Insights & Analyses

Drive and Agency in the Age of Algorithm-Based Decision Making*

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Abstract

This essay seeks to identify the requisites for human personhood so as to meet the legal challenges presented by algorithm-based decision making. Human beings are the archetype of legal personhood with all resulting rights and duties; however, because of the widespread usage of AI, there are potentially significant problems due to the lack of a clear definition of personhood in this context. The essay argues that Freudian psychoanalysis can be used to address this problem by providing a better understanding of personhood in juridical terms. Particular focus is given to the Freudian concept of 'drive'. The argued correspondence between the understanding of drive and the substantive theory of representation is central to the essay's conclusion that autonomous software systems are not real agents or persons even if they can communicate and interact with people in a human-like fashion because they are incapable of juridical cooperation and partnership with others.

I. The Challenges Presented by Self-Learning Algorithm-Based Software in Regard to the Concept of Legal Personhood

If legal scholarship is a science, then legal concepts must be based on real facts.

The reality that is the objects of legal study are made up not only of norms and interpretation of norms but also the facts which are governed and/or affected by norms and interpretations.

Therefore, legal scholars cannot avoid analysing the facts of human reality if they wish to offer to the courts and the legislature concepts that are scientific and not contradictory.

As has been noted, modern society depends ever more on autonomous decisions, which, for the purposes of this analysis, means unforeseeable decisions that are taken by self-learning algorithm-based software. Furthermore, it is implausible that this software will not continue to be used.[1]

People that use this variety of software are consequently subject to

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[1] See G. Teubner, in P. Femia ed, Soggetti giuridici digitali? Sullo status privatistico degli agenti software autonomi (Napoli: Edizioni Scientifiche Italiane, 2018), 22.

autonomous software risk, which is the risk of being considered accountable for unforeseeable declarations and actions decided on by this software because of nothing else but activating it.

To better govern autonomous software risk, some legal scholars argue that this type of software should be considered a self-governing agent and not a mere automatic non-decision-making tool operated by humans. Autonomous software should then be considered legally accountable for communications it autonomously decides upon. Those legal scholars consider this to be an efficient and fair way of solving the problem of the validity of electronic agent-based contracting and of the allocation of damages for injurious autonomous software decisions. They maintain that autonomous software programs are in effect data processing without human understanding; however, such programs are capable of acting if we consider data communication to be an action. Therefore, these scholars argue that autonomous software is capable of communicative interactions with humans notwithstanding their lack of human understanding.

Therefore, these scholars propose autonomous software be given the legal status of an electronic person, non-human entities with full legal personhood, or at least the lower legal status of electronic agents, digital assistants in the service of humans and acting as their representatives.[2]

Legal theories concerning digital autonomy and digital legal personhood are based on the idea that the law should classify a non-human entity as legal person whenever it could be perceived to be a person by society. Therefore, social perception of human identity would be sufficient to justify giving legal personhood to non-human entities. For this social perception of human identity to occur it is normally sufficient that a non-human entity is able to process and communicate data, thereby participating in social communication and interactions with other entities, be they human or not. In short, these scholars argue that this is the only factor necessary for the law to classify non-human entities as legal persons.

This legal doctrine is based on a fiction: a non-human entity, even if capable of social interaction, is not a real person.

If we exclude the sociological perception, we still have to define the requisites for human personhood, as these requisites also define any type of possible person in the eyes of the law and equal accountability. Human beings

[2] Floridi, for example, argues that a non-human entity can be considered able to act if it is capable of interaction, of autonomously deciding on changes to terms and conditions and of adapting its decision-making strategies: see L. Floridi, *The Ethics of Information* (Oxford: Oxford Academic, 2013), 140. Teubner uses Niklas Luhmanm's theory as the basis for his argument that software agents are, like corporation and other organizations, nothing more than 'data flows', that become persons (persons in limited respects) whenever in the communication process they are perceived as having a social identity and a specific capacity to act effectively at a social level: see G. Teubner, n 1 above, 40. For more information about theories concerning self-learning algorithm-based software as agents, see A. Santosuosso, *Intelligenza artificiale e diritto. Perché le tecnologie di IA sono una grande opportunità per il diritto* (Milano: Mondadori Università, 2020), 177.

