

Artificial Intelligence, Robotics and Fundamental Rights*

Massimiliano Delfino¹

¹ University of Naples Federico II, Department of Law, Corso Umberto I 40, 80138, Naples, Italy

Abstract

This paper aims to describe and motivate the author's perspective on the issues posed by robotics, specifically Artificial Intelligence, exploring the significance of the Fundamental Rights approach to AI. The author believes both aspects are essential to understanding robotics, work empowerment and the environment. The Fundamental Rights approach helps concentrate the attention on the issue of the environment, which will be intended as the social environment, which is strictly linked to legal sustainability.

Keywords

AI, fundamental rights, robotics, EU regulation

1. Introduction

The topic of robotics and work empowerment is crucial in current labour law. Moreover, this subject allows us to face the present and, above all, the future of our subject matter since this topic has yet to be well-established, especially with the rise of Artificial Intelligence (AI) enhanced robotics [1] [2]. The paper presents a point of view on this complex matter from a legal perspective. First, I choose the fundamental rights approach since examining the applicability and adaptability of labour law legislation to robotics is secondary to analysing the issue of fundamental rights in that field. Therefore, I intend the environment as the social environment where robotics operate. Second, it is worth reminding that robotics et similia are linked to the AI issue since systems based on AI can be easily divided into two types: 1) software operating in the virtual world (vocal assistants, search engines, etc.) and 2) software that can incorporate AI in hardware devices, such as robots and exoskeletons, which are the devices we are interested in this context.

This paper deals with the issues of AI and the fundamental rights approach to AI. In a broader sense, both are essential to understanding robotics, work empowerment and the environment. Moreover, the Fundamental Rights approach deals with the issue of the environment, one of the topics of the Conference, intended as the social environment, strictly linked to legal sustainability.

2. Robots et similia: the legal implications and the link with AI

The need for "laws of robotics" to ensure the peaceful coexistence of humans and robots on Earth comes from the process of robotisation. Robots are part of everyday life (including in areas such as transportation, medical care, education, and agriculture). They assist humans, facilitating tasks that, on their own, they could not easily do. Considering the need to regulate new phenomena that increasingly involve robots acting independently, the European Parliament adopted the Resolution of 16 February 2017, making recommendations to the Commission concerning the Civil Law Rules on Robotics, namely the civil liability profiles for any damage caused by "autonomously thinking" robots. Robotisation processes, however, can also be considered as having a significant impact on the organisation and labour market, concerning which the Resolution highlights the problem of the lack of skills to be filled, the need to monitor

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✉ massimiliano.delfino@unina.it (M. Delfino)

🆔 0000-0002-8287-9092 (M. Delfino)



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job losses, the need to ensure respect for fundamental rights in the workplace, and the levels of health and safety in the working environment through the transfer of some dangerous and harmful tasks from humans to robots, but also of the risks of deterioration caused by the new risks due to the increasing number of human-robot interactions.

A confirmation derives from this resolution. In one or two points, the EU Parliament stresses the link between Robotics and AI: “A comprehensive Union system of registration of advanced robots should be introduced within the Union’s internal market where relevant and necessary for specific categories of robots, and calls on the Commission to establish criteria for the classification of robots that would need to be registered; in this context, calls on the Commission to investigate whether it would be desirable for the registration system and the register to be managed by a designated EU Agency for Robotics and Artificial Intelligence” (par. 2); the Parliament asks the Commission to consider the designation of such an Agency “to provide the technical, ethical and regulatory expertise needed to support the relevant public actors, at both Union and Member State level, in their efforts to ensure a timely, ethical and well-informed response to the new opportunities and challenges ... arising from technological developments in robotics, such as in the transport sector” (par. 16).

The European Parliament “notes the great potential of robotics for the improvement of safety at work by transferring several hazardous and harmful tasks from humans to robots”, but also “their potential for creating a set of new risks owing to the increasing number of human-robot interactions at the workplace; underlines in this regard the importance of applying strict and forward-looking rules for human-robot interactions to guarantee health, safety and the respect of fundamental rights at the workplace”. For that reason, in the annexe to the resolution, you can find some recommendations, such as the Code of ethical conduct for robotic engineers, where it is underlined that “Robotics research activities should respect fundamental rights and be conducted in the interests of the well-being and self-determination of the individual and society at large in their design, implementation, dissemination and use”. In other words, human dignity and physical and psychological autonomy are always to be respected.

