

Human Dignity and Quantified Self: The Constitutional Challenge of AI

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ABSTRACT: This essay examines the relevance of the constitutional concept of dignity in the digital society. This analysis examines how digital technologies are currently redefining the concept of human personality, employing a quantitative approach that considers human behavior through a statistical lens. The idea of dignity is then considered as a useful element for starting a new juridical reasoning aiming to draw a line of continuity through a person's physical, psychic, relational, and even digital existence, and the EU AI Act seems to be the beginning of a new regulation intended to define a technological development that could be authentically anthropocentric.

KEYWORDS: dignity; AI; fundamental rights; AI Act; quantified self

SUMMARY: 1. The Constitutional meaning of dignity and its relevance for the regulation of digital society – 2. The quantified essence of digital society – 3. Which dignity for the Quantified Self? The answer of the European Union – 4. The constitutional force of dignity for digital society.

1. The Constitutional meaning of dignity and its relevance for the regulation of digital society

The meaning of the principle of dignity is, even today, endowed with a certain degree of mystery, considering that it is difficult to find, in the field of Constitutional Law, another concept that is, at the same time, both central and elusive, a synthesis of the strongest juridical protection of human personality, yet also a source of numerous interpretative doubts. A partial explanation of this peculiarity could be found in the origin of the theoretical and philosophical elaboration of the concept, which is very ancient and predates the legal use of the word *dignity* by centuries.

In fact, the evolution of the meaning of dignity has characterized the entire development of Western civilization, with a moment of foundation at the beginning of Christianity, when the Church Fathers used the word to describe human beings as an image of God, an *Imago Dei*: off course, in that moment the reasoning about the concept was purely theological, but in that there was something grounding also from a juridical point of view, because, for the first time, through dignity, it was possible to consider human beings as universally equal because they all shared the same divine nature.¹

During the humanist period, philosophers such as Pico della Mirandola and Pufendorf succeeded in

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¹ P. RIDOLA, *La dignità dell'uomo e il 'principio libertà' nella cultura costituzionale europea*, in *Diritto comparato e diritto costituzionale europeo*, Torino, 2010, 84.



giving dignity an immanent connotation, strictly related to the rational nature of humans; however, the authentic turning point was Immanuel Kant's *Metaphysik der Sitten*. In the second part of his essay, Kant reinterpreted the concept's entire evolution, affirming that each human being has an inherent value grounded in the inner moral Law. Consequently, through dignity, Kant elaborated the idea that there is a system of rights that universally connotes every person.²

Through this path, the concept of dignity acquired its primary and current characteristics in Western legal culture.³ It has become a principle capable of both expressing and grounding the idea that human rights are inherent to every individual, regardless of origin and social condition, but, despite this significant historical development, dignity was codified into Constitutions and the Charter of Rights only much later, because it was only after the atrocities of totalitarian regimes and the obliteration of the human person generated by nationalism, that dignity began to be written in Constitutions as intangible core of protection for the human person.⁴

The first legal text to explicitly refer to dignity is the Preamble to the Charter of the United Nations (1945). Then, in 1948, the Universal Declaration of Human Rights identified "the dignity of all members of the human family" as "the foundation of freedom, justice, and peace in the world" and established that "all human beings are born free and equal in dignity and rights". The authentic turning point, thus, was the new Constitutions of the two Countries, Germany and Italy, which had experienced the birth and rooting of totalitarianism.

The German Grundgesetz (1949) is undoubtedly the text that has had the greatest influence at the international level. In it, human dignity is the grounding principle of the whole constitutional system: Article 1 states that "Human dignity shall be inviolable. To respect and protect it shall be the duty of all State authority".

The Italian Constitution, although less well-known, has some significant peculiarities. Dated back in 1947, the Italian Constitution was the first that included dignity in its text; but, above all, the textual references to dignity (Articles 3, 36, and 41) define the concept as a limit that acts directly in economic-social relations and that must protect the human person not only from the power of the State but also from any private power. The result is an idea of a dignified life that binds all the juridical actors, public and private, and constantly combines rights and duties, freedom and solidarity.⁵

Through the achievements of those Constitutions, dignity became a new constitutional standard. After 1949, the concept of human dignity was incorporated into almost all European constitutions. Defining moments include the democratic transitions in Southern European countries (Greece, Portugal, and Spain) between 1975 and 1978, as well as the end of Communism in Central and Eastern Europe (1989-1991).⁶

However, the pinnacle of the entire process has been the European Union Charter of Fundamental Rights (2000). The Charter refers to dignity in the Preamble and affirms that "the Union is founded on the indivisible, universal values of human dignity, freedom, equality, and solidarity". Chapter I, then,

² I. KANT, *Die Metaphysik der Sitten*, 1785, part II.