are indeed the archetype of legal personhood and all resulting rights and duties. To this end, I submit that legal studies can profit from Freudian psychoanalysis, to answer the question of how to define the true meaning of legal personhood.[3]

II. Introduction to the Comparison Between Legal Studies and Psychoanalysis Findings Regarding Legal Personhood

We owe to Giacomo B. Contri the idea that legal studies and psychoanalysis findings can be compared because both sciences, among many other things, research a natural person's decision-making, conduct, willingness and (mental) capacity. A natural person is the *Rechts-individuum* (a legal subject), who exists only as the subject of juridical relationships with others. Contri's doctrine states that only human persons (including collective human entities) can be legal subjects because only humans are capable of '*drive*' and thus of thinking in formal juridical ways to interact with others in order to achieve satisfaction.[4]

But what exactly is this '*drive*' that qualifies a human being as a person in the eyes of the law?

In his work entitled Three 'Essays on Sexuality'[5] (in German, *Drei*

[3] This investigation of requisites for legal personhood takes as its starting point Freud's pioneering findings on 'drive', which contrasted with neuroscientific psychic determinism, which is taken by neurolaw scholars as their starting point. For more information on the comparison between neuroscience and legal study findings see, for example: G. Bombelli and A. Lavazza, 'Di nuovo sulla relazione neuroscienze e diritto' *Teoria e critica della regolazione sociale*, I, 7 (2021); G. Bombelli, 'Categorie giuridiche, giusrealismo e neuroscienze. Sulla nozione di rule-following' *Teoria e critica della regolazione sociale*, I, 73 (2021). For information on Freud's pioneering findings on 'drive' see G.M. Genga, 'Una parola sulla psicologia scientifica', in G.M. Genga and M.G. Pediconi eds, *Pensare con Freud* (Milano: SIC, 2008); Id, 'The human factor in flight and the question of satisfaction' *Italian Journal of aerospace medicine*, VII, 68 (2012), which claims that 'psychoanalysis is a science of human faculties, not functions. It is a widely diffused mistake to bring Freud onto the field of psychic determinism, while he opens the road to a new science of man (…). Freud would have liked to have called psychoanalysis simply psychology (…). It remains true that psychology is the name to reserve for a science of the psyche (a Greek word) that is the soul (anima, Latin word). Psyche, or soul, is nothing but the form of the motion of the human body (…). Freud called drive (Trieb) this law of motion, completely distinguishing it from animal instinct (Instinkt)'. This statement makes evident the weakness of the founder of cybernetics' proposition that 'the problem of the definition of man is an odd one (…). It will not do to say that man is an animal with a soul. Unfortunately, the existence of the soul, whatever it may mean, is not available to the scientific method of behaviorism': N. Wiener, *The human use of human beings. Cybernetic and society* (Cambridge – Massachusetts: The Riverside Press, 1950), 3.

[4] G.B. Contri, 'Norma e pulsione', in Id, *Saggi, testi pro-manuscripto*, *Opera omnia* (Milano: Sic, 1982), 1-17. See also: A. Farano, 'L'obbedienza al diritto tra ragioni e cause' *Teoria e critica della regolazione sociale*, 103 (2021), in particular 107, which argues that the human decision-making is the common subject of research for legal scholarship, neuroscience and psychoanalysis; A. Punzi, *Diritto in formazione. Lezioni di metodologia della scienza giuridica*, (Torino: Giappichelli, 2018), 11, which considers inherent to modern law the need to understand human behaviour to better regulate it.

