ARTICLES

TRANSPARENCY WITHIN THE *ARTIFICIAL ADMINISTRATION* PRINCIPLES, PATHS, PERSPECTIVES AND PROBLEMS *

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Abstract

The attempt to regulate the use of artificial intelligence within the public administration (which marks a new phase of public digitization, that of *artificial administration*) passes through the "resource" of administrative transparency. The essay analyses how the issue has been dealt with by Italian jurisprudence and legislation, also paying attention to the European framework being defined. Transparency is called upon to adapt to the new context, but the technological phenomenon also calls for a rethinking and reshaping of citizens' levels of legal protection. The challenge, on which the essay reflects, is to maintain adequate levels of guarantee and protection, in a scenario where the old rules risk, however, not being able to govern the phenomenon. The new principles, of jurisprudential formation, now codified by the new Italian "contract code", propose possible paths of solution, but also challenges and risks of retreat in the protection of rights. The work therefore questions what transparency is necessary and what transparency is possible.

TABLE OF CONTENTS

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1.　　Premise

1.1.　　The centrality of transparency and the artificial administration

More than thirty years have passed since Jacques Chevallier[1], in reflecting on the "myth of administrative transparency", found how this had «become not only one of the fundamental values which the administration must inspire, but also a privileged axis of administrative reforms»: after some time, and as a result of a pro-

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[1] J. Chevallier, *Le Mithe de la Transparence Administrative*, in *Information et transparence administratives* 239 (1988) 239.

cess in which transparency has undergone an extraordinary evolution, transparency shows that it has now become a more overall keystone in the relationship between administrations and citizens, and does not fail to continue to receive new requests.

Following this discussion, the consideration that Han Byung-Chul[2] proposes to us in general (and indeed critical) terms return: «No other buzzword dominates public discourse today as much as the term *transparency*».[3] But transparency often promises more than it delivers[4], and this is even more true in the new technological scenario.

At the same time, no other principle seems better able to allow us to accompany and manage the new, formidable challenges facing society and, last but not least, contemporary administration.[5] Which applies in a particular, but problematic way, to the entry of artificial intelligence into public action.

This new phase of public digitalization, which follows the phases of computerization, that of eGovernment, that of digital administration, can be defined as the phase of *artificial administration* (an expression that sums up, precisely, the use of artificial intelligence for automated public decision-making).[6] And it is a phase that arises, unlike the others, in problematic (and ambivalent) terms with respect to the challenge of transparency.

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[2] H. Byung-Chul, *Transparenzgesellschaft*, 3 (2012).

[3] In general terms, on the evolution of the principle of transparency and its tools, see already F. Merloni et al (eds.), *La trasparenza amministrativa* (2008); C. Hood e D. Heald (eds.), *Transparency: Key to Better Governance?*, 211 ff. (2006); E. Carloni, *Il paradigma trasparenza* (2012).

[4] See e.g. M. Fenster, *The Opacity of Transparency*, 91 Iowa Law Review 888 (2006).

[5] For a reconstruction of the various transparency tools and their "digital" perspective, see e.g. S. Rossa, *Trasparenza e accesso all'epoca dell'amministrazione digitale*, in R. Cavallo Perin, D.-U. Galetta (eds.), *Il diritto dell'amministrazione pubblica digitale*, cit. at. 247 ff.; see also, in general terms, A. Cerrillo Martinez, *Accountability delle decisioni algoritmiche*, in R. Cavallo Perin (eds.), *L'amministrazione pubblica con i big data*, 61 ff. (2021); F. Di Porto, *Opacità tecnologica e trasparenza delle decisioni amministrative*, in R. Cavallo Perin (eds.), *L'amministrazione pubblica con i big data*, cit. at. 69 ff.

[6] According to the classifications proposed here, this is a phase that is anticipated by the emergence of the discourse on algorithmic administration, F. Conte, *La trasformazione digitale della pubblica amministrazione: il processo di transizione verso l'amministrazione algoritmica*, 11 *Federalismi.it*, 54 (2023); J.-P. Schneider, F. Enderlein, *Automated Decision-Making Systems in German Administrative Law*, 1 *CERIDAP* 95 ff. (2023); D.-U. Galetta, G. Pinotti, *Automation and Algorithmic Decision-Making Systems in the Italian Public Administration*, 1 CERIDAP 13 ff. (2023).