³ P. HÄBERLE, *Verfassungslehre als Kulturwissenschaft*, Berlin, 1998.

⁴ M. ROSEN, *Dignity: its history and meaning*, Boston, 2012.

⁵ A. RUGGERI, *Appunti per uno studio sulla dignità dell'uomo, secondo diritto costituzionale*, in *Rivista AIC*, 1, 2011, 16.

⁶ C. DUPRÉ, *The Age of Dignity: Human Rights and Constitutionalism in Europe*, London, 2015, 55-56.

poignantly titled Dignity, articulates the meaning of the principle in the EU through a declaration of inviolability (article 1), the recognition of the right to life (article 2), of the right to the integrity of the person (article 3), the prohibition of the torture or inhuman or degrading treatment or punishment (article 4) and the prohibition of slavery and forced labour (article 5).

Through these codifications, dignity ceased to be mostly a ‘never again pledge’ to become an authentic grounding constitutional principle set by the Lisbon Treaty as the first fundamental value on which European integration is based (article 2).

The exact legal extent of the principle, however, has remained open. The scholars had defined dignity as a conceptual puzzle that can embrace at least four different interpretations: dignity as the prohibition of differences between human beings; dignity as the moral Law proper to each human being; dignity as a dignified way of acting; and finally, dignity as the right to be treated with dignity.⁷

Indeed, when examining the concrete application of dignity across various constitutional systems, the only certain data is the principle’s jurisprudential operability. Nowadays, it isn’t uncommon to find dignity invoked in decisions related to some debated issues like assisted suicide: in those kinds of decisions, dignity is the constitutional legal base for articulated reasonings about what can be perceived as a dignified way of living.

From a general perspective, it can be said that in courts, dignity serves as both an instrument to protect human liberty and a moral justification for public policies that safeguard specific values.

However, in recent years, a new field of application for human dignity has emerged, particularly in relation to the commodification of human personality that can be implied by the data economy and the integration of Artificial Intelligence into society.⁸

The next pages will analyze how human dignity has gained relevance in the legal debate over the regulation of Artificial Intelligence, especially following the approval of the EU AI Act in 2024.

The paper is articulated in three paragraphs. Paragraph two is dedicated to describing the quantitative essence of the digital revolution. It demonstrates how algorithms have increased the relevance of the mathematical-statistical perspective in society, with detrimental consequences for the idea that every person is unique and unrepeatable. The human person of the digital world isn’t really a dignified human being, but a Quantified Self whose existence is shaped by statistical, actuarial, and probabilistic programs. That has several juridical consequences, considering how the quantitative mind is creating a new medievalism in which the feudal structure of the past is reproduced in the algorithmic classification of people. The paragraph will consider how digital architectures lead people to conform to the statistical normality of their category, thereby reducing opportunities for following unconventional paths and reinforcing prejudices and inequalities that constitutionalism has sought to eliminate for over two centuries.

Paragraph 3 examines then the legal instruments that the law seeks to establish to guarantee fundamental rights in a digital society, with a specific focus on the role the European Union has played since the implementation of the 2016 GDPR, which has affirmed that only a digital economy in which people participate with awareness and with a guarantee of their rights can become compatible with the

⁷ S. CIVITARESE MATTEUCCI, G. REPETTO, *The expressive function of human dignity: a pragmatic approach to social rights claims*, in *European Journal of Social Security*, 2, 2021, 120.

⁸ N. CASTREE, *Commodifying what nature?*, in *Progress in Human Geography*, 2003, 273.

idea of social progress (Recital 7). The paragraph considers the regulations approved by the EU following its 2019 digital strategy: the Digital Services Act, the Digital Markets Act, the Data Governance Act, the Data Act, and, finally, the Artificial Intelligence Act are the tools created by the European Union to shape all the juridical aspects of the digital society.

Paragraph 4, as a conclusion, highlights that the constitutional path of the dignity principle is now proving to be the primary legal tool for meeting the challenges of the technological future.