[5] S. Freud (1905), *Three Essays on Sexuality*, *SE – The Standard Edition of the Complete*

Abhandlungen zur Sexualtheorie[6]), published in Vienna in 1905, Freud defined for the first time the concept of '*drive*' (*Trieb* in the German language), as

> 'die psychische Repräsentanz einer continuierlich fließenden innersomatischen Reizquelle, zum Unterschiede vom Reiz, der durch vereinzelte und von außen kommende Erregungen hergestellt wird (...)'.[7]

In English, according to the translation proposed by Prof Pediconi, Freud defines '*drive*' as the 'psychic representance of an endosomatic and continuously flowing source of stimulation, which differs from single external stimulation'.[8]

Contri described the Freudian concept of '*drive*' as 'the law of motion of bodies (...) to destination or satisfaction'[9] and also as the subject's demand and willingness 'to act in order to mobilise the action of another subject' for the satisfaction of both.[10] The above-mentioned reference to a sort of psychic representation purports to describe the subject's thinking about acting and working with others and by means of others toward their own satisfaction. The Freudian concept of '*drive*' would have remained unclear for jurists if it had not been further clarified by Contri in juridical terms that open the way to further psychoanalysis and legal research work.

Since Freud used the juridical concept of representation in his definition of '*drive*', let me briefly explain the different types of action and relationship described by the legal doctrine of direct voluntary representation in private law. I will use the term 'representation' rather than 'agency' in order to give sharper focus to a situation in which a person (ie the representative) represents another (the principal) in legal transactions and juridical acts with other parties whenever they are authorized by the principal to affect the latter's legal relationships.[11] I find 'representation' and 'representative' better terms than

Psychological Works of Sigmund Freud, translated under the general editorship of James Strachey, (London: The Hogarth Press, 1966), VII, 168.

[6] S. Freud (1905), *Drei Abhandlungen zur Sexualtheorie*, *Gesammelte Werke* (Frankfurt: Fischer Taschenbuch Verlag, 1999), V, 67.

[7] See n 6 above. For the Italian version see S. Freud, *Tre saggi sulla teoria sessuale* (Torino: Biblioteca Bollati Boringhieri, 1975, reprinted 2010, translated by M. Montinari), 50.

[8] In her paper entitled M. Pediconi, *Representance as a norm of psychic life. Freudian roots*, to be published and presented at Icon - S Conference 2022 - *Global problems and prospects in public law*, University of Wroclaw, Poland, July 4-6 July, 2022, 'Representance in crisis' panel.

[9] G.B. Contri, *The Thinking of Nature. From psychoanalysis to juristic thinking*, available at www.studiumcartello.it, 2003, 1-27.

[10] G.B. Contri, 'Norma e pulsione' n 4 above; Id, 'The thinking of nature' n 9 above, which underlines that it is that specific competence 'to make him/her human'.

[11] The terms of the Draft Common Frame of Reference (DCFR) are used in the text for the reasons given by the DCFR's drafters: see *Principles, Definitions and Model Rules of European Private Law. Draft common Frame of Reference (DCFR). Full edition*, Vol I, prepared by the Study Group on a European Civil Code and the Research Group on EC Private Law (Acquis Group), based in part on a revised version of the Principles of European Contract Law, edited by Christian von Bar and Eric Clive (Munich: Sellier, European Law publishers GmbH, 2009), 411.

respectively 'agency' and 'agent', because it is common for the word 'agent' to be used for people who have no authority to affect the principal's legal position. However, generally speaking, neither representation nor agency are ideal terms because ordinary language is rather loose regarding representation and agency-relationships, whilst there are many differences in legal regimes regarding representation in civil law and common law countries. Furthermore, the doctrinal debate regarding the 'true essence of representation' is still ongoing.

Very loosely speaking, in the Continental legal systems inspired by the French Code civil model, whenever the representative has been granted authority by the principal (normally through the latter's power of attorney, which is a principal's unilateral declaration of will), juridical acts carried out by the representative with third parties in the name of the principal are chiefly to the principal's direct benefit, whilst those reducing the principal's wealth could be annulled if the representative has acted in conflict with the interests of the principal.

At the same time, even though power of attorney confers on the representative the power to act on the principal's behalf and to affect the latter's legal relations, it does not oblige the representative to act at all: the representative relationship with the principal may be described as 'a can-do relationship' and it differs from the 'shall-do relationships' that arise from contracts.[12] Once entitled by the principal, the representative can still decide whether to act or not, depending on his or her internal relationship with the principal. The internal relationship established by 'authorization' or 'public investiture' of the representative by the principal is not necessarily a contractual one. The granting of power of attorney is perfectly valid and effective even in the absence of an underlying contract of mandate or any other consideration. At the same time, the principal's authority is necessary but not sufficient for the success of the representative relationship.

