

Artificial Intelligence Is a New Human Rights Generation?

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Abstract

There is a (re)new world that has emerged with the introduction of Artificial Intelligence – AI in all life features – from an abstract and distant idea to the life of humanity in all its dimensions. Artificial Intelligence has created a serious challenge, both in terms of exploiting its full potential and the serious threat it may pose. It is undeniable that Artificial Intelligence is not just a “simple” evolution, but a deep change in the paradigm of cyberspace, as it involves itself in all ‘real’ life, beyond the borders of states, as an unknown “world/life” that challenges human life in all its dimensions. Our research focuses on analyzing this context based on Karel Vasak's theory on Generations of Human Rights, and discussing, in an attempt to understand, whether with Artificial Intelligence we are experiencing a new generation of Human Rights in this unquestionable new reality for Human Beings, for States and Governments, for International Organizations from legal, political, economic, and social perspectives. The methodology followed in this research is qualitative, using the hypothetical-deductive method, as it starts from a phenomenological problem, namely the impact of Artificial Intelligence on generations of Human Rights, for which there are no absolutely comprehensive explanations. In the end, we conclude that AI has the power to greatly impact existing human rights, both economically, politically, and socially, but for now, given its state of development and application, it does not constitute an autonomous dimension of Human Rights.

Keywords: human rights, fundamental rights, human rights generations, artificial intelligence, artificial intelligence systems.

JEL Classification: K33, K37, K38, K40

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1. Introduction

The emergence of Artificial Intelligence, which has already developed so much in such a short space of time, shows how the computer sciences bring about technological advances in the area of information technology and how these technological advances happen at such dizzying speed, with implications for all fields

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of human activity, specifically economic and scientific, and in all areas that the Human mind can imagine.

Obviously, this technological evolution that has brought Artificial Intelligence to fruition, and that continues to develop it, has direct implications for Human Rights and Fundamental Rights, depending on whether we are analysing it in the area of Public International Law, or with European Union Law, especially the “*Charter of Fundamental Rights of the European Union*”, or with the Fundamental Rights integrated into the legal systems of each of the specific states, especially their ‘Constitutions’.

In view of the sedimentation of Human Rights in multiple legal systems, both internationally and in each specific country, it is essential to understand whether Artificial Intelligence has created a new generation of Human Rights, or whether, on the contrary, it is just another computer technology that, despite its already known potential and those that even the best imagination can't see where it will take us, As with all other computer technologies, special legal care must therefore be taken when researching, designing, placing on the market and using Artificial Intelligence systems, as well as all other technologies that use it, so that Human Rights are never violated.

All these doubts are the motto for the problem that this research aims to answer: will Artificial Intelligence create a new generation of Human Rights?

The methodology followed in this research was qualitative, using the hypothetical-deductive method, as it started from a phenomenological problem, i.e. the impact of Artificial Intelligence on generations of Human Rights, for which there are no absolutely precise explanations.

2. The Protection of the Fundamental Rights in the AI Age. Study on Its Protection in the European Artificial Intelligence Regulation as a Universal Paradigm

2.1. Introduction

In Niall Ferguson's “Forword” to the book “*Inteligência Artificial, Esperança, e o Espírito Humano*” [*Artificial Intelligence, Hope, and the Human Spirit*] by Henry A. Kissinger, Graig Mundie and Eric Schmidt, Niall Ferguson write that the authors are looking forward to “*the evolution of Homo Technicus - a human species that can, in this new era, live in symbiosis with machine technology*”. *AI, they argue, could soon be harnessed ‘to generate a new base of human wealth and well-being (...) [which] will at least alleviate, if not eliminate, the tensions of labour, class and conflict that have previously torn humanity apart’. The adoption of AI could even lead to ‘profound equalizations (...) between race, gender, nationality, place of birth and family background’*³.

It is clear that Niall Ferguson emphasizes here the hope that the authors have

³ Niall Ferguson, (2024). “Preface”, in Henry A. Kissinger, Graig Mundie, Eric Schmidt (2024). *Genesis*. Portugal - Alfragide: Publicações Dom Quixote, xi-xxii.

that Artificial Intelligence will bring to humanity, however he also draws attention, in this analysis, to possible complications that humanity may face with the development of AI and the use that may result from it, stating that the authors of this book - Henry A. Kissinger, Graig Mundie e Eric Schmidt – “envisage six scenarios,” but “none of them are attractive,” that we present below: “1. *Humanity will lose control of an existential race between multiple actors trapped in a security dilemma*; 2. *Humanity will suffer the exercise of a supreme hegemony by a winner free of the traditional checks and balances needed to guarantee a minimum of security for others*; 3. *There won't be just one supreme AI, but multiple instantiations of higher intelligence in the world*; 4. *Companies that own and develop AI can accumulate total social, economic, military and political power*; 5. *AI could find its greatest relevance and most widespread and lasting expression not in national structures, but in religious ones*; 6. *The uncontrolled and open-source diffusion of the new technology could give rise to smaller bands or tribes with a lower but still substantial AI capacity*.”⁴

We must conclude from Niall Ferguson's analysis of the book “*Genesis*” that Artificial Intelligence, like any other existing reality, always has two facets, one apparently positive and the other apparently negative.

What many see as a giant step forward in building the future of humanity by demonstrating the direction of the summit of human potential, there are others who see this era of AI affirmation as a race to the human precipice, with choices therefore having to be made between a human existence without AI, or the possibility and useful use of a new partnership between man, the creator, and the machine, the AI, created by him, but which is entirely new to what has existed until now, this choice being difficult but absolutely necessary.⁵

In the search that the European Union has been making for years to regulate the development, creation, implementation and use of Artificial Intelligence and the necessary protection of Fundamental Rights, among many other aspects, led to the establishment of the Regulation (EU) 2024/1689 of the European Parliament and of the Council, of 13 June 2024, that creates laying down harmonized rules on artificial intelligence and amending Regulations, also known as “The Artificial Intelligence Act”.⁶

We call attention to the fact that this Regulation took more than three years to be approved⁷, It has culminated in a very extensive debate at the internal level of the bodies and the Member States of the European Union, as well as, by the most different

⁴ Ibid, p. XX.

⁵ Ibid, p. XXI.

