

Book Review

E. CATERINI, *L'intelligenza artificiale "sostenibile" e il processo di socializzazione del diritto civile*, Edizioni Scientifiche Italiane, Napoli, 2020

In 2017, worldwide sales of industrial robots increased by 30% (data from the International Federation of Robotics); in 2018, 57% of companies worldwide started automation processes (report Mcinsey& C.); according to the World Economic Forum, in 2025, 52% of working time will be carried out by machines and 48% by workers.

Enrico Caterini gives an account of these data in his text «L'intelligenza artificiale "sostenibile" e il processo di socializzazione del diritto civile» (The "sustainable" artificial intelligence and the process of socialisation of civil law): it constitutes the reworking and extension of the paper that the author read during the "2019 Summer School" of the Association of Private Law Doctorates (the school was held at the Polytechnic University of Marche, on 11 September 2019).

The work is divided into 12 paragraphs and is accompanied by a substantial set of notes. The author aims to clarify what is meant by Artificial Intelligence and what prospects await mankind in terms of social and regulatory life in the face of the disruptive innovation that is taking place.

First of all, Enrico Caterini points out that robotics, having gone through the phase of so-called auto-motion (the machine works by itself and does not need an impulse), has passed from the phase of programming actions (human and machine) to the phase of so-called autonomization (the machine makes its own decisions). The subject is of particular importance: the robot, in fact, makes autonomous choices that have important repercussions on value structures.

He states that the lack of a heterodirected government changes perspectives. More specifically, Caterini believes that the progress of AI affects various established ideas, including that of the «person»: it changes the natural conditions of human existence (and therefore also of human intelligence).

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autonomisation of machines poses a social question, a problem of accessibility: the instrument is less and less an instrument and more and more a decision-making centre; it changes the balance and becomes a possible cause of differentiation between people: not everyone, in fact, can freely access it. It changes the balance and becomes a possible cause of differentiation between people, since not everyone can access it freely. He emphasises that these actions must be aimed in particular at remedying socio-economic obstacles, and that a certain transparency and intelligibility of the instruments must be ensured.

One agrees with the part of the essay in which Caterini points out the need to recognise that algorithmic authors and machine actors are responsible both civilly and socially: AI cannot be the cause of worsening differences, but must act as a vehicle for equality. In order for this to happen, it is necessary that «the discovery of science should be subject to the primacy of law», which is a tool for building a just society.

This is a central issue, which must be duly taken into account when carrying out studies on technological innovation: think of the health sector and the differentiated distribution of resources on a regional basis; but also, more trivially, of the social inequalities that have come to be substantiated in the course of the pandemic, in the light of the already existing digital differential in Italian families (on this subject, cf. N. Posteraro, *Lo smart working come strumento di lavoro primario per le pubbliche amministrazioni (al di là della pandemia)*, in *Osservatorio IRPA sullo Stato Digitale*, <https://www.irpa.eu/lo-smart-working-come-strumento-di-lavoro-primario-per-le-pubbliche-amministrazioni-al-di-la-della-pandemia/>).

Particularly noteworthy is the part in which she focuses on the analysis of the two functions of AI: the disintermediation function and the predictive function.

Caterini states that the character of disintermediation appears very risky.

In fact, one thinks of the already implemented disintermediation of information: we all easily realise how dangerous this area of innovation is on a practical level; the risk we experience on a daily basis, in fact, is that of having direct access to unfiltered data which dis-inform (Lorenzo Casini has given an account of this in his latest

book «*Lo Stato nell'era di Google. Frontiere e sfide globali*», Mondadori, 2020. On this topic, see the interview given by the author to the IRPA Observatory on the Digital State: <https://www.irpa.eu/intervista-con-lautore-lorenzo-casini-lo-stato-nellera-di-google-frontiere-e-sfide-globali-mondadori-2020/>).

The problem is exacerbated, Caterini believes, when disintermediation transits from information to values: with AI we disintermediate all those structures (banks, states, control subjects and professions) that were instruments of guarantee for the weaker parts of the relationships governed by the system. The risk is that values will be introduced into the economic and social legal circuit without any guarantee or control.

Caterini then asks whether the paradigms of the democratic conception do not also change in the context of automated life.

The author states that AI causes an extreme focus on data and entails a concomitant lack of focus on ideas; in other words, it causes the value of democracy to be transferred from the idea to the data. However, Enrico Caterini affirms that the two identities do not necessarily coincide: for this reason, he believes that the shift to the data leads to the dangerous lack of the evaluative and ideal moment (a moment that, on the contrary, must exist for democracy to be defined as such).

The author specifies that man, in this context, has a fundamental right to the true datum (a datum that corresponds to a non-absolute truth). He also specifies, however, that such a right to the true datum (which is the pre-supposition of democratic decision) cannot coincide with it: the democratic decision, in fact, needs the element of choice; if this last element is missing, the de-creator coincides with the technician and the democratic system collapses (G. Sgueo has spoken about how technology influences and conditions democracy. Sgueo in a post published in the IRPA Observatory on the Digital State (*Il futuro della partecipazione democratica è on line?*: available on: <https://www.irpa.eu/il-futuro-della-partecipazione-democratica-e-online/>).

As for the predictive function, it manifests itself in various sectors of preventive medicine, for example, and is -perhaps justifiably- criticised in Italy when correlated with the theme of justice.

The author points out that it can have a positive spin-off; through it, for example, all of us consumers simultaneously assume the role of purchasers of the products to be consumed (we

become, that is, subjects of production): when we provide information on tastes, preferences, etc., we provide the production companies with preferences that will push those same companies to produce goods that better correspond to our tastes.