III. The 'True Essence of Representation' in Private Law

Voluntary representation in private law, depending on the way it is conceived, can work to increase the principal's autonomy or to increase the power of the representative to affect the principal's affairs, thereby limiting the latter's autonomy.

In 1905, when Freud published 'Three Essays on the Theory of Sexuality', Germany had just codified voluntary representation (die *Vertretung*) and the power of attorney (die *Vollmacht*). The general part of the German civil code of 1900 (the BGB – Bűrg*erliches Gesetzbuch*), under title 5, called *Vertretung und Vollmacht* (representation and power of attorney),[13] incorporated the *formal theory of representation* that had been invented by the German pandectists[14] in

[12] See P. Sirena, *Introduction to private law* (Bologna: il Mulino, 2nd ed, 2020), 310.
[13] para 164.
[14] For information about the Pandectistics, see G. Pugliese, 'I pandettisti fra tradizione

the second half of the nineteenth century in accordance with *Begriffs-jurisprudenz* (jurisprudence of concepts) principles.[15]

The Pandectists' concept of representation was based on the principle of the absolutely abstract nature of the authority (*Abstraktion der Vollmacht*) conferred by the principal to the agent in regard to the third parties. This theory disregarded the internal relationship between the principal and the representative: the carrying out of the principal's interests was not a requisite of validity of the representative's declaration of will on the principal's behalf. It has been observed[16] that:

> 'The theory of the abstract or autonomous character of authority – which has been considered one of the most important discoveries of modern jurisprudence, is normally attributed to Laband (…) (1866)'[17]

who, not by chance, was a public law scholar. However, this theory had already been put forward in a more veiled manner by F.C. von Savigny,[18] around twenty years earlier.[19] The starting point for Laband's theory was the absolute nature of

romanistica e moderna scienza del diritto' *Rivista italiana per le Scienze giuridiche*, III, XXVII, 89, 98, 99, 126 (1973), which states that the founding ideas for the movement were contained in Putcha's two-volume work *Gewohnheitsrecht* (1828) and the first edition of *Pandekten* (1838). The author observes that the Pandectistic school was the direct result of von Savigny's historical school due to its focus on Roman law and maintained that only law scholars were capable of validly interpreting the people's will and establishing legal concepts on the basis of Roman law and derive therefrom the rules to be applied for day-to-day cases. Pugliese points out that the unification of private law in Germany and its adequacy to meet the needs of middle-class interests was the work of a group of law scholars, the Pandectists, because at that time Germany was not a democratic nor liberal country but rather an authoritarian one; this contrasts with the unification of private law process that occurred in England and France.

[15] The *Begriffs-jurisprudenz* (jurisprudence of concepts) is a legal school of thought that proposed a systematic and dogmatic approach to the knowledge of law. It was founded by von Savigny's epigones, mainly Putcha and Windscheid, and was 'concerned with the goal of erecting an organic and coherent conceptual system. In this effort, they mainly sought to present the law and its study as a proper science (scientia juris)': see P. Sirena, n 12 above, 270. F. Wieacker, *Storia del diritto privato moderno* (Milano: Giuffrè, 1980), I, 488, states that the German philosopher and jurist Christian Wolff, one of the most distinguished representatives of Enlightenment rationality in Germany, was the true father of the 'jurisprudence of concepts' (*Begriffsjurisprudenz)* or 'constructive jurisprudence' (*Konstruktionsjurisprudenz*), which inspired Pandectistic works, from Putcha to Windscheid.

[16] By M.J. Bonell, 'The 1983 Geneva Convention on Agency in International Sale of Goods' *The American Journal of comparative law*, 717 (1984).

[17] P. Laband, 'Die Stellvertretung bei dem Abschluss von Rechtsgeschäften nach dem Allgemeinen Deutschen Handelsgesetzbuch' *Zeitschrift für das gesamte Handelsrecht*, X, 183 (1866).