2. The quantified essence of digital society

Digital technologies are changing the way we live and work, and the more advanced the systems become, the more they are used to making relevant decisions: hiring, education, disease prevention, and even criminal convictions are just a few examples of decision-making processes in which the role of automated computing has become increasingly important.

In fact, a careful consideration of what is currently happening leads to reflecting on how the digital revolution could be considered as a transfiguration of human existence. As happened at the end of the 19th century with the Industrial Revolution, we are now experiencing a profound reinvention of everyday life that is reshaping social relationships, and at the core of this new era we can find a quantitative approach: to be understood by digital technologies, human life must be segmented and classified into elements detectable from a statistical and quantitative perspective.⁹

Consequently, digital technologies can perform optimally only when applied to contexts that are easily understood from a mathematical perspective, and the ideas grounding the constitutional development of fundamental rights cannot be readily translated into mathematical models. The juridical protection of human personality results from a complex juridical framework that relies on the idea that the limitation of power must be adapted to every possible situation to ensure a protection that should be the specific connotation of every individual.

The rising power of the digital society, thus, is quite different from every kind of power that Law has faced in the past: computational power has been meaningfully defined as a power that “is exercised by adapting or claiming to adapt, little by little, not only the world but also the representation of the reality to the functioning of digital information and communication technologies (ICTs)”.¹⁰ That means the digitalization works through segmentations that aim to place reality into a classification system designed to enable mathematical and statistical operations on the observed objects, and, so, only numerical elements are comprehensible in digitalization: similarities, differences, hierarchies, and correlations are the result of quantitative parameters present in the real world that can be perceived and reprocessed by algorithms.¹¹

It is then clear that for the ICTs, social relationships assume the characteristics of statistical correlations: through the algorithmic filter, sociality is no longer based on people but on the quantitative elements

⁹ L. FLORIDI, *The Fourth Revolution: How the Infosphere is Reshaping Human Reality*, Oxford, 2014.

¹⁰ M. DURANTE, *Computational Power: The Impact of ICT on Law, Society and Knowledge*, 2021.

¹¹ E. BRYNJOLFSSON, *The Second Machine Age: Work, Progress, and Prosperity in a Time of Brilliant Technologies*, New York, 2014, 9; M. BROUSSARD, *Artificial Unintelligence. How Computers Misunderstand the World*, Cambridge-London, 2018, chapter 3; T. GILLESPIE, *The relevance of algorithms*, in T. GILLESPIE et al. (eds.), *Media Technologies*, Cambridge-London, 2012, 167.

related to people's activities, which become the only tools for establishing affinities and differences, ordination and subordination, values and disvalues.

The digital revolution is, then, the result of applying increasingly powerful hardware and software to big data that, thanks to its volume, velocity, and variety, can easily reshape many elements of human existence, diminishing the relevance of the juridical framework that Law has defined to protect and promote fundamental rights and human personality.¹²

In the history of public Law, the moment the individual enters society has always been considered the moment of establishing relations of power. Only when humans become members of a community can they realize their personality through society.¹³

Consequently, juridical systems have consistently sought to establish specific models of juridical personality. It is well known how the French Revolution elaborated the structure of its legal system, starting from the idea of the *citoyen* as a being transfigured by Reason, a secular saint constantly dedicated to the common good and general interest.¹⁴

Similarly, after World War II, constitutionalism sought to rebuild a strong juridical protection of the person, emphasizing the idea of a human being connoted by his economic and social condition. That vision, as presented in the first paragraph, led to the anthropology of the *homo dignus*, meaning that every member of humanity should have fundamental rights that aren't mere claims regarding the State but are affirmed in society, using the force of the Law to assist a human existence that should be realized directly in intersubjective relations.¹⁵

Now, digital technologies affect the very assumptions on which constitutionalism has built the protection of the person, because they are not neutral facilitators of spontaneous relationships but rather architectures of affordances designed to guide behavior through selective, manipulative algorithmic pathways.¹⁶

The man of the digital society is a Quantified Self, a *homo numericus* increasingly engaged in producing data about itself, whether biological, physical, behavioral, environmental, or relational.¹⁷ In the digital world, people are composed of multiple layers of data, and algorithms do not need any accuracy to operate on individuals, because the real power of digitalization lies not only in data collection but also in data aggregation. The strength of ICTs isn't knowledge about single elements but rather making large-scale comparisons and classifications that could infer a lot of information that, even if not accurate, are nonetheless effective.¹⁸ When an algorithm succeeds in extracting those quantitative elements that enable a statistically significant aggregation or disaggregation, it possesses all the necessary information

¹² D. LANEY, *3D Data management: controlling data volume, velocity and variety*, META Group Research, 6, 2001.