1.2.   Transparency functions

In its essential core, as a paradigm of public law[7], transparency responds first and foremost to the function of guaranteeing the citizen in his relationship with power. It is the so-called "external transparency", which is defined in its characteristics through a series of guarantee rules that give substance to this paradigm of administrative law: power must be exercised by an authority that is knowable and is responsible for it, based on predetermined and knowable rules, following a decision-making process that must be explained, the decision must be taken "in the light of the sun" in the relationship with the interested party, it must be motivated.

The knowability and comprehensibility of the decision allow its control in the proceeding and any case in the judgment, and this is supported by the documents that form the proceeding, which can be made known with the access of the interested party (and now also exposed to possible democratic control of the citizen based on the Freedom of Information rules[8]) and reviewable by a judge.

Ultimately, it is the reversal of the Kafkaesque nightmare of an anonymous, unknowable power, not so much "secret" (to mean what is legitimately removed from knowledge due to specific needs of public or private interest), but structurally mysterious, occult. An important part of the history of public law and administrative law is given precisely by this path of "illumination" of power in its exercise in front of the citizen, no longer "naked", but armed with the power that gives knowledge.[9]

1.3.   Technological change and transparency adaptability

Technological evolution impacts this path in a way that is not yet fully felt, proposing new challenges to transparency, and pushing it to show, again and more than before, its ability to adapt. In particular, new questions and new problems, new challenges, arise precisely in the prism of that technological evolution which has also been among the factors of evolution and expansion of the forms of knowability. Technological evolution exerts an ambivalent action,

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[7] N. Bobbio, *La democrazia e il potere invisibile*, 2 Rivista Italiana di Scienza Politica 181 ff. (1980); see at lenght E. Carloni, *Il paradigma trasparenza*, cit. at 3.

[8] See e.g. T. Altì, M.C. Barbieri, *La trasparenza amministrativa come strumento di potere e di democrazia*, 2 Rivista trimestrale di diritto pubblico 809 ff. (2023)

[9] The reference is to Madison's well-known passage. In the relationship with power «people [...] must arm themselves with the power which knowledge gives» (J. Madison, *Letter to W.T. Barry,* August 8, 1822).

on the one hand destructive of old constructs (including normative ones), on the other creating a new order which is the right to govern: technology is therefore in particular a determinant of many administrative innovations[10], places transparency at the center of administrative discourse in renewed terms.[11]

Transparency, in the face of the stresses resulting from technological transformations, shows, as we will see, its centrality, which is linked in no small way to the elasticity of the principle and its ability to renew itself to adapt to a changing world. In general terms, it is the specific character of transparency as Donati already highlighted: in its articulation and/or action, transparency must necessarily change due to the evolution of the subject itself and the changing conditions of the context in which it moves".[12] It is precisely in this ability to adapt and re-modulate itself one of the main strengths of transparency, which thus becomes a principle capable of presenting itself in new forms as scenarios change.

The question with which we will try to deal is how, today, transparency appears to be a solution capable of ensuring, again and again, those guarantees of the individual in the relationship with power which are its essential core.

Transparency, which has matured in the prism of legislation which for over a decade has placed it at the center, is called to re-explore its potential and its ability to adapt: the challenge to this is precisely the evolution of technology, and in particular now the emergence of decision dynamics governed by algorithms and artificial intelligence (AI).

2. Algorithms and artificial intelligence
2.1. Law and new challenges

Law (and in particular administrative law) is therefore confronted with new phenomena, and only a part of these can be classified in the old categories. In fact, automation not only produces a capacity for mechanical repetition and error-free application of pre-determined criteria but also translates into new forms in which de-

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[10] See e.g. A. Natalini, *Il tempo delle riforme amministrative* (2006).

[11] See e.g. B. Ponti (ed.), *Transparency in tension: between accountability and legitimacy*, 2 Etica pubblica 9 ff (2022).