Consider, for example, robots used in surgery as support for doctors. Although this technology is now widespread in medicine, there is still little guidance on managing risk and liability during surgery, the doctor's autonomy in conducting the action, the criteria for verifying diligence, and the accuracy required in using a robot. A following Resolution was passed by the EU Parliament in 2020 [2], which is interesting from many points of view. It highlights the connection between the risk of using AI and other devices with the violation of fundamental rights by saying “that artificial intelligence, robotics and related technologies should be considered high-risk when their development, deployment and use entail a significant risk of causing injury or harm to individuals or society, in breach of fundamental rights and safety rules as laid down in Union law” (para 14). This approach is confirmed by Art. 4, lett. e, of the proposal for a regulation on ethical principles for the development, deployment and use of AI, robotics and related technologies annexed to the resolution: “‘high risk’ means a significant risk entailed by the development, deployment and use of AI, robotics and related technologies to cause injury or harm to individuals or society in breach of fundamental rights and safety rules as laid down in Union law, considering their specific use or purpose, the sector where they are developed, deployed or used and the severity of injury or harm that can be expected to occur” [3]. Under this proposal, “any artificial intelligence, robotics and related technologies, including software, algorithms and data used or produced by such technologies, shall be developed, deployed and used in the Union in accordance with Union law and in full respect of human dignity, autonomy and safety and other fundamental rights set out in the Charter” (Art. 1, para. 1).

3. The two proposals for EU regulation

As said, this risk-based social environment approach is crucial and similar to that used in the two proposals for EU regulation, which have more chances to be passed and provide for a more robust intervention of the EU in the field of Robotics and AI after reminding that the 2020

proposal on robotics was substantially absorbed in the 2021 proposal for a regulation on AI. The legislative proposals under attention (regulation on AI and regulation on the market for digital services) are different, even though the legal basis is similar. Both are based on Art. 114 TFEU, which provides for the adoption of measures aimed at ensuring the establishment and functioning of the internal market, with the objective, for the regulation regarding AI, of 'ensuring the proper functioning of the internal market by establishing harmonised rules, in particular concerning the development the placing on the Union market and the use of products and services using AI technologies or provided as stand-alone AI systems' and, for the proposal on the services market, to 'ensure the smooth functioning of the internal market, in particular about the provision of cross-border digital services (more specifically, intermediary services)'. In addition, considering that the first proposal 'contains certain specific rules on the protection of natural persons concerning the processing of personal data, in particular restrictions on the use of AI systems for 'real time' remote biometric identification in publicly accessible areas for law enforcement purposes', it is appropriate to base it, as far as those specific rules are concerned, on Art. 16 TFEU, which precisely involves the protection of personal data.

The choice of regulation as the source of the law is justified by the need for uniform application of the new rules (i.e., the definition of AI), the prohibition of certain harmful practices permitted by AI and the classification of specific AI systems. The direct applicability of regulation, following Art. 288 TFEU will reduce legal fragmentation and facilitate the development of a single market for AI systems. This will be achieved by introducing a classification for high-risk AI systems and obligations for providers and users of such systems. A similar objective characterises the proposal for a regulation on the market for services "aimed at ensuring harmonised conditions to allow the development of innovative cross-border services in the Union by addressing and preventing the emergence of obstacles to such economic activity arising from the different ways in which national laws are drafted, taking into account that many Member States have legislated or intend to legislate on issues such as the removal of illegal content online, the duty of care, notice and action procedures and transparency".

The AI regulation (proposal) confirms the strict connection between robotics and AI since it explicitly refers to the 2017 Resolution on Ethical Aspects of Artificial Intelligence, Robotics and Related Technologies, which is considered one of the bases of AI regulation.