⁶ Regulation (EU) 2024/1689 of the European Parliament and of the Council, of 13 June 2024, published in https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:L_202401689. This Regulation also amended the (CE) n. 300/2008, (EU) n.167/2013, (EU) n. 168/2013, (EU) 2018/858, (EU) 2018/1139 and (EU) 2019/2144 and the Directives 2014/90/EU, (EU) 2016/797 and (EU) 2020/1828.

⁷ The Commission's proposal dated April 21, 2021, according to European Commission, “*Proposal for a Regulation of the European Parliament and of the Council establishing harmonised rules on artificial intelligence (Artificial Intelligence Regulation) and amending certain Union legislative acts*”, see COM (2021) 206 final, 2021/0106(COD).

private *actors*, i.e., it is considered one of the most widely debated legislative processes of the European Union.⁸

2.2. The Concept of the Artificial Intelligence

The first item we need to clarify, to move forward with our analysis, is to determine which concept of Artificial Intelligence we will be working with.

The evolution of the concept of Artificial Intelligence has been constantly changing since the moment it was first⁹ was used, but the Caitlin Mulholland¹⁰, describes Artificial Intelligence as “*any computer system that simulates the human capacity to reason and solve problems by making decisions based on probabilistic analysis*”.

Nowadays, some refer to it as a software system, working on hardware, which, through its own programming language and the capture and processing of data, is able to autonomously make deductions, take decisions and carry out actions, in an attempt to rival human reasoning, as well as being able to adapt to the environment in which it operates, modifying these actions to that same environment.¹¹

When we go on to analyse the concept of Artificial Intelligence under the designation it has been given by various entities and bodies of the European Union, we see that there has been constant conceptual change in line with its constant technical evolution. Let's take a look.

In the Commission's 2018 Communication, Artificial Intelligence was assumed to be “systems that exhibit intelligent behaviour, analysing their environment and taking action - with a certain level of autonomy - to achieve specific goals”.¹²

In 2020, in its “White Paper on Artificial Intelligence - A European approach to excellence and trust”, the Commission summarized the concept of Artificial Intelligence, describing it as “a set of technologies that combine data, algorithms and computing power”¹³.

⁸ Domingos Soares Farinho (2005). “Fundamental Rights in Artificial Intelligence Regulation: Taking Fundamental Rights Seriously or a Diversionary Maneuver?”, in André Alfar Rodrigues, João Almeida, João Luz Soares (Coord.) *AI Act - O Novo Regulamento de Inteligência Artificial Europeu*, ed. Almedina, Coimbra, Portugal, 545-567.

⁹ John McCarthy, Marvin L. Minsky, Nathaniel Rochester, Claude E. Shannon, (2006). „A Proposal for the Dartmouth Summer Research Project on Artificial Intelligence, August 31, 1955”. *AI Magazine*, 27(4), 12. <https://doi.org/10.1609/aimag.v27i4.1904>.

¹⁰ Frazão, Ana; Mulholland, Caitlin (coord.) (2019). *Inteligência artificial e direito: ética, regulação e responsabilidade*.: Thomson Reuters, São Paulo, Brasil, 5.

¹¹ Rodrigues da Lu, R. e Freitas Lima, M. (2025) “Inteligência artificial e direito: um estudo sobre os impactos nas dimensões dos direitos humanos fundamentais”, *Revista de Direito, Governança e Novas Tecnologias*. Florianopolis, Brasil, 10(2). doi: 10.26668/IndexLawJournals/2526-0049/2024.v10i2.11046, 101-123.

¹² Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions Artificial Intelligence for Europe – COM (2018) 237 final – Brussels, 25.4.2018 - <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM%3A2018%3A237%3AFIN>.

¹³ White Paper on Artificial Intelligence - A European approach to excellence and trust- COM(2020) 65

Lastly, in the final version of Regulation (EU) 2024/1689 of the European Parliament and of the Council of 13 June 2024, which creates harmonized rules on Artificial Intelligence, in Article 3(1), the European Union now defines the concept of an Artificial Intelligence System as "a machine-based system designed to operate with varying levels of autonomy and which may exhibit adaptability after deployment. In Article 3(1), the European Union now defines the concept of Artificial Intelligence System as "a machine-based system designed to operate with varying levels of autonomy, which may be capable of adaptation after deployment and which, for explicit or implicit purposes, and on the basis of the input data it receives, infers how to generate results, such as predictions, content, recommendations or decisions that can influence physical or virtual environments".¹⁴

For the purposes of our study, as Domingos Soares Farinho develops, 2025¹⁵ we adopt as the concept of "AI system" that contained in Article 3(1) of the AI Regulation to which we exposed above.

2.3. The European Union Fundamental Rights and the AI Regulation

Considering how Artificial Intelligence has developed so exponentially, we take for granted that its evolution will be taken for granted and that it will become another tool in the hands of humanity, which will become indispensable in responding to all the major challenges that all of us, human beings or not, face, namely climate change and environmental degradation, energy and drinking water shortages, poverty and lack of access to education, and perhaps the next pandemic. This means that Artificial Intelligence will be an exponential amplifier of our intellect and creativity in promoting innovation in all areas of human entrepreneurship.¹⁶

As Artificial Intelligence is an authentic revolution of the Cosmos, it has become mandatory for the European Union to regulate it in order to limit its borders when there is a possible collision with the Fundamental Rights established by the European Union and fundamental to its existence, since it is unequivocal that Artificial Intelligence can affect these rights, both in terms of its use or even abuse, and in the structuring of processes to combat it.¹⁷

When we look at the AI Regulation, the first thing that strikes us on closer inspection is that the European legislator included the expression "Fundamental Rights" in the AI Regulation 56 (fifty-six) times in the initial 180 (one hundred and eighty)

final - Brussels, 19.2.2020 - <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52020DC0065>.

¹⁴ Regulation (EU) 2024/1689 of the European Parliament and of the Council of 13 June 2024 laying down harmonised rules on Artificial Intelligence - <https://eur-lex.europa.eu/eli/reg/2024/1689/oj>.

¹⁵ Domingos Soares Farinho (2005). "Os Direitos Fundamentais no Regulamento de Inteligência Artificial: Levando os Direitos Fundamentais a Sério ou Manobra de Diversão?". In André Alfar Rodrigues, João Almeida, João Luz Soares (coord.), *op. cit.*, 545-567.