[12] See in a similar sense D. Donati, *Il principio di trasparenza in Costituzione*, in F. Merloni et al. (eds.), *La trasparenza amministrativa* (2008).

cisions are the result of choices made by machines based on probabilistic approaches and self-learning paths, to the point of prefiguring choices resulting from artificial intelligence that replace individuals, following their decision-making strategies, in the exercise of decision-making spaces (also) in the public sphere.

The question, also from a legal perspective, is linked first of all to the nature of the phenomenon: in the AI approach, we are witnessing the transition from deductive logic to statistical-probabilistic logic. The artificial system learns, starting from the data, and in doing so it improves its predictive capacity, according to dynamics in which the "recipe" (the algorithm) does not always operate in a predictable and deterministic way, but evolves its decision-making strategies by experience. This is all clearer when the discussion moves to the concept of "artificial intelligence".

2.2. Artificial Administration as a necessary challenge

The prospect of artificial intelligence on the one hand may appear alarming and certainly requires to be accompanied by precautions and rules, but it is an unavoidable challenge for public administrations as it is for private organizations.[13] The technological context marks an extraordinary evolution in the ability to govern complexity[14], but it also produces a complexity that becomes ungovernable except through the strengthening of cognitive, analytical, and decision-making capacity: administrations cannot, in a nutshell, remain blind and deaf-faced with a transformation that qualifies economic and social dynamics.

Administration is a necessary power, a power useful for satisfying the needs and rights of citizens. Indeed, it is a power-duty, in which the function of service is increasingly evident rather than that of the exercise of authority. In a society in which needs are increasingly complex, resources are always limited compared to needs, and the risk of retreating in the guarantee of rights or any case of

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[13] See E. Chiti, B. Marchetti, N. Rangone, *L'impiego di sistemi di intelligenza artificiale nelle pubbliche amministrazioni italiane: prove generali*, 2 BioLaw Journal - *Rivista di BioDiritto* 489 ff. (2022).

[14] See es. J.-B. Auby, *La digitalizzazione come motore dell'evoluzione dell'organizzazione della pubblica amministrazione*, 2 Istituzioni del federalismo 389 ff. (2023); J.B. Auby, *Il diritto amministrativo di fronte alle sfide digitali*, 3 *Istituzioni del federalismo* 619 ff. (2019); I. Martin Delgado, *El impacto de la reforma de la Administración electrónica sobre los derechos de los ciudadanos y el funcionamento de las Administraciones Publicas*, in M. Almeida Cerreda, L. Miguez Macho (eds*.), La actualizacion de la Administracion electronica* (2018).

non-correspondence with social needs and requests is evident, the challenge of seeking a greater administrative capacity (and, more broadly, a greater capacity to govern complexity) inevitably depends on the opportunities offered by technological evolution.[15] It can be said, emphatically, that the administration of the future is digital administration in its full potential, and is therefore artificial administration.

The concept of *artificial administration* (which is the formula with which we summarize the use of AI for public decisions) refers to a new level of evolution of the administration in its relationship with technologies: it is a level that implies that of full digitalization.[16] This is a perspective in which digital power unfolds but is at the same time regulated by law. It is a new step after the computerization of public administration, e-government, and digital administration.

This is a transformation that must be accepted but guided and understood. This is because, as the perspective of transparency shows us well, this evolution brings with it not only opportunities but also risks.

2.3. The favor for automation, and precautions

As Kate Crawford[17] highlights, AIs are not peacefully neither "intelligent" nor "artificial". The complexity reduction strategy they propose does not necessarily (and it would be wrong to say a priori that) produce the "best" solution; and, again, it is not certain

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[15] In this sense, for example, the proposed European regulation (AI Act: see e.g. Recital 3, «by improving forecasting, optimizing operations and resource allocation, and personalizing the digital solutions available for individuals and organizations, the use of artificial intelligence can provide critical competitive advantages to businesses and support socially and environmentally beneficial outcomes») and President Biden's Executive Order on the Safe, Secure, and Reliable Development and Use of artificial intelligence, dated October 30, 2023 (see section 1: «the responsible use of AI has the potential to help solve urgent challenges by making our world more prosperous, productive, innovative and safe»).