¹³ G. SARTORI, *Elementi di teoria politica*, Bologna, 1987, 241.

¹⁴ G. BURDEAU, *La démocratie en chantier*, 1962, republished in G. BURDEAU, *Écrits de Droit constitutionnel et de Science politique*, Paris, 2011, 345.

¹⁵ S. RODOTÀ, *Il diritto di avere diritti*, Bari, 2012.

¹⁶ L. URQUHART, T. RODDEN, *New directions in information technology law: learning from human-computers interaction*, in *International Review of Law, Computers & Technology*, 2, 2017, 150.

¹⁷ M. SWAN, *The Quantified Self. Fundamental Disruption in Big Data Science and Biological Discovery*, in *Big Data*, 2, 2013, 85.

¹⁸ D.K. CITRON, F. PASQUALE, *The scored society: due process for automated predictions*, in *Washington Law Review*, 1, 2014, 1.

to perform.¹⁹

The Law, then, can no longer protect the individual simply by preventing interference with a private sphere, but must also prevent the construction of personality by those powers, public or private, who organize personal data for their own purposes.²⁰

For example, algorithms often use data from a sample to infer conclusions about the entire population under study.²¹ Similarly, they analyze past and present data to predict the future, or they can place people in groups that appear statistically similar but were created autonomously by the algorithms, maybe using randomization techniques.²²

It then becomes tough to bring out the real merit and potential of a single individual, and instead, it's straightforward to encourage adaptation to statistical normality and the patterns identified by algorithms.

As a result, by calculating the probabilities of human behavior with increasing precision, it becomes much more difficult for the subject to choose alternative paths.²³

In this context, the juridical condition of human personality can easily slide into a new medievalism. If algorithms determine which identities are standard and reject everything else, the uniqueness of each personality is gradually undermined by classifications that create a feudal system in which social layers are defined by statistical similarities and differences.²⁴

The idea of a person as unique is replaced by the idea that everyone can be and do what is proper to the statistical category to which he or she belongs. By classifying a person, the algorithmic profile also defines the range of opportunities related to that person and, in doing so, brings subjects closer to the statistical normality of their categories.

Diversity is increasingly viewed as abnormality, and the most authentic core of constitutionalism is definitely compromised.

Human existence, considered for centuries as a core of self-determination embedded in given social relationships, is now becoming a statistical class membership.

To address this shaping power, it is necessary to guarantee the possibility of consolidating, as well as defining and communicating, a personality that is not hetero-determined, even in the face of continuous and pervasive algorithmic interferences.

It's in this direction that Law is trying to head at the moment, especially in Europe, where the European Union is attempting to define new rules to preserve the legacy of constitutionalism and the technological progress of humanity.

¹⁹ J. VAN DIJCK, *Datafication, dataism and dataveillance: big data between scientific paradigm and ideology*, in *Surveillance and society*, 2, 2014.

²⁰ S. RODOTÀ, *Il diritto di avere diritti*, cit.

²¹ M. HILDEBRANDT, *Learning as a machine: crossovers between humans and machines*, in *Journal of Learning Analytics*, 1, 2017, 6.

²² J. KROLL et al., *Accountable algorithms*, in *University of Pennsylvania Law Review*, 2017, 633.

²³ E. ESPOSITO, *The Future of Futures: The Time of Money in Financing and Society*, Cheltenham, 2011.

²⁴ P.P. VERBEEK, *Subject to technology*, in A. ROUVROY, M. HILDEBRANDT (eds.), *Law, Human Agency, and Autonomic Computing. The Philosophy of Law meets the Philosophy of Technology*, London, 2011, 27.

3. Which dignity for the Quantified Self? The answer of the European Union

When it comes to technology, the Law is fundamentally challenged. Compared to the dynamic development of digital technologies, the Law is a slow-moving entity.

