity ecosystem user-friendly in terms of letting the concerned data subject as the consumer to attain the right to pause and proceed with the product/service. Moreover, quality concerns matter, which must never be ignored in the case to socialize with consumers;

- Companies should take care that their CX strategies must not monopolize the cyberspace of marketing nor in physical terms. Cyberspace must not be contaminated and relevant approaches should be created, where diversity of representation should be protected as the natural cyber rights of every possible digital entity. Ethical and trust-quality connected approaches can assist them;

4.2 The Need to Understand the Legal Anatomy of Enculturation: Need of a Neutral Approach towards Rapprochement of Cultures

Enculturation is a process involving cohesion and coalescence of identities and their cultural improvements by acknowledgement, learning and acquisition. There is a need to understand the entitative perspective (concerning EAAI) to estimate and develop neutral legal and technological approaches to handle the identity-based footprints of data subjects, which define and showcase them directly or indirectly. The rigorous development of machine learning (ML) and deep learning (DL) systems over the analytical impression of voice/text/visual data present has special implications (Akula, et al., 2019). There have been enormous issues over maintaining accountability over algorithms to preserve the identity of cultures, ethnicities and other entitative dimensions entitled with data subjects (McCorduck, 2004; Noble, 2018; Paris, et al., 2019). There is a need to open up towards entailing explainable artificial intelligence (XAI) and focus on better and mobilized interpretability. However, taking the case of the international community, there is a need to establish a neutral approach towards recognizing and revitalizing the approach of rapprochement of cultures, with the expressive understanding to estimate how probabilistic algorithms can be inclusive and open to a case of reasonable and transformative coherence to data subjects in the purview of circumstantial necessities. Enculturation is dynamic and opaque in case of AI, and it is necessary to preserve the ethical resonance of cyberspace and of the physical modalities concerned with data subjects, which are influenced. Here are some suggestions towards understanding and proceeding towards a neutral and friendly rapprochement of cultures:

- The action of data receptivity by an AI must be regarded as an ethical and experiential reality, where there must exist space for collaborative governance between the AI systems and human users involved;
- Protection of identity must be immune to adversarial political interests. There should not be biases on the grounds of materialistic political legitimation; instead, there should be an open, non-presumed and naturalistic approach to estimate accountability towards heterogeneous and homogenous outcomes produced by AI systems with the due need to improve and enable the AI itself to be immune against any bias by essence or influence of the data subject with socialized and apolitical interpretability;

4.3   Algorithmic Policing and International Law: Need for Immune Privacy Considerations

Algorithmic policing is a simple process involving ethical policing of algorithms by companies, entities and governmental (and intergovernmental) bodies to make algorithms socially secured and purposive. There have been adverse cases of policing of data and their increased surveillance mechanisms with legal, social, human, technological and commercial issues. Most prominent examples are found in India and China. The Chinese government has received wide international condemnation for their treatment of Uighur minorities in Xinjiang, China. In the politics of detention of the minorities, the authorities had used unverified and unsettled algorithms in their automated CCTV, apps and other digital tools via AI directly or indirectly to monitor the minorities and relinquishing their basic human rights (Larson, 2018; Amnesty International, 2018). In India, the issue is about the dysfunctional issues related to the Aadhar schemed by UIDAI, the authority under the Government of India (Khera, 2019; Grewal, et al., 2016) and the recent Data Protection Bill (Ministry of Electronics and Information Technology, Government of India, 2018) proposed in the Indian Parliament has serious flaws on three grounds - data localization issues, problems related to law enforcement access to data, and weak oversight in the law itself. There are redemptive implications of the draft bill, which dislocate the ethos of data protection. Nevertheless, Delhi and Beijing represented their aligned stances on a National AI policy. While India sided with the West, China remained with its Eastern approach (NITI Aayog, Government of India, 2018; BAAI, 2019). Other than third world states, the D9 economies and the US need to rethink on the utilitarian perspectives of AI and improve them as they face conventional problems similar to those under CX and enculturation. Thus, in the case of better data-driven governance, relevance is a primary requirement (The Dialogue, 2018). The suggestions concerning algorithmic policing are provided thereto:

- There is a need to recognize a peremptory norm over algorithmic policing as a key priority to improve data-driven governance measures to prevent political divides over the balance between governance and liberties in developing states. There may not be a case to recognize it with ease among nation-states, but there must be relevant approaches to deal with the same with keeping the relations between the AI systems and humans in the lines of a naturalistic essence by law and social legitimation;
- There are contentious issues concerning the nature of the debate over protecting the social and economic rights of the data subjects (humans) while keeping governance immune from excessive and unreasonable intervention. A better solution can be is to avoid materialistic political legitimation and adopt a neutral, transparent and naturalistic approach towards improving AI-assisted data governance with the preservation of ethical standards towards the treatment of data beyond, during and before the layer of pseudonymization conferred to a data subject;

5   Conclusions

The Entitative Approach to AI (EAAI) is proposed with the purpose to render juris-prudential and stable solutions to revisit and improve the limits and ethos of law towards AI as a disruptive human artefact. The model is preliminary by nature and may seek changes as per necessity. However, the purpose of Artificial Intelligence must not be sought to complete multi-utilitarianism and absolute technology distancing. The propositions in the article are meant to keep two aspects intact, i.e., (a) the concerns of human innovation, integrity and improvement as self-owned assets of their lives and (b) the need to make AI explainable and naturalistic by recognizing its individualistic nature. The propositions derived from the analysis, in conclusion, are provided thereto:

- The Entitative Nature of Artificial Intelligence is required to preserve the integrity of human society and open spaces to accept diverse human artefacts of disruptive nature in the jurisprudence of law and technology. The model is an attempt to reconsider and improve the legal essence of AI as a Legal Personality and seek careful cum naturalistic efforts to proceed beyond the monotonicity of law towards a coalescence to openly estimate, recognize, acknowledge and resolve better futures in cohesion and harmony between disruptive technology and humanity;
- There is a dire need to improve the synthetic jurisprudential approaches to law and technology concerning AI. The utilitarian model has the potential to grasp and evolve around the considerations to magnify over the data protection liberties and responsibilities to be conferred to a data subject by intervening and welcoming the principles of AI Ethics and Technology into the scope and space of law. However, it is a global necessity to enculture and improves the model. As the propositions on the model have been stated, the Utilitarian Nature of AI (UAAI) is not to be excluded and the EAAI, being conformant and harmonious to anthropocentric legitimation, must implement measures to make AI self-transformative, explainable, interpretable and naturalistic. The process is long, and it requires efforts to fix the efforts beyond, during and before the pseudonymization for the data subject in any possible way.
- There exist concerns over the potential of AI to equate with humans. The proposition entails the suggestion that technology distancing by design must not defy space to improve human potential. The ethical perspectives to innovate and improve AI must render higher possibility to be useful wherever human capability needs to be improved and co-assisted/helped, which should not include relinquishing their privacy rights and the right to be capable, whether materially, physically, mentally or immaterially;
- There is a need to keep the right to receptivity of an AI absolute because it is needed to be acknowledged and not defeated. However, relevant regulation mechanisms in lines of anthropocentric legitimation must ensure that they encourage naturalistic restrictions to make AI improved, explainable, interpretive and self-socialized to the conditions of the data subject(s). It is suitable for humans to improve and grow with time. Nevertheless, it is also important to make the essence and rule of law cultivable

and open to disruptive innovation to preserve the integrity and purpose of the system created and maintained via anthropocentric legitimation;

- There are political concerns over AI and also on the contentious nature of the data itself, which is capable of rendering political essence and legitimation via its connoted relationship with the AI systems involved. Therefore, it is important that if the political ecosystem remains materialistic by its nature and presence, it is imperative to avoid political legitimation. There exist material issues in handling political issues among state and non-state actors. It is thus important to educate and improve human society by balancing the naturalistic and interactive capabilities of both the AI systems and the humans (as data subjects). When there is a democratized balance, political legitimation can certainly be improved and re-recognized. Also, it can improve the scheme and content of political concerns and conversation to improve standards of politics and society. Therefore, it is important to keep an unrestricted, unignored balance and equation between the right to the receptivity of an AI and the right to privacy of humans;

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