Regarding fundamental rights, the two proposals for Regulation differ, at least considering the first version of the AI Act. Both referred to fundamental rights and/or the Nice Charter in their preambles and recitals. Nevertheless, only the proposal for a regulation on digital market services refers to special fundamental rights in the body of the text. In particular, Art. 1(2) aims to establish uniform rules for a safe and reliable online space, protecting fundamental rights as enshrined in the Charter; Art. 8 emphasises the need for territorial scope limitations in countering illegal content, considering applicable Union and national laws and international principles; Art. 12 mandates that intermediary service providers inform users of restrictions on service use, requiring them to act diligently and proportionately, respecting the fundamental rights of all parties involved; Art. 26 requires extensive online platforms to identify and assess systemic risks, including those affecting fundamental rights, such as privacy, freedom of expression, non-discrimination, and children's rights; Art. 27(3) allows the Commission to issue guidelines on mitigation measures, considering their impact on fundamental rights. The regulation also addresses crisis protocols, specifically in extraordinary circumstances impacting public security or health while safeguarding fundamental rights. Also, this must be partially reviewed after the amendments passed by the European Parliament on 14 June 2023 [4], where a more significant role for the fundamental rights approach has been recognised.

The effectiveness of social rights in the AI era depends on the applicability of the sources that contain them. Thus, at the supranational level and beyond, the question of the scope of the Charter of Fundamental Rights is decisive. The first question is whether the Charter applies to the above proposed regulations. The reference is to the rules of the Charter on regulated profiles by European secondary sources of law. The problem mainly concerns the proposal for a regulation on services in the digital market because the other does not contain any reference to the rules of the Charter, either expressed or implied. For the first time, a legislative act of general scope,

binding and directly applicable in the Member States of the Union, makes express reference to the Charter and its rules in at least two cases. Indeed, declaring that digital service providers must act "with due regard to the rights and legitimate interests of all parties involved, including the applicable fundamental rights of the recipients of the service enshrined in the Charter" and that online platforms must identify systemic risks, including "any adverse effects on the exercise of fundamental rights to respect for private and family life and to freedom of expression and information, the right to non-discrimination and the rights of the child, as laid down respectively in Art.s 7, 11, 21 and 24 of the Charter", it seems to me that it makes the fundamental rights contained in the Charter applicable to internal systems, concerning digital providers and online platforms.

4. The issue of applying the Nice Charter

It is necessary to wait and see whether the two regulations will be passed and how the Court of Justice will decide on them without undermining the role of the doctrine. In this regard, a judgment of the Court of Justice of 17 March 2021, KO, C-652/19, undermines the certainties reached up to that point. After recalling that "the provisions of the Charter apply, under Art. 51(1) thereof, to the Member States only when they are implementing Union law", Art. 6(1) TEU and Art. 51(2) of the Charter make it clear that the Charter does not extend the field of application of Union law beyond the powers of the European Union (EU) and does not establish any new power or task for the EU, or modify powers and tasks as defined in the Treaties. The Court is, therefore, called upon to interpret, in the light of the Charter, the law of the EU within the limits of the powers conferred on it"; it emphasises that "for it to be found that Directive 98/59 and, consequently, the Charter, apply to the main proceedings, that directive must impose a specific obligation in respect of the situation at issue in those proceedings, which has been implemented by the provisions of Italian law concerned".

However, "such an obligation is not apparent from the provisions of Directive 98/59. The main objective of that directive is to make collective redundancies subject to prior consultation with the workers' representatives. Prior notification to the competent public authority," and "Directive 98/59 provides for only a partial harmonisation of the rules for the protection of workers in the event of collective redundancies, that is to say, harmonisation of the procedure to be followed when such redundancies are to be made" is ensured. In particular, "the means of protection to be afforded to a worker who has been unlawfully dismissed as part of collective redundancy, following a failure to comply with the criteria based on which the employer is required to determine the workers to be dismissed, are manifestly unrelated to the notification and consultation obligations arising from Directive 98/59. Neither those means nor those selection criteria fall within the scope of that directive. Consequently, they remain within the Member States' competence".