In addition, the digital revolution operates with a degree of opacity that is difficult to match with the imperatives of transparency, certainty, and explicability required in a legal context.²⁵

In recent years, legislators worldwide have sought to develop new strategies to safeguard fundamental rights in digital environments, and the regulation of artificial intelligence has become a new frontier for protecting individuals.²⁶ The approach of the European Union emerged as an attempt to replicate, in the field of Artificial Intelligence, the ‘Brussels effect’ that enabled the EU to present the regulation of privacy set out in the 2016 GDPR as a new global standard.²⁷

The EU Commission outlined, in the communication COM(2021)118, a comprehensive digital strategy up to 2030 that has, as its main goal, to shape the EU as an advanced digital marketplace, in which the stereotype of a Law that chases technological innovation is replaced by a digital economy in which people enjoy strong guarantees of personal rights.

In this document, the Commission outlined an approach completely different from the past: the European regulation was no longer conceived as a legislation mainly oriented to the market, but has taken on the characteristics of what it seems to be a proper constitutional discipline, with a primary focus on the strengthening of the adequate protection of fundamental rights as enshrined in the Charter of Fundamental Rights of the European Union.²⁸

As discussed in the first paragraph, the Charter is built on the juridical concept of dignity, and that made the European Digital Strategy strongly committed to defining for the future a digital environment firmly rooted in the prevention of any kind of exploitation of human beings through the accumulation, aggregation, and reuse of personal data.²⁹

The EU Directive 2019/770, as the first implementation of the Strategy, openly addressed the risk of commodification of human personality that could be associated with the economic value of personal data.³⁰

Then, in a few years, five regulations (the Digital Services Act, Digital Markets Act, Data Act, Data Governance Act, and AI Act) rapidly reshaped the European approach to digitalization.

The Digital Services Act (Regulation UE 2022/2065) has updated the rules on the liability of platforms in

²⁵ H. RUSCHEMEIER, *AI as a challenge for legal regulation – the scope of application of the artificial intelligence act proposal*, in *ERA forum*, 2023, 361.

²⁶ A significant relevance should be recognized for some institutional analyses developed in recent years, such as the UK AI national strategy, presented to Parliament by the Secretary of State for Digital, Culture, Media and Sport in September 2021. Another cognitive institutional insight has emerged from hearings held by the Subcommittee on Privacy, Technology, and Law of the USA Senate under the Biden Administration.

²⁷ A. BRADFORD, *The Brussels Effect: How the European Union Rules the World*, Oxford, 2020.

²⁸ G. PITRUZZELLA, *Big Data, Competition and Privacy: a Look from the Antitrust Perspective*, in *Concorrenza e Mercato*, 2016, 15 ff.; F. COSTA-CABRAL, O. LYNKEY, *Family Ties: The Intersection Between Data Protection and Competition in EU Law*, in *Common Market Law Review*, 2017, 11 ff.

²⁹ A.C. WITT, *The Digital Markets Act – Regulating the Wild West*, in *Common Market Law Review*, 60, 2023, 625 ff.

³⁰ Directive (EU) 2019/770, *on certain aspects concerning contracts for the supply of digital content and digital services*, 20 May 2019. Significantly, e.g., the Recital 24, which explicitly declares that “the protection of personal data is a fundamental right and that therefore personal data cannot be considered as a commodity”.

providing digital services.

The premise of DSA is the increasing dominance of digital platforms in managing vast amounts of personal data. However, the regulation also includes thoughtful reasoning on the potential impact of such disposal of personal data on an individual's personality. The Digital Services Act, in fact, imposes several obligations on platform operators, differentiated by the size and volume of data they manage. There are four types of intermediaries: brokerage services, hosting services, online platforms, and large-scale platforms. All of them are obliged to introduce a reporting and action mechanism (Art. 16), which must allow any subject to notify the platform of the presence of illegal content. Article 17 then requires platforms to explain any restriction of visibility or removal of content. At the same time, Articles 20 and 21 require operators to have a complaints management service, and Article 21 provides extrajudicial dispute-resolution mechanisms that should be easily accessible via the online interface.³¹

The main innovation, however, lies in highlighting the systemic risks inherent in the activities of large-scale platforms and research engines. These risks are identified in the dissemination, through digital services, of illegal content or in the possibility of negative effects on the fundamental rights enshrined in the Nice Charter, and, mainly, on human dignity, private and family life, protection of freedom of expression and information, non-discrimination, respect for the rights of the child, and protection of consumer rights.³²

Additionally, the Digital Markets Act (DMA), Regulation (EU) 2022/1925, established a new framework for the digital economy. In fact, the DMA opened a new era in which Article 102 TFEU assumes a particular meaning for some large digital companies, known as gatekeepers, which are subject to antitrust obligations and prohibitions that apply preventively.