[18] F.C. Von Savigny, *System des heutigen rômischen Rechts* (Berlin, 1840), III, 89-90; Id, *Sistema del diritto romano attuale*, Italian translation by V. Scialoja (Torino: UTET, 1900), III, 108. Subsequently, this theory was reviewed and developed by B. Windscheid, *Lehrbuch des Pandektenrechts*, Frankfurt AM, 1862-70, sechste verbesserte und vermehrte Auflage, zweiter Band, Frankfurt AM, 1887, 859.

[19] J.M Bonell, n 16 above, remarks that one of the important consequences of the theory of

the power of representation granted to the 'Prokurist' (the commercial agent) by the 1861 German commercial code, which stated that once power of attorney had been registered, the 'Prokurist' always legally commits the principal by contracting with third parties even when they go beyond or are not in keeping with the principal's instructions. In this theory, until the power of attorney is revoked, the principal cannot object to the representative's undertakings with third parties even if they involve abuse of or exceeding the granted powers. The theory of the abstract character of authority aimed to protect to the maximum possible degree the validity and effectiveness of commercial transactions in the market and to give third parties faith in the commercial agent's representative power.[20] In short, this theory states that once power of attorney is granted, the representative may substitute for the principal not only in action but also in will: to some extent to represent here means to command.[21]

The nineteenth-century idea of substitutive-representation comes from a doctrine dating back to the late Middle Ages, which was inspired by the canonist

the abstract or autonomous nature of the power of attorney, 'consisting in the impossibility of the principal to invoke against third parties the limitation of authority established in the internal relationship, was sanctioned as early as 1861 by the Allgemeines Deutsches Handelsgesetzbuch in a specific reference to the holder of a statutory commercial authority (Prokurist) (art 43) and to the agency authority of a partner in a partnership (arts 116, 167, 196) and to the authority of administrators of a corporation (art 231). Although this theory represents a typical product of the Bregriffsjurisprudenz which was dominant in Germany at that period, it is important to remember that at its basis was an eminently practical need, viz. the necessity, strongly invoked by the emerging mercantile class, to ensure utmost certainty in commercial transactions undertaken through an agent: on this matter see Müller-Freienfells, Die Abstraktion der Vollmachtserteilung im 19. Jahrhundert, in Stellvertretungsregelungen in Einheit und Vielfalt, Zum heutigen Stand, at 81 et seq'. P.P. Onida, *«Agire per altri» o «agire per mezzo di altri». Appunti romanistici sulla «rappresentanza» Ipotesi di lavoro e stato della dottrina* (Napoli: Jovene, 2018), 106, observes that the theory regarding representation proposed by Rudolph von Jhering, 'Mitwirkung für fremde Rechtsgeschäfte' in *Jahrbücher für die Dogmatik des burgerlichen Rechts*,I, 313, 333 (1857), was *'l'ultima posizione romanistica … prima del diluvio rappresentativo/sostitutivo*'. G. Pugliese, n 14 above, 120, fns nos 81 and 82, remarks that Jhering, in the second phase of his activity, was a proud opponent of the Pandectistic school and a precursor of Interessenjurisprudenz, above all in his work *Der Zweck im Recht* (2, 1877).

[20] V. De Lorenzi, 'La rappresentanza', in F.D. Busnelli ed, *Il Codice Civile Commentato* (Milano: Giuffré, 2012), 54, in particular 59.

[21] P.P. Onida, n 19 above, 99 observes that von Savigny and then the Pandectists, in particular Windscheid and Laband, in their works on 'heutiges Römisches Recht' (contemporary Roman law), explained representation by using the concept of guardianship of people who lack capacity. Nevertheless, in Roman law the legal status of *pupillus* and the legal status of *popolus* were completely different and therefore the parallel does not exist. Indeed, in Roman law, the *pupillus* was the archetype of people *in aliena potestate*, whilst the *populus* (ie, the *societas/ collegium* and/or the *societas/res publica*) were the archetype of people *suae potestatis* ('Il populus, la cui potestas è assomigliata al potere divino, non soltanto è in sua potestate ma ha tutti gli altri nella propria potestà, ivi compresi (anzi: in particolare) i propri magistrati/ magistratus'). Onida observes that this contemporary legal doctrine's reasoning cancelled the Roman law concept of *per quem agere*, to act by means of another, by turning it into the concept of '*alieno nomine agere*', to act instead of another (102).

persona ficta et/vel represaentata (fictitious person)[22] and theoretically developed by Hobbes.[23] Here the representative's will takes the place of the fictitious person's will. In this doctrine, the idea is that to represent is to act for others by substituting for them.