¹⁶ Martin Ford, (2022), *O Futuro da Inteligência Artificial*, edição portuguesa, Ed. Bertrand Editora, Lisboa, Portugal, 19-20.

¹⁷ José Miguel Júdice, (2025), *Prefácio [Forword]*. In André Alfar Rodrigues, João Almeida, João Luz Soares, *op. cit.*, 11-21.

considering's, and 44 (forty-four) times throughout its articles that specifically regulate Artificial Intelligence. In other words, this Regulation was created with the clear and evident intention of providing the necessary and total protection of "Fundamental Rights" in relation to the "Artificial Intelligence System" of which it regulates, while at the same time stimulating investment, innovation and the use of Artificial Intelligence.¹⁸

The same author to reinforce its opinion that we are facing an innovation in the protection of Fundamental Rights at European Union level in the face of Artificial Intelligence, appeals to the statement made by the President of the European Commission, Ursula von der Leyen, that "EU's AI Act" is the first-ever comprehensive legal framework on Artificial Intelligence worldwide",¹⁹ thus affirming the universal vocation of this Universal Intelligence Regulation^{20,21}, which means that the European Union, through this Regulation, is exporting and also imposing, in the field of Artificial Intelligence, its high standards of protection of fundamental rights, and not only that, at a global level²².

It should be noted that "EU's AI Act" is of extraterritorial application to the European Union, since its rules are applicable throughout the European Union regardless of where the supplier or user of Artificial Intelligence systems is located, and may even be placed in a third country - see Article 2(1) of the AI Act - which means that the necessary protection of Fundamental Rights, and necessarily Human Rights, are of universal application in all those situations covered by the AI Act.

It should be noted that Mario Draghi, in his September 2024 Report, the European Union is trying to strike a difficult balance with this Regulation: *'as in global AI competition winner takes most' dynamics are already prevailing, the EU now faces an unavoidable trade-off between stronger ex ante regulatory safeguards for fundamental rights and product safety, and more regulatory light-handed rules to promote EU investment and innovation'*²³, emphasizing, for this purpose, the necessary protection of Fundamental Rights in the face of the development of Artificial Intelligence.

¹⁸ Alberto Saavedra, (2025), *As coimas do Regulamento de Inteligência Artificial: A Perspetiva Nacional do Enforcement*. In André Alfaro Rodrigues, João Almeida, João Luz Soares, *op. cit.*, 475-493.

¹⁹ Commission welcomes political agreement on Artificial Intelligence Act - Ursula von der Leyen, President of the European Commission - Statement by President von der Leyen on the political agreement on the EU AI Act, de 9.12.2023 - https://ireland.representation.ec.europa.eu/news-and-events/news/commission-welcomes-political-agreement-artificial-intelligence-act-2023-12-09_en.

²⁰ Alberto Saavedra, *op. cit.* (2025), 475-493.

²¹ In this sense, *'true global regulatory power of the European Union'*, see also Nuno Cunha Rodrigues (2024), *A Globalização do Poder Regulatório da União Europeia*, ed. Almedina, Coimbra, Portugal, 258-265.

²² This international regulatory effect carried out by the European Union is clearly evident in the study carried out by Anu Bradford, (2019), *The Brussels Effect – How the European Union Rules the World*, Oxford University Press, 25-66.

²³ Mario Draghi, (2024), *Report on the future of European competitiveness Part B | In-depth analysis and recommendations*, September 2024, https://commission.europa.eu/document/download/ec1409c1-d4b4-4882-8bdd-3519f86bbb92_en?filename=The%20future%20of%20European%20competitiveness_%20In-depth%20analysis%20and%20recommendations_0.pdf, accessed on 20 October 2025.

2.3.1. Preliminary European Union Studies on EU Fundamental Rights Referenced in the AI Regulation

Aiming understand deeply the European Union's concern about the impact of Artificial Intelligence on Fundamental Rights, let's first analyse the study that the European Union Agency for Fundamental Rights - FRA carried out in 2020, in its "Getting the future right. Artificial Intelligence and Fundamental Rights - REPORT"²⁴.

This study "*is based on 91 semi-structured interviews with representatives from public administration and private companies who are involved in the use of AI for their services and businesses*" and "*in addition, ten interviews were conducted with experts dealing with potential challenges of AI in public administration (e.g. supervisory authorities), in non-governmental organisations or as lawyers working in this field*"²⁵, i.e., more than 100 interviewed in following Member States, Estonia, Finland, France, the Netherlands and Spain.

The FRA wanted to understand the impact, positive or negative, that Artificial Intelligence had on the following areas of activity: social benefits, predictive policing, healthcare, and targeted advertising.

The legal basis had the "*Charter of Fundamental Rights of the European Union*", as the study main point; the European Convention on Human Rights that confirms that other "international Human Rights instruments are relevant"; the "1948 Universal Declaration of Human Rights" and the major "UN Human Rights Conventions". It is added to this study that is relevant too "the sector-specific secondary EU law, notably the EU data protection acquis and EU non-discrimination legislation"²⁶.

Analysing the Report, we see that the rights affected by Artificial Intelligence are human dignity, privacy and data protection, equality and non-discrimination, access to justice, the right to social security and social assistance, consumer rights and citizenship, and the right to good public administration²⁷.

Moreover, the Article 1 of the "*Charter of Fundamental Rights of the European Union*" emphasizes human dignity as one of the basic pillars of the European Union, which means that all the development of Artificial Intelligence must come under the umbrella of this structuring principle, but this principle has a logical link with Article 2, which requires respect for the right to life, and Article 3, which imposes the duty to respect the integrity of persons, which means that Artificial Intelligence technology must respect all these rights. However, this technology cannot be used without the knowledge and express consent of individuals or legal entities.²⁸

²⁴ European Union Agency for Fundamental Rights, (2020) *Getting the future right. Artificial Intelligence and Fundamental Rights – REPORT*, Luxembourg: Publications Office of the European Union – available in <https://fra.europa.eu/pt/publication/2020/artificial-intelligence-and-fundamental-rights>, accessed on 20 October 2025.

²⁵ Ibid, 18.

²⁶ Ibid, 18.

²⁷ Ibid, 60-82.