According to Article 3, gatekeepers are companies that have a significant impact on the internal market, provide a core platform service which is an essential gateway for business users to reach end users, and enjoy an entrenched and durable position in its operations, or it is foreseeable that it will enjoy such a position shortly.³³

Article 5, then, prescribes that gatekeepers must seek users' consent to combine their data across different services and must provide an equivalent alternative to users who decline consent.

The premise of the European reasoning is that the size of these entities implies a relevant and unavoidable influence that can select the market options available to the individual, and ultimately, can nudge people into giving consent for data treatment only because an authentic alternative isn't provided. Therefore, the EU imposed specific obligations: the measures include the interoperability of services, surveillance of data generated on platforms and in advertisements, the elimination of lock-in mechanisms for promoting bids and concluding contracts, equal treatment of services provided by other gatekeepers, allowing consumers to connect with companies outside the platform, and the uninstallation of any pre-installed software or apps. Additionally, the European Commission assumed direct supervision and control over the application of the DMA, thereby superseding the previous

³¹ C. PINELLI, *L'evoluzione della normativa dell'Unione europea*, in C. PINELLI, U. RUFFOLO, *I diritti nelle piattaforme*, Torino, 2023, 13 ff.

³² A. TURILLAZZI, M. TADDEO, L. FLORIDI, F. CASOLARI, *The digital services act: an analysis of its ethical, legal and social implications*, in *Law, Innovation and Technology*, 1, 2023, 83.

³³ Regulation (EU) 2022/1925, *Digital Markets Act*, article 3.

competences of national authorities, and initiated various surveillance procedures for the six Big Tech companies identified as gatekeepers (Alphabet, Amazon, Apple, ByteDance, Meta, and Microsoft).³⁴ Using that approach, the EU has made clear that it's no longer possible to affirm the principle of the neutrality of digital platforms. What is now emerging is a clear awareness that digital technologies are powerful instruments and, as such, can produce subjection, discrimination, and inequalities that should be strongly prevented by the Law.

However, the pinnacle of the entire European ruling process is the Artificial Intelligence Act, proposed by the Commission in April 2021 and definitively published in July 2024 as Regulation (EU) 2024/1689. In it, respect for human dignity is emerging as a significant legal principle that informs the AI's ruling.

As is well known, the main feature of the AI Act is to address the complex world of Artificial Intelligence through a risk-based approach. In fact, the Regulation identifies different risk levels, corresponding to various regulation scenarios: unacceptable risk technologies, high-risk technologies, limited-risk technologies, and low-risk technologies. Unacceptable risk technologies are prohibited by the EU, high-risk technologies are subject to strict rules and obligations, and limited-risk technologies must meet transparency obligations. Low-risk technologies can be freely placed on the EU market.

The choice of a risk-based approach is effective because it allows for a comprehensive ruling action, avoiding the pitfalls of the notion of AI, which is not only ambiguous but also rendered uncertain by ongoing developments in the field. Using the risk-based approach, the Regulation can potentially cover any data processing technology; however, the provision's vagueness is balanced by the tangible social impact that can be ascribed to a single technology.³⁵

The Act addresses algorithmic classifications in various parts of its discipline.

In Chapter II, dedicated to prohibited AI practices, the EU has considered the commercialization of systems that can persuade people into unwanted behaviors, or that nudge them into decisions in a way that subverts and impairs their autonomy and free will, to be an unacceptable risk to fundamental rights (Recital 29).

Article 5, then, lists the practices that can produce this kind of effect, considering it unacceptable to deploy subliminal techniques or to exploit the vulnerability of a natural person or a group of people due to their age, disability, or a specific social or economic situation. The letter c) specifically prohibits the commercialization of AI products that could evaluate or classify natural persons or groups of persons over a certain period based on their social behavior or known, inferred, or predicted personal or personality characteristics. The provision, however, limits its applicability to situations in which the algorithmic social scoring could be detrimental to individuals or groups of individuals in a social context unrelated to the context in which the data was originally collected, or could produce an effect that is disproportionate to the observed social behavior and its gravity.