[16] On this subject see already, in a general perspective, E. Carloni, *Tendenze recenti e nuovi principi della digitalizzazione pubblica*, 2 Giornale di diritto amministrativo 148 ff. (2015); with reference to public procurement, see already G.M. Racca, *La digitalizzazione necessaria dei contratti pubblici: per un'Amazon pubblica*, 4 DPCE online 4669 ff. (2020); is a process that develops both in a general way and through sectoral strategies: see e.g. D. Donati, *La digitalizzazione del patrimonio culturale. Caratteri strutturali e valore dei beni, tra disciplina amministrativa e tutela opere d'ingegno*, 2 P.A. Persona e Amministrazione 323 ff. (2019).

[17] K. Crawford, *Né intelligente né artificiale. Il lato oscuro dell'IA* (2022).

that what appears to be the result of neutral and impersonal mechanisms is (and therefore the outcome is not actually "impartial")[18], because algorithmic decisions often transmit biases that are specific to the social environment (of the programmer, in a deterministic model; of the social context, in a predictive statistician; perhaps of both).

It is a power, the exercise of which is useful and necessary, but concerning which we need "auxiliary precautions".

Precisely these limits, highlighted by Crawford, underline the importance of transparency as a condition of control over mechanized but not, therefore, optimal decisions (and this even in the absence of malfunctions of the systems): the problem, however, is that transparency is compared in terms not peaceful with machine learning, deep learning and data mining technologies, especially in a context in which large masses of data (big data) are available.

2.4. Possible risks, necessary guarantees

The importance of using new technologies to improve government capacity and the quality of services is evident in Biden's recent executive order, which signals the importance of these tools but also highlights their risks: «AI can help government deliver better results for the […] people. It can expand agencies' capacity to regulate, govern, and disburse benefits, and it can cut costs and enhance the security of government systems. However, the use of AI can pose risks, such as discrimination and unsafe decisions».[19]

On the other hand, the same European perspective is to encourage and allow the use of AI in the public sector[20] precisely because of their potential in terms of improving the quality of services, always with a "risk-based thinking" approach.

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[18] Which is one of the basic arguments in support of the use of AI and complex algorithms; as highlighted for example by C. Napoli, *Algoritmi, Intelligenza Artificiale e formazione della volontà pubblica: la decisione amministrativa e quella giudiziaria*, 3 Rivista AIC 1 ff. (2020) among the reasons in support of new technologies there is «the profile of objectivity or neutrality, given that, by making use of impersonal mathematical operations for the solution of questions of daily individual interest, the algorithm and the electronic tool at its service should be able to avoid those flaws typical of human cognitive processes that do not they rarely lead to outcomes that escape the parameters of reasonableness and impartiality».
[19] The White House, *Executive Order on the Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence*, 30 october 2023.
[20] See for example, Recital 3: «artificial intelligence consists of a family of rapidly evolving technologies that can contribute to the achievement of a wide range of

In this scenario, AI systems can identify correlations between information, even hidden ones, and build more sophisticated predictive models, and perhaps even more "precise", than "human" ones, with much shorter times.

In short, the algorithmic decision is more efficient (and hence the favor towards these tools, especially, but not only, for the execution of repetitive interventions)[21], on average perhaps even "better": but we are sure that it is true also in any specific case? How can we be sure that we are not faced with a system error, a "hallucination" of the machines? And in what terms can we evaluate the goodness of choices that are not fully reverifiable?

The challenge of transparency returns as an issue that concerns the guarantee of the individual in the relationship with power.[22]

The paradigm shift suggests, in any case, caution: this shift, therefore, poses new challenges for the law[23], while new regulation

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economic benefits and social across the entire spectrum of industrial and social activities».

[21] As highlighted for example by C. Napoli, *Algoritmi, Intelligenza Artificiale e formazione della volontà pubblica*, cit. at. 2 «in this sense, first of all, the efficiency profile is taken into consideration, given that the transformation of an input into an output from part of a machine through a finite sequence of elementary operations, the merit of being able to neutralize and thus overcome that irreducible quantum of inefficiency that characterizes human action is recognized, in particular with regard to the execution of repetitive interventions».