²⁸ Javier Valls Prieto (2021), *Inteligencia Artificial, Derechos Humanos y Bienes Jurídicos*, Thomson

Regarding the right to privacy and data protection, they are covered by Articles 7 and 8 of the “*Charter of Fundamental Rights of the European Union*”, which rights are in the centre of the discussion when we apply this technology, since it must blindly observe these principles. Please be aware that related with this specific protection it’s inherent the necessary protection of freedom of expression and information - referred to in Article 11, as well as the right of association - referred to in Article 12, which is extremely relevant to the exercise and expression of political ideas, namely when associated with trade unions, political parties or freedom of religion, referred to in Article 10, what has implications for the right to work, political and religious freedom.

When we analyse the right to equality and non-discrimination, we are automatically engaged to Articles 20 and 21 of the “*Charter of Fundamental Rights of the European Union*”. Of course, this technology cannot jeopardies these rights, particularly when it comes to vulnerable groups, for example racial, ethnic, religious or gender-based groups, as well as minors - Article 24, the elderly - Article 25, or disabled people - Article 25. It should be borne in mind that within these groups there are even people who have a special need for the use of Artificial Intelligence, especially when linked to medicine and other healthcare, namely in the creation of insurance when using this technology could lead to discrimination.

We will briefly analyse the principle of effective judicial protection - article 47, in two different aspects, namely when Artificial Intelligence is used to decide whether to accept a particular application, or when Artificial Intelligence systems make the decisions in specific cases. The lack of knowledge and opacity of these systems, which are not in the public domain at all, means that people are afraid of decisions based on this technology, given the lack of understanding of the motivations and justifications for making judicial decisions²⁹.

The right to social security and social assistance - Article 34, when it can be decided through the use of this technology, can lead to situations that affect its applicability through discrimination based on nationality, thereby jeopardizing the freedom of movement of people within the European Union and the consequent intervention of these states in social protection for workers from other Member States, which could conflict with the labour rights and legal pension schemes that these workers must receive after a lifetime of contributions to social security systems, and this regardless of the specific nationality of each citizen within the European Union³⁰.

As for the right to consumer protection, which comes from Article 169 of the Treaty on the Functioning of the European Union, this right can be risked using this technology in marketing techniques, or when it can affect consumer freedom by manipulating consumer profiles, inducing them to make purchases they don't need, or with artificially manipulated prices.

With regard to the principle that citizens have the right to good administration - Article 41 - the use of this technology could lead the public administration to

Reuters, Aranzadi, España, 71 - 84.

²⁹ Ibid.

³⁰ Ibid.

manipulate data and also to attempt to make decisions without the slightest justification, in fact or in law, to the detriment of the respect that each person has for the public administration, risking this relationship between citizen and administration³¹.

Having come this far and having analysed the constant concern that the European Union has had with the possible harmful influences of this technology - Artificial Intelligence - on Fundamental Rights, let's take a closer analysis at what "EU's AI Act" determines in this area.

2.3.2. What Is the Specific European Union Fundamental Rights Referred to in the AI Regulation?

Having noted that "EU's AI Act" makes abundant reference to 'Fundamental Rights', it is now time to analyse this Regulation and see whether the European legislator only makes express reference to 'Fundamental Rights', or whether it also discriminates specifically against these rights.

We would draw attention to the fact that in the very first "considering" the European legislator imposed that *"the purpose of this Regulation is to promote the uptake of human centric Artificial Intelligence"*, reality that assumes the power of legal standard when AI Act Article 1, number 1, impose one of the "AI Act" aims: *"promote the uptake of human-centric Artificial Intelligence"*.

So, we understand there is no doubt that European legislator has drawn up a regulatory framework on Artificial Intelligence centred on the protection of the human person, with all the consequences of this protection having to be assumed under the densification and full application of the Fundamental Rights of the European Union and International Human Rights to Artificial Intelligence.

Please be aware that the same first "considering" impose that this Regulation has to ensure *"a high level of protection of fundamental rights as enshrined in the Charter of Fundamental Rights of the European Union"*, being mandatory as a legal standard to European Union, as Article 1, number 1 – Artificial Intelligence systems have to ensure *"a high level of protection of fundamental rights enshrined in the Charter"*.

We would like to draw attention to the fact that the European legislator has imposed an obligation on all Artificial Intelligence systems to be in line with the 'Charter of Fundamental Rights of the European Union', since it imposes this observation 15 (fifteen) times in its considering's, and once in its articles.³² This continuous appeal to the "Charter of Fundamental Rights of the European Union" in the creation and use of Artificial Intelligence systems leaves us in no doubt that all Artificial Intelligence systems must obey the set of Fundamental Rights legally disciplined in that "Charter".

However, the European legislator didn't stop at imposing that Artificial Intelligence systems had to comply with the 'Charter of Fundamental Rights of the

³¹ Ibid.

³² Please see the "considering's" 1, 2, 6, 7, 27, 28, 48, 59, 62, 63, 134 e 176, and the Article 1.

European Union’, since throughout the ‘AI Act’ he presents, in multiple considering’s and articles, various Human Rights that Artificial Intelligence systems must obey. Let's look at some of them.

The AI Act imposes that Artificial Intelligence systems must respect ‘democracy’ and be subordinate to the ‘rule of law’, by including respect for ‘democracy’, which it does 8 (eight) times in its “considering’s” and 2 (two) times in Articles 1 and 74, and the obligation to respect ‘the rule of law’, which it does 7 (seven) times in its “considering’s” and 1 (one) time in Article 1.

It should be noted that in ‘considering’ number 6, the European Union imposes as a “prerequisite” that ‘AI should be a human-centric technology’, in other words, it is not the human being who will be subordinated to Artificial Intelligence, but it must be this technology that is obligatorily subordinated to the human being, which is why, as the European legislator says in that recital, this technology ‘It should serve as a tool for people, with the ultimate aim of increasing human well-being’.

Aiming to understand the European Union legislator's constant concern about protecting the fundamental rights that this technology must fulfil, we analysed “EU’s AI Act” to understand how many times its initial ‘Recitals’ and ‘Articles’ refer to a wide range of rights that deserve protection when they are created, made available to users and their actual use could risks them.

The table below identifies specific rights that the European legislator intends to protect and which show us, without any doubt, that the rights of the “*Charter of Fundamental Rights of the European Union*” are the guiding principle for Artificial Intelligence, showing the European Union, in this way, that the ‘MAN’ is above all, and that this technology is at his exclusive service.