These declarations of the Court of Justice contrast previous case law (from *Akeberg* to *Florescu* via *Poclava*) that had yet to go into detail. This source has been transposed into national law, and the implementation of Union law allows the Charter of Fundamental Rights rules to enter the Member States' legal systems. In addition to a potential new direction, there is an inconsistency in the reasoning of the recent Luxembourg Court ruling. The argument needs to be differentiated on a case-by-case basis. Art. 20 of the CDFUE focuses on equality before the law and does not deal with dismissals, while Art. 30 deals with protection against unjustified dismissals. Therefore, implementing the Directive on Collective Redundancies cannot allow the application of Art. 20 in domestic law. On the other hand, the application of Art. 30 would have been irrelevant here. However, the Court of Justice's interpretation will likely weaken the Charter of Fundamental Rights and the application of social rights in domestic law. The Court of Justice's partial *revirement* also concerns the Italian Constitutional Court, which, in Judgment 194 of 2018, had stood by the Court of Justice's previous positions. On the EU law profiles, the Constitutional Court argued in particular: i) Under Art. 51 CFREU, the Court of Justice of the European Union has consistently held that the provisions of the CFREU apply to the Member States when they act within the scope

of Union law'. This is clear to the Constitutional Court, according to which 'for the Charter of Fundamental Rights of the European Union to be invoked in a case of constitutional legitimacy, the case subject to domestic legislation must be governed by European law - in so far as it is inherent in acts of the Union, in national acts and conduct which give effect to EU law - and not by national rules alone which have no connection with that law' (judgment no. 80 of 2011). And in the present case, there is no evidence to suggest that the censured regulation of Art. 3(1) of Legislative Decree No. 23 of 2015 was adopted in the implementation of the European Union law; ii) For the applicability of the CFREU, Art. 3(1) of Legislative Decree No. 23 of 2015 should fall within the scope of a rule of Union law other than those of the Charter itself. However, the mere fact that Art. 3(1) of Legislative Decree No. 23 of 2015 falls within an area where the Union has competence within the meaning of Art. 153(2)(d) of the Treaty on the Functioning of the EU cannot entail the applicability of the Charter given that, as regards the regulation of individual dismissals, the Union has not, in practice, exercised that competence. Moreover, it cannot be considered that the legislation censured was adopted in the implementation of Directive 98/59/EC (on collective redundancies) since Art. 3(1) of Legislative Decree No 23 of 2015 regulates individual redundancies; iii) To argue the existence of a 'European case', the respondent argued that they would fall within the scope of the Union's employment policy and the measures adopted in response to the Council's recommendations. Those recommendations provided for in Art. 148(4) TFEU fall within the Council's discretion and has no binding force, so this is the implicit reasoning conducted by the Constitutional Court; they cannot be regarded as Union law. This is also valid beyond labour law. The Constitutional Court, in its judgment 149 of 2022, stated that there is no doubt that the EU secondary law governs the matter of copyright protection, in particular by Directive 2001/29/EC, and this implies that the domestic regulation falls within the scope of implementation of EU law within the meaning of Art. 51 CFREU, with the consequent obligation to respect the rights recognised by the Charter, including Art. 50 CFREU.

The immediate direct effect of the regulations means that, if passed, they will apply immediately in such legal systems and are effective against both States and individuals without the need for further action. In addition, regulations can entitle individuals to rights and obligations and, therefore, be invoked by individuals before national courts and used as a reference in relations with other individuals, Member States and Union institutions. Regarding the regulations, we cannot speak of the "implementation of Union law", necessary according to Art. 51 CFREU to make the rules of the Charter operational in domestic legal systems. However, since the Regulation has a direct horizontal effect and its implementation is unnecessary, it acts as a solid bridge between the Charter and the national legal systems. It thus allows the entrance of the rules (at least those expressly mentioned) in domestic law. In addition, the regulation also strikes a balance between freedoms and fundamental rights.