The text encourages the reader to think about the opportunity to keep the two intelligences (human and artificial) separate, as well as about the certainty of being able to consider the first (UI) superior to the second (AI), and the need to start considering them as an integral process.

The author points out that it has been proved that in replicating the metrological scheme of human intelligence, the Artificial Intelligence has a calculation potential which is enormously superior to the first; it is advantaged, therefore, because it is able to do things which the human mind, from the point of view of the application of its rationalist method, is not able to do; however, Caterini underlines that it has also been demonstrated that the AI is not only rational intelligence.

However, Caterini points out that it has also been demonstrated that AI is not only rational intelligence. In particular, thanks to an experiment carried out in the field of sport, it has been found that machines also think in terms of fantasy: they apply the same method that the human brain applies when it deviates from rational logic and works on abstract conjectures. In other words, it has been discovered that creativity is also automatable and that, therefore, the processing capacity of the machine is equal or almost equal to the processing capacity of man; in particular, an Oriental Go player in 2017 challenged a machine with the aim of proving the superiority of UI over AI: he played that game and lost 4 sets out of 5. In analysing the reasons for the defeat, it was realised that the machine, in order to win, had used fantasy to make a strategic move.

According to Caterini, in any case, it is necessary to take definitive note of the fact that, at present, artificial intelligence, although it replicates the part of human intelligence that knows and learns through experience, is different from the latter. The author underlines, in fact, that the distinction between the two intelligences can be found in the presence/absence of consciousness: AI, contrary to Human Intelligence, has no conscience (and therefore interacts with the apparatus of knowledge). It is also devoid of judgement, since, unlike the UI, it is neither wise (it is incapable of penetrating beyond people and things) nor just (it does not evaluate the interest of others, when it chooses and de-

cides, but only its own).

The author also dwells on the issue of the so-called subjectivisation of AI.

He notes that the most advanced juridical studies now almost unequivocally recognise the juridical subjectivity of AI (both the robo-robot and the one that does not express itself through a robot): he therefore believes that this demonstrates that subjectivity is not to be identified with the person; the latter is in fact only a part - albeit a very important one - of the range of juridical subjectivities that the legal system conceives.

In this sense, he agrees with the theories that register an overcoming of the anthropocentric conception of juridical subjectivity, also in the light of the case law of the interests that, over time, has intervened on this subject (and has recognised the subjectivity of forests, glaciers, animals, etc.).

The legal system, he affirms, can undoubtedly recognise and appreciate new interests, so much so as to subjectivise them; the only limitation lies in the person, who must not in any way be harmed by these recognitions (but rather must benefit from them in terms of increasing his protection).

Consequently, Caterini, expressly taking up Kant's idea that the moral agent is responsible for his actions, states that the autonomous decision-making capacity of the subjectivized machine must necessarily correspond to an autonomous responsibility. The topic is obviously central, so much so that it has been addressed both by the Italian doctrine and by the European Union (as to the studies of the Italian doctrine on this point, see, among others, the contributions published in E. Gabrielli and U. Ruffolo (eds.), *Intelligenza Artificiale e diritto*, in *Giurisprudenza italiana*, monographic issue, 2019, reviewed by the writer on the IRPA Observatory on the Digital State: <https://www.irpa.eu/ai-recensione-fascmonogr-post/>); as to the attention paid by the EU to the topic, see in particular the European Parliament Resolution of 2016; for a comment, if you wish, N. Posteraro, *Robots, autonomous decisions and civil liability. The Parliament asks the commission to intervene*, available on: <https://www.irpa.eu/robot-decisioni-autonome-e-responsabilita-civile-il-parlamento-chiede-alla-commissione-di-intervenire/>).

In conclusion, the essay shows how the discussion on the potential of AI must always be conducted within the prism of the values of the person: the person is the fulcrum of the legal system and must be understood from an axiological and ontological perspective; innovation

must not lose the social dimension of mankind and must, on the contrary, develop in its potentiality the capacity for cooperation between men. Through AI, the effectiveness of human rights and duties can be guaranteed, but their mechanism to access by social actors can also be simplified.

It is clear from the text how important the commitment of the jurist (in particular, the civilist) is: he must strive to act so that the law increases the rate of sociality, assuming an interpretative position that is consistent with the fundamental law of the Republic.

In this perspective, Caterini innovatively specifies that artificial intelligence is an instrument of social sustainability; that is, thanks to its ability to look to the future, it can be a facilitator that drives and facilitates actions towards sustainability, to be understood as the general principle of the Italian-European legal system according to which the legal phenomenology of the present must respect and preserve the future.

Caterini's book demonstrates that, in addition to being a problem of law, AI is also a problem that affects, among others, the anthropological and social levels.

The book summarises a constant dialogue of the jurist with the other sciences; it confirms how the legal scholar who wants to deal with the subject must necessarily take into account the other disciplines and the other sciences.

The risk otherwise is that his research will become meaningless and incomplete.

The work is part of the research activities related to the PRIN 2017 project entitled "Administrative reforms: policies, legal issues, and results"; an Italian version of the review has been published in the IRPA Digital State Observatory (irpa.eu) (NICOLA POSTERARO).

**T. WISHMEYER, T. RADEMACHER (eds.),
Regulating Artificial Intelligence, Cham,
Springer, 2020**

The review of this volume offers an articulated view of an extremely topical subject that is far from having been thoroughly dealt with at both European and national level, in a constant pendulum, swinging between the improvement of human activities and risks of pathological drifts of the phenomenon of AI.

Regulating or complying with regulations on artificial intelligence is a need that can no longer be postponed, in terms of a global problem that goes well beyond not only the concerns of EU