Protected Rights	Number of times Referenced		
	Total References	References in the “Considering’s”	References in “Articulated”
Biometric identification	57	31	26
Biometric verification	5	3	2
Children’s rights	1	1	0
Collective agreements	2	1	1
Consumer protection	7	5	2
Democracy	10	8	2
Employment protection	9	7	2
Environmental protection	8	6	2
Freedom of assembly and of association	1	1	0
Freedom of expression and information	1	1	0
Freedom to strike	1	1	0
Freedoms of individuals	4	3	1
Gender equality	3	2	1
Health	78	41	37
Human dignity	4	4	0
Law on the protection of minors	1	1	0

Non discrimination	10	9	1
Presumption of innocence	3	3	0
Protection of health	6	1	7
Protection of personal data	11	6	5
Protection of workers	2	2	0
Respect for private and family life	1	1	0
Right of defence	2	2	0
Right to a fair trial	3	3	0
Right to an effective remedy	3	3	0
Right to education	2	2	0
Right to good administration	1	1	0
Right to privacy	2	2	0
Rights of persons with disabilities	2	2	0
Rights to free movement	1	1	0
Safety	94	53	41
Safety at work	1	1	0
Safety of persons	9	6	3
Social protection	1	1	0
The environmental protection	8	6	2
The rule of law	8	7	1
Workers' rights	2	2	0
UN Convention relating to the Status of Refugees	1	1	0
United Nations Convention on the Rights of Persons with Disabilities	1	1	0
United Nations Convention on the Rights of the Child	1	1	0

Table 1. Designed by the Authors: Carlos Rodrigues and Ana Campina

From the content of this ‘**Table 1**’ we can conclude that the ‘*Charter of Fundamental Rights of the European Union*’ has been fully complied with European legislator in the creation of the “EU’s AI Act”³³.

This ‘**Table 1**’ demonstrates the European Union’s concern with repeatedly itemizing many of the ‘Protected Rights’ within the ‘EU’s AI Act’, which is part of the ‘Fundamental Rights’ that Artificial Intelligence technology is obliged to observe and comply with, not only imposing specific obedience to the “*Charter of Fundamental Rights of the European Union*”, but also taking care to repeat many of the ‘Rights’ described therein and reaffirmed exhaustively in EU’s AI Act, leaving no room for doubt that Artificial Intelligence systems must ‘*ensure a high level of protection of fundamental rights enshrined in the Charter*’, see Article 1(1) of the AI Act.

As the object of our study is to answer the question ‘Are the Digital Human Rights a new Generation?’, it is now necessary to briefly analyse the generations of Human Rights.

³³ Javier Valls Prieto, *op. cit.* (2016), 71-84.

3. The Human Rights Generations

3.1. Introduction

The preliminary point for our analysis must begin by identifying the conceptualisation of Human Rights, which are fundamental rights and freedoms that people maintain in relation to public authorities³⁴ or, to put it another way, Human Rights are basic active legal situations that each citizen has against the state, and which materialise in *potestative* rights essential to their dignified living as a person³⁵, or as this author refers to the United Nations definition, when this international organization defines Human Rights as ‘*universal legal guarantees that protect individuals and groups against actions or omissions by governments that undermine human dignity*’.³⁶

They are centred on the dignity of the human being, obliging the state and state agents to protect individuals and groups, they cannot be suppressed or denied, and they are equal and interdependent, i.e. none of them is more important than the other rights, and the enjoyment of any one affects the enjoyment of the others.³⁷

We should add to this conceptualisation of Human Rights that wasn't, until 1993, during the World Conference on Human Rights in Vienna, Austria, from 14 to 25 June, a new conceptualization of Human Rights emerged³⁸, is that all participating states agreed that Human Rights were universal, indivisible, interdependent and interrelated.³⁹

These rights, made up of three elements, are centred on their beneficiary, the Active Subject - the human being or legal person, taking into account their specific characteristics, imposing *potestative* obligations on the Passive Subject, the public entity - the State or International Organisation, which has the obligation to satisfy the specific situations and, finally, the Object, i.e. the satisfaction of the specific right.⁴⁰

Since Human Rights are legal situations that are active vis-à-vis public entities, they incorporate the following characteristics⁴¹ as following: Fundamental/Essential; Universal; Innate/Permanent; Personal; Non-patrimonial; Unavailable.

³⁴ Njal Hostmaelingen (2005), *Direitos Humanos num Relance*, Ed. bilingue – Inglês / Português, Edições Silabo, Lisboa, Portugal, 13-32.

³⁵ Vânia Simões (2024), *Lições de Direitos Humanos & Proteção Internacional dos Direitos Humanos - Teoria Geral e Temáticas Contemporâneas*, ed. Almedina, Coimbra, Portugal, 19-27.

³⁶ Alto Comissariado das Nações Unidas para os Direitos Humanos e Aplicação da Lei — Guia do Formador, Série de Formação Profissional n.º 5/Add.2, ed. portuguesa, GDDC, Portugal, 16.

³⁷ Raquel Tavares (2013), *Direitos Humanos - De onde vêm, o que são e para que servem?* 2.ª edição, Editora: Imprensa Nacional Casa da Moeda (Lisboa, Portugal), 22.

³⁸ Njal Hostmaelingen, *op. cit.* (2005), 13-32.

³⁹ Conferência Mundial sobre Direitos Humanos (1993), Viena, Áustria, Número 5 – available in https://dcjri.ministeriopublico.pt/sites/default/files/declaracao_e_programa_acao_viena.pdf, accessed on 20 October 2025.

⁴⁰ Ana Maria Guerra Martins (2012), *Reconhecimento jurídico dos direitos humanos, relatório: programa, conteúdos e métodos de ensino teórico e prático*, ed. Almedina (Coimbra, Portugal), 84.

⁴¹ José de Melo Alexandrino (2011), *Direitos Fundamentais: introdução geral*, 2.ª edição, ed. Principia, (Cascais, Portugal), 22-30.