By contrast, the idea of a person's capability to make contracts by means of others (*negotia aliena gerere*) dates back to Roman law, which however did not include the concept of voluntary representation. Indeed, in the Roman *jus civile* there only existed the opposite concept '*per extraneam (o liberam) personam non adquiritur*',[24] excluding certain exceptions admitted by the Roman *ius pretorium*.[25] However, in Roman law it was possible to instruct a servant or a mandatary to enter into contracts and then transfer contractual rights (for instance property and credits) to the *dominus negotii* and be guaranteed by him for the payment to the counterparty.[26] The idea of representation as a form of juridical cooperation was subsequently developed in the context of the modern school of natural law, by the eighteenth-century continental codes[27] and the French Civil Code of 1804[28] which regulated representation together with contract of mandate.[29] Unlike the abstract theory of representation, the concrete concept of

[22] See P.P. Onida, n 19 above, 69, which reminds us that the term *persona ficta* has been attributed to the canonist Sinibaldus Fliscus, Pope Innocence IV, in his work *Super libros quinque Decretalium commentaria, Frankfurt a M 1570*, in reference to oath of the *universitas*.

[23] T. Hobbes, Leviathan or the matter, form and power of a commonwealth ecclesiastical and civil, 1651, Part. 1, Of Man, Ch. 16, Of Persons, Authors and Things Personated. P.P. Onida, n 19 above, 77 underlines that also Hobbes took the guardianship of people who lack capacity as a model of the representation functioning and its substitution mechanism.

[24] See R. Orestano, 'Rappresentanza (diritto romano)' *Novissimo Digesto Italiano*, (Torino: UTET, 1967), XIV, 795, 796, in which he quotes the rule as it is enshrined in the *Corpus juris Iustiniani*: GAI, 2, 95 = *Institutiones*, 2, 9, 5; *Paul Sent*, 5, 2, 2; C I, 4, 27, 1 pr, ecc.

[25] See R. Orestano, n 24 above, 799 and G. Stolfi, *Teoria del negozio giuridico* (Padova: CEDAM, 1961, reprinted), 186, fn 1.

[26] R. Orestano, n 24 above, 796, explains that in Roman *jus civile,* servants and sons were only *de facto* representatives as they were unable to become right-holders through the contracts they entered into in the *pater familias*' interest. See also G. Lobrano, 'Appunti per la lettura delle fonti. L'esempio – da non seguire – della attribuzione della 'rappresentanza' al Diritto romano', in *Diritto @ Storia, Rivista internazionale di Scienze giuridiche e Tradizione romana*, XVI, 2018; Id, *Tradizione romana*, available at www.dirittoestoria.it (last visited 31 December 2022).

[27] Concerning the modern school of natural law and the eighteenth-century continental codes see F. Wieacker, n 15 above, 493 and following pages.

[28] Republished in 1807 as Napoleonic Code (in French, Code Napoleon), in 1814 as Civil Code and finally in 1852-1870 as Napoleonic Code again: see F. Wieacker, n 15 above, 522.

[29] See V. De Lorenzi, n 20 above, 5 and following pages.; P. Cappellini, 'Rappresentanza (diritto intermedio)' *Enciclopedia del diritto* (Milano: Giuffrè, 1987), XXXVIII, 435 and following pages; G. Visintini, 'Degli effetti del contratto. Della rappresentanza. Del contratto per persona da nominare, Artt. 1372-1405', in F. Galgano ed, *Commentario del Codice civile Scialoja-Branca* (Bologna - Roma: Zanichelli, 1993), 175 and following pages, in particular fn 7, which observes that while the Italian civil code of 1865 did not contain specific norms for representation, 'il codice di commercio abrogato, sul modello del code civil, sanciva che il mandato commerciale ha per oggetto la trattazione di affari commerciali per conto e in nome del mandante (art. 349). Tale disposizione modellata sull'art. 1984 code Napoleon (…) traduceva l'idea che la rappresentanza fosse un elemento necessario del mandato (mandat ou procuration)'. P.P. Onida, n 19 above, 96, comparing

representation as a form of juridical cooperation gives great importance to the internal agency-relationship between the principal and the representative.[30]