The article also prohibits systems that could assess or predict the risk of a natural person committing a criminal offense based solely on the profiling of a natural person or on assessing their personality traits and characteristics (letter d); create or expand facial recognition databases through the untargeted scraping of facial images from the internet or CCTV footage (letter f); infer emotions of a natural person in the areas of workplace and education institutions (letter g); use of biometric categorization systems

³⁴ The identification was made on the 6th of September 2023.

³⁵ J. SCHUETT, *Defining the scope of AI regulations*, in *Law, Innovation and Technology*, 1, 2022, 1.

that categorize individually natural persons based on their biometric data to deduce or infer their race, political opinions, trade union membership, religious or philosophical beliefs, sex life or sexual orientation (letter i).

Additionally, the regulation of high-risk technologies focuses on mitigating the severe effects of algorithmic classifications. According to the provisions of Annex III, the areas in which AI technologies can develop some high-risk effects are: biometrics, with a specific attention to remote biometric identification/categorization or emotion recognition; education and vocational training; employment, workers management and access to self-employment; access to and enjoyment of essential private services and essential public services and benefits, with a specific reference to systems intended to be used to evaluate the creditworthiness of natural persons or establish their credit score; law enforcement; migration, asylum and border control management; administration of justice and democratic processes.

As can be seen, the AI Act pays significant attention to the possibility that artificial intelligence could have discriminatory effects, thanks to its quantitative approach, rooted in its statistical nature. In the discipline, there's a specific intent to prevent some of the main distortions realized by artificial intelligence in the first years of its development.

Nonetheless, this remarkable achievement is in a text that originally sought to balance the protection of personal rights with the EU's interest in strengthening the economy of personal data. It is important to remember that the initial proposal for the AI Act, made by the Commission in April 2021, was considering the protection of personal rights as a question of the lack of trust that individuals can develop in AI technologies (Whereas 1 and 5 of the text proposed by the EU Commission). However, the European Parliament's discussion of the proposal helped to change the approach. The rapid advancement of generative artificial intelligence has demonstrated how easily AI can generate complex texts, images, videos, and audio that can significantly alter human perception, opening the field to a vast range of new threats to human rights.

This circumstance prompted the EU to partially rethink the structure of the AI Act, including in the Regulation a set of general principles that must ensure that Artificial Intelligence is developed with full respect for the human person. Dignity is closely tied to the new framework incorporated into the final text.

Specifically, following parliamentary amendments in July 2023, a new general goal was added to Article 1, defining the primary purpose of the AI Act as ensuring a human-centric, trustworthy artificial intelligence that always respects the fundamental rights enshrined in the EU Charter. In addition, the final text of the Regulation now provides some limits that apply to all types of AI, regardless of risk level, and should help define an artificial intelligence that is, by design, ethical, reliable, and fully compliant with the Union's Charter of Fundamental Rights.

The boundaries of AI legitimacy encompass human intervention and surveillance, technical robustness and safety, respect for privacy and data governance, transparency, respect for diversity, nondiscrimination, fairness, and social and environmental welfare.

The final result is a far cry from the original balance between person and market, and it appears to clearly prioritize protecting human rights over the function of any technology.

The AI Act now explicitly acknowledges that a regulation on AI should ensure that technology is always

serving people and that people consistently exercise their rights.

Textual references to human dignity are prevalent throughout the AI Act, and their global significance lies in reconstituting the multiple dimensions that the human person assumes in digital environments.

As a result, dignity is emerging as the element that can draw a line of continuity through a person's physical, psychic, relational, and even digital existence.³⁶

4. The constitutional force of dignity for digital society

The connection between dignity and the AI Act enables consideration of fundamental rights in a manner that differs significantly from the usual development of constitutional systems.

In fact, under European law, the old bilateral pattern of fundamental rights is no longer current. In a digital society, personal rights can't be exercised solely within relationships with public powers: people define their identities in a network of relationships that are both real and digital, and data flows are increasingly relevant in the construction of social perceptions and representations. State power isn't the primary threat to individual freedom, and the strategy of liberating people solely by protecting their privacy from outside interference is no longer effective.