When we analyse Human Rights, we can divide them into two distinct types or categories:

- civil and political rights, which encompass political rights, namely the right to vote and be elected, freedom of expression, assembly and association⁴², civil rights include, among others, the right to life and physical and moral integrity, the prohibition of torture and ill-treatment, personal liberty, the right to privacy and freedom of expression and religion⁴³, freedom of expression, freedom of movement, the right to property and economic freedoms, such as freedom of economic initiative, freedom of enterprise, freedom to choose a profession and private autonomy and freedom of contract⁴⁴, all of which have as an essential element the State's duty of abstention.⁴⁵

- economic, social and cultural rights, which are closely linked to property, labour and social security, the former, while the latter, social rights, include health, food and housing, while cultural rights include the right to protection and to enjoy culture and its language⁴⁶, these rights require action from the state to realise them, i.e. they create an obligation on the part of the state to act in order to realise these rights.⁴⁷ In other words, although they impose an obligation on the state to do something, their realisation is always closely linked to a criterion of rationality and expediency in terms, in particular, of its financial reserve.⁴⁸

Obviously, these rights include working hours, weekly rest, holiday entitlements, freedom of association and the right to strike, as well as the right to education, health and social security.^{49, 50}

3.2. Human Rights and Fundamental Rights

Throughout “EU’s AI Act” the European legislator always refers to ‘Fundamental Rights’, but as in this study we are analysing ‘Human Rights’. It is therefore imperative to establish the relationship between these two nomenclatures, in order to know if they are differentiated typologies, or if they are one and the same.

The doctrine only makes the distinction between ‘Human Rights’ and ‘Fundamental Rights’ to clarify that they are two verbal expressions for the same set of rights, but only and only with differences in the legal documents in which they are enshrined.

While the former originate in documents issued by international organisations,

⁴² Njal Hostmaelingen, *op. cit.* (2005), 13-32.

⁴³ *Ibid*, 13-32.

⁴⁴ Jorge Pereira da Silva (2024), *Direitos Fundamentais para o Universo Digital*, Edições Fundação Francisco Manuel dos Santos, Lisboa, Portugal, 21-32.

⁴⁵ Vânia Simões, *op. cit.* (2024), 19-27.

⁴⁶ Njal Hostmaelingen, *op. cit.* (2005), 13-32.

⁴⁷ Vânia Simões, *op. cit.* (2024), 19-27.

⁴⁸ L. Barbosa Rodrigues (2021), *Manual de Direitos Fundamentais e de Direitos Humanos*, Ed. Quid Juris (Lisboa, Portugal), 242-290.

⁴⁹ Jorge Pereira da Silva, *op. cit.* (2024), 21-32.

⁵⁰ For a broad description of the set of rights integrated into “civil and political rights” and “economic, social and cultural rights”, see Vânia Simões, *op. cit.* (2024), 21-24.

and thus form part of public international law, the latter are the same rights that the internal orders of states, in this case the European Union, transpose into their internal legal orders, i.e. the European Union has transposed them into the internal legal order, i.e. 'Human Rights' and 'Fundamental Rights' are two sides of the same law⁵¹.

It is now time to present the Generations of Human Rights.

3.3. The Human Rights Generations

As we have already seen, in the very brief note that we have inserted in this text, it was Karel Vasak who in 1979, at a Conference in Strasbourg, at the International Institute of Human Rights⁵², established a periodization of Human Rights based on the ideals of the French Revolution - "liberty", 'equality' and "fraternity", which we will now compare with the various classifications/typologies of Human Rights that we have very briefly described and which thus represent three generations of Human Rights structured by Karel Vasak in 1979, which are peaceful in terms of their existence in the doctrine. We will focus on these first three generations first. Recently, there have been some authors who point to the existence of two more generations of Human Rights, which we will also briefly mention.

3.3.1. First Generation of Human Rights

This first generation, which represents the ideal of "Freedom", include rights that reflect the liberal thinking of the 18th century⁵³, and focus on civil and political rights that are fundamental to the functioning of Democracy⁵⁴, and are therefore individualistic rights vis-à-vis the state, and are concretized by the non-intervention of the state in the individual sphere, i.e. they defend the autonomy of the individual vis-à-vis state power. This first generation includes, in particular, the right to life and protection against arbitrary deprivation of life, the right to individual freedom and security, the right to privacy and access to justice and criminal rights, the right to freedom of expression and association, of thought and religious conscience, of assembly and property, political rights such as the right to vote, the right of assembly and association^{55,56}.

These first-generation rights are fundamental to the realization of human dignity and freedom from the state.

⁵¹ Rodrigo Rodrigues da Luz & Marília Freitas Lima (2025), „Artificial Intelligence and Law: A Study on The Impacts on The Dimensions of Fundamental Human Rights”, *Revista de Direito, Governança e Novas Tecnologias*, XXXI Congresso Nacional de Brasília, v. 10, n. 2, Jan/Jul, (Brasília, Brasil), 101 – 123.

⁵² Vânia Simões, *op. cit.* (2024), 19-27.

⁵³ *Ibid*, 19-27.

⁵⁴ Njal Hostmaelingen, *op. cit.* (2005), 13-32.

⁵⁵ Rafael de Lazari (2019,) *Manual de Direito Constitucional*, 3.º Edição, Editora D'Plácido, Belo Horizonte, Brasil, 346-349.

⁵⁶ Rodrigo Rodrigues da Luz & Marília Freitas Lima, *op. cit.*, (2025), 101 – 123.

3.3.2. Second Generation of Human Rights

While first-generation rights are characterized by the abstention of state action, these second-generation rights have as their genetic characteristic the imposition on the state of *facere*, that is, their fundamental characteristic is the imposition on the state to provide services to people, stemming from the right of “equality” originating in the French revolution of the 18th century, and now seen in economic, social and cultural rights, rights that aim to guarantee people a society of well-being based on the principle of equality⁵⁷, so that the state is a public welfare entity in the name of social justice⁵⁸, in other words, what is at stake here is the credit that each person expects from the society in which they live, so that they can live with a minimum standard of well-being, which is why the state must promote this well-being, and which brings the principle of equality to society⁵⁹.

Second generation rights include the rights to health, education, work, social security, housing, economic regulation and access to culture.⁶⁰

3.3.3. Third Generation of Human Rights

These rights, which according to Karel Vasak would fit in with the ideal of ‘fraternity or solidarity’ of the French Revolution of 1789, are by their nature intended to protect groups, families, people and nations⁶¹, and are collective rights, or also known as diffuse rights, or also called *meta-individual* rights, because they aim to protect interests and values common to humanity.⁶²

They emerge, par excellence, from the atrocities committed in World War II and therefore aim to ensure the right to peace and development, the self-determination of peoples, the right to the environment and quality of life, consumer rights, the right to a public administration with efficient public services, the protection and conservation of cultural and historical heritage⁶³, rights that are collectively owned and are therefore often linked to global issues⁶⁴, which often imposes global and complex responses and challenges.