In Germany, the abstract concept of representation was challenged by Schlossman,[31] who, in keeping with the principles of scientific positivism, considered juridical phenomena to be equivalent to natural phenomena and underlined that normally the power of representation is granted with a contract regulating the internal agency relationship between the principal and the representative. The agency relationship is normally a contract of mandate, but it might also be a different kind of contract (eg an employment contract, a work contract like that with a lawyer or a doctor). This theory states that the true essence of representation is that the representative is entitled to take care of the principal's interests, the principal remaining the *dominus negotii*. Therefore, the representative acts as the principal's substitute for some activities but not in terms of their will.

In this theory the representative is conceived as a partner with the principal because they cooperate for the success of the latter's affairs.

If seen in this way, representation becomes a tool for distributing work and creating cooperation.

As a consequence, the representative should not be seen as a master but rather as a partner: as the case may be, he might be a mandatary or a servant in the broadest sense of the word, such as an employee or a counsellor or a doctor (case law has sometime described the agency-relationship between a doctor and a patient as therapeutical alliance).[32]

The substantive theory of representation, which was proposed by Schlossmann as an alternative to the abstract one, had no followers in Germany at that time.

the wording of Art 1984 in the Napoleonic Code (Titre XIII *Du mandat* – Chapitre 1er *De la nature et de la forme du mandat*, art 1984 (*le mandat ou procuration …*) and the wording of the subsequent Art 164 of the German Civil Code - BGB (Titel 5 *Vertretung und Vollmacht*, par. 164 *Wirkung der Erklärung des Vertreters*, para 1 *Eine Willenserklärung, die jemand innerhalb der ihm zustehenden Vertretungsmacht im Namen des Vertreten abgibt, wirkt unmittelbar für und gegen den Vertretenen*) finds the latter's novelty in the transition from the logic of 'acting by means of another' (still existent in the Napoleonic Code, Art 1984) to the logic of 'acting instead of another'.

[30] See G. Visintini, n 29 above.

[31] S. Schlossmann, *Die Lehre von der Stellvertretung, insbesondere bei obligatorischen Vertrâgen*, (Leipzig: A. Deichert, I, 1900; II, 1902). For more information on Schlossmann, see V. De Lorenzi, n 20 above, 95.

[32] Understood to mean 'cooperation between both parties involved', doctor and patient, in taking decisions regarding therapy with the ultimate aim to protect the patient's health, in accordance with the guidelines of the World Health Organization: see G. Pellegrino, 'Il rapporto medico/paziente e l'alleanza terapeutica', in P. Cendon ed, *Responsabilità civile* (Milano: WKI, 2017), 2751, in particular 2761-2762; L. Chieffi and A. Postignola, '*Bioetica e cura. L'alleanza terapeutica oggi*' *Mimesis Quaderni di Bioetica*, III, (Napoli: Centro interuniversitario di ricerca bioetica, 2014), passim. See also T. Penna, 'Nudging, informed consent and public health: dangerous liaisons between law and neuroscience or opportunity for the future?' *Teoria e critica della regolazione sociale*, I, 117 (2021).

However, it later gained many adherents across Europe. For example in Italy it influenced many moderate followers of legal positivism, starting with Pugliatti, whose work influenced the 1942 Italian codification of representation.[33]

Therefore, even though the Italian civil code for the first time codified representation separately from contract for mandate, it did not accept the Pandectists' idea of the absolute power of the representative, which they believed to favour security of trade in the public interest. On the contrary, the representative agent remains accountable if they act when they have a conflict of interest or exceed the power of attorney, and in these two cases their acts are respectively voidable or without any legal effect. The internal relationship between principal and the representative-agent was thus described by the Italian legal positivists as a fiduciary relationship.[34] In their view of representation, the representative might substitute for the principal for carrying out some tasks but not in terms of will, in other words he or she is a partner, but not a substitute for the principal.[35]

In many Continental countries, the idea of representation as a tool for the principal to increase their autonomy by means of the cooperation of the representative has become mainstream even if there is still an open debate regarding the true essence of representation.