Digital technologies can influence the human mind even before the process of willingness can begin, and every digital behavior can be prompted by a statistical model that assigns the highest probability to the desired result. That means that human personality is constantly exposed to systemic risks that must be addressed not only by public powers, but especially by private actors who, having hegemony in data management, are consequently also developing hegemony over individuals and their rights.³⁷

Dignity has been introduced in Constitutions precisely as an element that prevents challenging the rights and freedoms that outline the anthropological texture of constitutional and democratic orders. Dignity has the juridical ability to simultaneously limit and direct social organization, and as such, it could also be the main juridical criterion for a constitutional turn in the liquid nature of digital society.³⁸

Therefore, through dignity, it becomes possible to give a constitutional interpretation to digital society: if globalization has promised the removal of barriers and has actually built deep interconnections and interdependencies, it does not follow that the human condition should be transfigured according to the characteristics of computational power.³⁹

As seen in the previous pages, the juridical concept of dignity emerged from the most tragic moments of European history. Dignity is written in the Constitutions to introduce an undecidable element, a core idea that prevents the principles, rights, and freedoms that define the anthropological texture of democratic systems from being challenged.⁴⁰

Its inner force in contemporary society, however, isn't just about closing the door on an unwanted past.

³⁶ S. RODOTÀ, *Il diritto di avere diritti*, cit.

³⁷ R. MESSINETTI, *La tutela della persona umana versus l'Intelligenza Artificiale. Potere decisionale dell'apparato tecnologico e diritto alla spiegazione della decisione automatizzata*, in *Contratto e impresa*, 2, 2019, 885.

³⁸ Z. BAUMAN, D. LYON, *Liquid Surveillance: A Conversation*, Cambridge-Malden, 2013.

³⁹ R. BROWNSWORD, *What the World Needs Now: Techno-Regulation, Human Rights and Human Dignity*, in

R. BROWNSWORD (ed.), *Global Governance and the Quest for Justice*, Portland, 2004, 203 ff.

⁴⁰ S. RODOTÀ, *Antropologia dell'homo dignus*, in *Storia e memoria*, 2, 2018, 107 ff.; H. ARENDT, *The Origins of Totalitarianism*, London, 1966, 3.

Its actual specific ability is to anchor the system of subjective rights to an objective principle that, as such, is subtracted from any balancing technique. As an evocative synthesis of universal rights, dignity cannot be rediscussed and must remain immutable, even in the era of exponential technological change.⁴¹

In a world where digital technology is deeply integrated into society and can easily influence the definition and development of the Self, the relevance of dignity lies in imposing respect for the autonomy of the individual on all social actors, public powers, and private individuals. It is the principle that reminds everyone that the Law must always ensure the free and full development of the human person.⁴²

It is possible to affirm that the legal limitation of Artificial Intelligence cannot in any way be based on simple mechanisms of referral to human self-determination and must instead follow multi-principled approaches that make the legal protection of the person a structural element of algorithmic architectures.⁴³

Developing a moral and social obligation in respecting the unique value of every individual, dignity expresses the legal duty to prevent any use of technology that could alter the equal relevance of every person.⁴⁴

The presence of dignity in almost every Constitution of European Countries and in the EU Charter of Fundamental Rights can be regarded as an important starting point, awaiting to be played out in all its consequences and potential for application. Dignity is the juridical principle that is now strongly affirming the legal duty to prevent the subjection of human beings to any predetermined pattern. It commits the Law to developing social actions capable of ensuring that each person's social existence is the result of everyone's ability to contribute, according to one's own possibilities and choices, to the spiritual and material progress of society.⁴⁵

The presence in Europe of a strong network of Constitutional Courts and National Data Protection Authorities provides the legal infrastructure that could make dignity a sound principle, preserving for future citizens the heritage of more than two Centuries of constitutionalism.⁴⁶

⁴¹ E. DI CARPEGNA BRIVIO, *Pari dignità sociale e Reputation scoring. Per una lettura costituzionale della società digitale*, Torino, 2024.

⁴² L. FLORIDI, *The Fourth Revolution*, cit.

⁴³ L. FLORIDI, *Tolerance and the Design of Norms*, in *Science and Engineering Ethics*, 21, 2015, 1095 ff.

⁴⁴ Q. CAMERLENGO, *Costituzione e promozione sociale*, Bologna, 2013.

⁴⁵ S. RODOTÀ, *Il diritto di avere diritti*, cit.

⁴⁶ B. MARCHETTI, *The algorithmic administrative decision and the human in the loop*, in *Biolaw journal*, 2, 2021.