3.3.4. Fourth Generation of Human Rights

According to Ingo Wolfgang Sarlet⁶⁵ the rights integrated into this fourth

⁵⁷ Njal Hostmaelingen, *op. cit.* (2005), 13-32.

⁵⁸ Ingo Wolfgang Sarlet (2007), *A eficácia dos Direitos Fundamentais*, 7.^a edição, ver., e atualizada, Ed. Livraria do Advogado, Poto Alegre, Brasil, 56-61.

⁵⁹ Rodrigo Rodrigues da Luz & Marília Freitas Lima, *op. cit.*, (2025), 101 – 123.

⁶⁰ Vânia Simões, *op.cit.* (2024), 19-27.

⁶¹ *Ibid.*, 19-27

⁶² Rodrigo Rodrigues da Luz & Marília Freitas Lima, *op. cit.* (2025), 101 – 123.

⁶³ Rafael de Lazari *op. cit.* (2019.), 346-349.

⁶⁴ Ingo Wolfgang Sarlet, *op. cit.* (2007), 56-61.

⁶⁵ *Ibid.*, 56-61.

generation, they would add new rights to the classic rights of freedom and would be rights against genetic manipulation, the right to change sex, or even digital rights. However, to Noberto Bobbio⁶⁶ this fourth generation would cover biological rights related to genetic research and manipulation, while for Paulo Bonavides⁶⁷ this fourth generation included the right to democracy, the right to information and pluralism in the face of neoliberal globalisation.⁶⁸ This reality shows us that the doctrine has not established the existence of this fourth generation.

3.3.5. Fifth Generation of Human Rights

According to Patrícia Peck and Luís Carlos Cancellier de Olivo doctrine⁶⁹, this fifth dimension covers technological rights: access to the internet, information technology and human interactions with new technologies, including Artificial Intelligence. However, to Vânia Simões⁷⁰, this new generation would include the right to peace and the internet.

Researchers on this subject are still a long way from reaching a consensus on the fourth and fifth generations, and in this sense see Jorge Pereira da Silva⁷¹ who consider the first generation includes civil rights, the second generation political rights, the third social rights, while the fourth incorporates environmental rights and the fifth digital rights, but this reality is still under discussion due to a lack of consensus.⁷²

4. Are the Digital Human Rights a New Generation?

Our analysis has led us to conclude that since 1979 Human Rights have been divided by Karel Vasak into three generations that have been duly stabilised in the doctrine, with some researchers now adding a fourth and fifth generation, but these new generations do not even have the slightest consensus among scholars on the subject.

It's now time to answer the question that led us to this study, that is, to get the answer to this question: "Will be the Digital Human Rights a new Generation?"

When we analyse 'EU's AI Act', one fact stands out. The European legislator established in Article 3(1), in the 'Definitions' that '*AI system*' means a machine-based system'. It should be noted that in its initial recitals the European legislator clarifies in 'Considering 4' that '*AI is a family of technologies*', repeating in 'Considering 138' that '*AI is a family of technologies*', in other words, both in the specific definition of 'AI system' and in those recitals, by previously emphasising that "*AI*" is part of the

⁶⁶ Noberto Bobbio (2004), *A era dos direitos*, Ed. Elsevier, Rio de Janeiro, Brasil, 9.

⁶⁷ Paulo Bonavides (2004), *Curso de Direito Constitucional*, 15.^a ed., Imprensa: São Paulo, Malheiros, Brasil, 571.

⁶⁸ Vânia Simões, *op. cit.* (2024), 19-27.

⁶⁹ *Apud* Rodrigo Rodrigues da Luz & Marília Freitas Lima, *op. cit.* (2025), 101 – 123.

⁷⁰ Vânia Simões, *op. cit.* (2024), 19-27.

⁷¹ Jorge Pereira da Silva, *op. cit.* (2024), 21-32.

⁷² Rafael de Larazi & Brunna Pinotti Garcia Oliveira (2017), *Manual de direitos humanos*, 3.^a edição, Editora Juspodium, Salvador, Brasil, 147.

'family of technologies', there is no doubt that we are dealing with yet another of the new technologies that the computer world has created at the service, and for the service, of Man.

It should be noted that throughout "'EU's AI Act'" the European legislator wrote the expression 'AI system' 613 times, 312 times in the *considering's* and 301 times in the articles, as well as writing 'AI technologies' 4 times, 2 times in the *considering's* and 2 times in the articles, and repeating the word 'technologies' 13 times, 7 times in the *considering's* and 6 times in the articles. All this reinforces our certainty that 'AI' is yet another computer technology at the service of humanity.

It should also be noted, as we made clear above, that in all the work prior to the publication of "'EU's AI Act'", particularly in 2020, the Commission, in its '*White Paper on Artificial Intelligence - A European approach to excellence and trust*', made it clear that Artificial Intelligence is nothing more than '*a set of technologies that combine data, algorithms and computing power*'⁷³, a reality that reinforces our conviction that this is just another IT tool that is expanding.

For us, Artificial Intelligence is the latest technology created in the field of information technology and made available to humanity, which will continue to develop like all the others, and which is part of the so-called 'Fourth Industrial Revolution', or also known as 'Industry 4.0'⁷⁴, which follows the line of other advanced information technology, such as the 'Internet of Things', the 'Internet of Services', 'Cloud Computing', 'Big Data', "Robotics" and "Cybersecurity".⁷⁵

All these new IT tools made available to man can now lead to 'Automation', i.e. the use of machines and robots to carry out repetitive and complex tasks, to 'Customisation', i.e. the ability to produce personalised products adapted to individual needs, thereby achieving greater "Efficiency", i.e. improving efficiency and reducing costs by optimising processes, and in this way continuing on the path of 'Innovation', treading the path towards the creation of new products and services through the combination of advanced technologies.