IV. Concluding Remarks

The legal concept of representation as a formal way of increasing the juridical autonomy of individuals by means of the cooperation of another seems to correspond to the functioning of 'drive' as it was described by Freud in his 1905 essay and afterwards, including in the 1915 essay entitled 'Metapsychology - Drives and their Fates'.[36] Indeed, '*drive*' has also been explained by psychoanalysts as

[33]See Salvatore Pugliatti's essays collected in the book S. Pugliatti, *Studi sulla rappresentanza* (Milano, Giuffré, 1965), passim; see also P. Papanti Pellettier, *Rappresentanza e cooperazione rappresentativa* (Milano: Giuffrè, 1984), passim.

[34] See A. Trabucchi, 'La rappresentanza' *Rivista di diritto civile*, I, 576, in particular 382 (1978).

[35] C.M. Bianca, *Diritto civile*, III, *Il contratto* (Milano: Giuffrè, 2000), 71, in particular 80. See also L. Cariota Ferrara, *Il negozio giuridico nel diritto privato italiano* (Napoli: Morano, 1948) 680; G. Stolfi, n 25 above, 184, in particular 198; R. Scognamiglio, 'Contratti in generale', in G. Grosso and F. Santoro Passarelli eds, *Trattato di diritto civile* (Milano: Vallardi, 3rd ed, 1972), IV, 2, 61; F. Messineo, 'Il contratto in genere', in A. Cicu and F. Messineo eds, *Trattato di diritto civile e commerciale* (Milano: Giuffré, 1973), I, 223; U. Natoli, *La rappresentanza* (Milano: Giuffré, 1977), 21; F. Santoro Passarelli, *Dottrine generali del diritto civile* (Napoli: Jovene, 1989, 9thedition, reprinted), 266, in particular 274; F. Galgano, 'Il negozio giuridico', in A. Cicu, F, Messineo,L. Mengoni, P. Schlesinger eds, *Trattato di diritto civile e commerciale* (Milano: Giuffrè, 2002), 397.

[36] S. Freud (1915), *Metapsychology – Drives and their Fates* (London: Penguin Books, 2005, translated by Graham Frankland), 15, 16. See the original version in S. Freud (1915), *Die Verdrängung*, *Gesammelte Werke* (Frankfurt: Fischer Taschenbuch Verlag, 1999), X, 250. See the Italian version in S. Freud, *Metapsicologia. Pulsioni e loro destini*, in the series *Opere*, 8, *Introduzione alla psicoanalisi e altri scritti*, 1915-1917 (Bollati Boringhieri, 2020), 14.

the individual's thinking that creates initiative with others and by means of others in order to be satisfied. Since '*drive*' is a fundamental law governing the functioning of the human psyche – like a sort of human equivalent to a country's constitution – we can draw the conclusion that the psyche functions in a formal and juridical way, which Freud himself described as a kind of representance.

By way of conclusion, we can infer from a comparison between representation in private law and psychoanalytical 'drive' theory that human beings think for themselves and their satisfaction as a result of a partnership in the sense of cooperation with others in formal ways that are juridical in nature. And it is this unique capacity – which is much more than conscience, sensibility and the capacity to communicate and calculate – that qualifies human beings to be legal subjects.

If digitalization challenges our traditional understanding of the scope and limits of personhood, the psychoanalytical finding that only human individuals are capable of thinking for themselves in juridical relationships with others, and therefore are existing and real persons, is of great relevance and use.

Autonomous software are thus not real agents nor persons even if they can communicate and interact with people, because they are incapable of juridical cooperation and partnership with others. Even the more sophisticated algorithms are mindless entities, incapable of representing humans, because they are incapable of understanding and thinking and thus unable to take care of human interests for mutual satisfaction.

For these reasons, there is no justification for classifying autonomous software as legal persons, and to do so has the potential to create enormous problems.