5. Fundamental rights and AI: the responsibilities of the operators

The connection between Robotics, AI and fundamental rights is complicated, especially regarding the proposal for the AI Act. In the proposal for a regulation of digital market services, there will not be any problems in applying the Charter of Fundamental Rights since there are some specific references to the provision of the Charter itself, which enter into force into the domestic legal systems thanks to the regulation. On the contrary, some questions could arise for AI regulation. The reference to the Charter in the 2021 proposal for an AI Act was more indirect before June 2023. Art. 7.1 provided that "the Commission is empowered to adopt delegated acts ... to update the list in Annex III by adding high-risk AI systems where both of the following conditions are fulfilled": a) the AI systems are intended to be used in the areas listed in Annex III and, above all, b) "the AI systems pose a risk of harm to the health and safety or a risk of adverse impact on fundamental rights, that is, in respect of its severity and probability of occurrence, equivalent to or greater than the risk of harm or of adverse impact posed by the high-risk AI systems". Indeed, According to Art. 7, par. 2, "When assessing for the purposes of par. 1 whether an AI system poses a risk of harm to the health and safety or a risk of adverse impact on

fundamental rights that is equivalent to or greater than the risk of harm posed by the high-risk AI systems already referred to in Annex III, the Commission shall take into account” among other criteria “the extent to which the use of an AI system has already caused harm to the health and safety or adverse impact on the fundamental rights or has given rise to significant concerns about the materialisation of such harm or adverse impact, as demonstrated by reports or documented allegations submitted to competent national authorities”.

Thus, it did not seem possible that the Charter of Fundamental Rights applied to domestic legal systems. Rights and principles in the Charter could only be used to understand whether AI systems are at risk of hurting them to modify the list of high-risk AI systems provided in Annex III. The fundamental rights (especially those inside the Charter) only operated at the EU level. Therefore, AI Act could not be considered a solid bridge to make the fundamental rights of the Charter enter into the national legal systems. Things could change after the amendments adopted by the European Parliament on 14 June 2023. The Parliament has proposed to add Art. 4 α, according to which “all operators falling under this Regulation shall make their best efforts to develop and use AI systems or foundation models in accordance with the ... general principles establishing a high-level framework that promotes a coherent human-centric European approach to ethical and trustworthy AI, which is fully in line with the Charter as well as the values on which the Union is founded”. This provision and the general principles contained therein make the rights of the Charter operate in the domestic legal systems. Indeed, a) ‘human agency and oversight’ means that AI systems shall be developed and used as a tool that serves people, respects human dignity and personal autonomy, and that is functioning in a way that can be appropriately controlled and overseen by humans; b) ‘technical robustness and safety’ means that AI systems shall be developed and used in a way to minimize unintended and unexpected harm as well as being robust in case of unintended problems and being resilient against attempts to alter the use or performance of the AI system so as to allow unlawful use by malicious third parties; c) ‘privacy and data governance’ means that AI systems shall be developed and used in compliance with existing privacy and data protection rules, while processing data that meets high standards in terms of quality and integrity; d) ‘transparency’ means that AI systems shall be developed and used in a way that allows appropriate traceability and explainability, while making humans aware that they interact with an AI system as well as duly informing users of the capabilities and limitations of that AI system and affected persons about their rights; e) ‘diversity, non-discrimination and fairness’ means that AI systems shall be developed and used in a way that includes diverse actors and promotes equal access, gender equality and cultural diversity while avoiding discriminatory impacts and unfair biases that are prohibited by Union or national law; f) ‘social and environmental well-being’ means that AI systems shall be developed and used in a sustainable and environmentally friendly manner as well as in a way to benefit all human beings, while monitoring and assessing the long-term impacts on the individual themselves, on the society and the democracy [5, 6, 7, 8, 9].

The amendments to the AI regulation clearly show that the provisions of the regulation and the rights of the Charter do not apply to AI in general but specifically to the operator, i.e. “the provider, the deployer, the authorised representative, the importer and the distributor” (Art., 3, par. 1, point 8 as amended by the European Parliament), who are individuals, not robots or AI systems. A couple of examples of this can be made. Art. 21 CFRUE prohibits “any discrimination based on any ground such as sex, race, colour, ethnic or social origin, genetic features, language, religion or belief, political or any other opinion, membership of a national minority, property, birth, disability, age or sexual orientation”, while Art. 23 declares that “equality between women and men must be ensured in all areas, including employment, work and pay”. Suppose this version of the AI Act is passed. In that case, these provisions will enter into force in domestic jurisdictions, and human beings must respect them since robots and algorithms cannot be responsible for violating fundamental rights.

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