Since 'Industry 4.0' is an intelligent connection, i.e. an interconnection, between workers, human beings and a vast array of information and communication technologies, i.e. the fusion between technologies and their interaction in the areas of physics, digital and biology, we have no doubt that this 'Industry 4.0', with the introduction of 'Artificial Intelligence' and its interconnection with other existing technologies, will advance beyond human imagination today.⁷⁶

⁷³ White Paper on Artificial Intelligence - A European approach to excellence and trust - COM(2020) 65 final - Brussels, 19.2.2020 - https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CE_LEX%3A52020DC0065, accessed on 20 October 2025.

⁷⁴ Klaus Schwab, (2017), *The Fourth Industrial Revolution*, Ginebra: Crown Business, New York, USA, 192.

⁷⁵ For an analysis of all these concepts, see Icléia Silveira, Amanda Camara Manso, Amanda da Silveira Bairos (2023), *Indústria 4.0: conceitos, ferramentas e aplicações na indústria brasileira*, ENSUS 2023 – XI Encontro de Sustentabilidade em Projeto – UFSC – 05 a 07 de junho, Florianópolis, Brasil, 282 -293.

⁷⁶ Aline Xavier dos Santos Germano, José André Villas Boas Mello, Wladimir Henriques Motta (2021), „Contribuição das tecnologias da indústria 4.0 para a sustentabilidade: uma revisão sistemática". *Palavra clave* [online], vol. 11, n. 1, pp. 142-142. ISSN 1853-9912. <https://doi.org/https://doi.org/10.24215/1853>

As we saw above, the European legislator ‘EU’s AI Act’, in defining the concept of ‘AI system’, recognised, established and determined that ‘AI’ is a ‘system’ that is ‘machine-based’, stating that “AI” belongs to the ‘family of technologies’, which means that we are only and only in the field of computer technologies.

What the European legislator imposed in ‘EU’s AI Act’ – in Article 1 (1), as mentioned above, is ‘*the purpose of this Regulation is to promote the uptake of human centric Artificial Intelligence*’, in other words, the centre of this technology, we would say, as well as all the others, is at the service of “Man” and, therefore, the ‘AI system’ is also at the service of that same ‘Man’.

Obviously that due this new technology, as well as its consequences and future uses are uncertain and unimaginable, the European legislator has imposed that all Artificial Intelligence systems must ‘*ensure a high level of protection of fundamental rights as enshrined in the Charter of Fundamental Rights of the European Union*’, with normative imposition in Article 1(1).

As we have seen, ‘EU’s AI Act’ not only makes express reference to the ‘*Charter of Fundamental Rights of the European Union*’, but also imposes, throughout its ‘Recitals’ and “Articles”, the fulfilment of multiple and concrete ‘Human Rights’. Take a look at ‘Table 1’ that we have drawn up on the wide range of Human Rights that the European legislator has itemised throughout the “Considering’s” and ‘Articles’ of “EU’s AI Act”.

All this demonstration by the European legislator in the creation of ‘EU’s AI Act’ shows that Artificial Intelligence is an integrated system of computer technologies, just like the others we’ve mentioned above, being only and only a ‘system that is based on the computer machine’ and which always has, like all the others, “Man” at its centre, and therefore all products originated, commercialised and used by Artificial Intelligence must strictly comply with ‘Human Rights’.

From what we have explained above, Artificial Intelligence is not a new generation of Human Rights, in line with the conclusion of the study carried out by Rodrigo Rodrigues da Luz & Marília Freitas Lima⁷⁷, when they conclude that Artificial Intelligence does not constitute a new dimension of Human Rights, even though, logically, it can affect, reach, influence existing Human Rights, whether they are civil and political rights, or economic, social and cultural rights, in line with the thinking also trodden by Gustavo Tepedino e Rodrigo da Guia Silva⁷⁸, for whom new technological developments do not constitute any new Human Right, but only represent new forms of manifestation in people’s daily lives, which is already in line with the thinking of Flávio Martins Nunes Júnior⁷⁹, to whom new technologies do not create any new category of Human Rights.

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⁷⁷ Rodrigo Rodrigues da Luz & Marília Freitas Lima, *op. cit.* (2025), 101 – 123.

⁷⁸ Gustavo Tepedino e Rodrigo da Guia Silva (2019), „Desafios da inteligência artificial em matéria de responsabilidade civil”, *Revista Brasileira de Direito Civil - RBDCivil*, v.21, jul-set., Belo Horizonte, Brasil, 61-86.

⁷⁹ Flávio Martins Nunes Júnior (2017), *Curso de Direito Constitucional*, 1.ed., Editora Revista dos Tribunais, São Paulo, Brasil), 752.

In conclusion, to the question we set out to answer, ‘Are the Digital Human Rights a new Generation?’ we would say no, because all the Human Rights underlying the creation, trade and use of Artificial Intelligence are by nature already listed in all the existing International, European Union and individual state legislation on Human and Fundamental Rights.

5. Conclusion

As we have analysed, Artificial Intelligence is the latest of the computerized, and therefore technological, tools that have been created by man and which follows on from others, such as the “Internet of Things”, the “Internet Of Services”, “Cloud Computing”, “Big Data”, “Robotics” and “Cyber Security”, which form part of the latest Industrial Revolution, the “Fourth Industrial Revolution”, or also known as “Industry 4.0”.

All the ‘Industrial Revolutions’ have brought new challenges for Human Rights and have been the support for the densification of many of these Human Rights, but Artificial Intelligence, due to its conception and capacity for evolution, integration and intersection with other existing tools and the capacity to generate new tools, imposes greater care on all global players dedicated to its research, creation, availability of services and use, so that Human Rights are safeguarded in all these actions that lead to the intersection of Artificial Intelligence, as a computer tool, with the safeguarding of Human Rights.

This same reality is demonstrated by ‘EU’s AI Act’, created by the European Union through Regulation (EU) 2024/1689 of the European Parliament and of the Council of 13 June 2024, which is relevant worldwide, being the first of its kind, and therefore serves as a universal paradigm.

It should be noted that we are dealing with an ‘AI system’ that has to obey the rules of existing ‘Human Rights’, in other words, despite the disruptive impacts that Artificial Intelligence systems can have on Human Rights, it must always be subordinate to them, despite the fact that this new tool can develop and realise them, but this does not mean that, as we have seen, it is in itself a new dimension of these Human Rights, but only a tool that, if used well, has the potential to improve their realisation.

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