[22] See e.g. M. Macchia, *Pubblica amministrazione e tecniche algoritmiche*, in 1 DPCE online 311 ff. (2022); S. Del Gatto, *Potere algoritmico, "digital welfare state" e garanzie per gli amministrati. I nodi ancora da sciogliere*, in 6 Rivista Italiana di Diritto Pubblico Comunitario 829 ff. (2020); S. Ranise, *Fiducia nell'algoritmizzazione della Pubblica Amministrazione: chimera o realtà?*, 1 *Ciberspazio e Diritto* 9 ff. (2020); I. Martín Delgado, *Automazione, intelligenza artificiale e pubblica amministrazione: vecchie categorie concettuali per nuovi problemi?*, in 3 Istituzioni del Federalismo 643 ff. (2019).

[23] See, in addition to the references above, in general terms A. Simoncini, S. Suweis, *Il cambio di paradigma nell'intelligenza artificiale e il suo impatto sul diritto costituzionale*, in 1 Rivista di filosofia del diritto 92 (2019); A. Simoncini, *Amministrazione digitale algoritmica. Il quadro costituzionale*, in R. Cavallo Perin, D.-U. Galetta, *Il diritto dell'amministrazione pubblica digitale*, cit. at. 1.

needs are accompanied by the affirmation of this power (in the "algorithmic society"[24], in the era of hyper-connection[25]), and the problems that arise when these solutions are proposed and implemented in the public sector are felt.[26]

3. The crux of technological opacity
3.1. A gradualist approach

Change poses a primarily definitional challenge.[27]

Not every use of automation poses the same problems: the mechanization of repetitive decisions, the use of deterministic algorithms, and the use of artificial intelligence are completely different things. The distinction between different phenomena, however, is neither simple nor immediate, and the speed of technological change imposes continuous updates and new interpretations of the phenomena by the law; forcing new taxonomies.

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[24] In this sense M. Bassini, L. Liguori, O. Pollicino, *Sistemi di Intelligenza Artificiale, responsabilità e accountability. Verso nuovi paradigmi?*, in F. Pizzetti (ed.), *Intelligenza artificiale, protezione dei dati personali e regolazione* 333 (2018); A. Pajno et al., *AI: profili giuridici. Intelligenza Artificiale: criticità emergenti e sfide per il giurista*, 3 Bio-Law Journal – Rivista di BioDiritto 206-207 (2019).

[25] See already P. Dominici, *Comunicazione, sfera pubblica e produzione sociale di conoscenza: nuovi scenari per le organizzazioni complesse*, in 3 *Rivista trimestrale di scienza dell'amministrazione* 97 ff. (2013); see also L. Floridi (ed.), *The Onlife Manifesto. Being Human in a Hyperconnected Era* (2015).

[26] G. Sartor, F. Lagioia, *Le decisioni algoritmiche tra etica e diritto*, in U. Ruffolo (ed.), *Intelligenza artificiale. Il diritto, i diritti, l'etica* 65 (2020); cfr. M. Zanichelli, *Ecosistemi, opacità, autonomia: le sfide dell'intelligenza artificiale in alcune proposte recenti della Commissione Europea*, and A. Simoncini, *L'algoritmo incostituzionale: intelligenza artificiale e il futuro delle libertà*, in A. D'Aloia (ed.), *Intelligenza artificiale e diritto. Come regolare un mondo nuovo* 21-22, 111-114 (2020); see also Y.N. Harari, *Homo Deus. Breve storia del futuro* 375 ff. (2018); see also B. Boschetti, *Transizione digitale e amministrazione (eco)sistemica*, 209 Studi parlamentari e di politica costituzionale 53 ff. (2021).

[27] See on the point eg. R. Cavallo Perin, I. Alberti, *Atti e procedimenti amministrativi digitali*, in R. Cavallo Perin, D.-U. Galetta (eds.), *Il diritto dell'amministrazione pubblica digitale*, cit. at 139 ff.; on the need for dialogue between technology and law, and in particular on that of a "technologically oriented" reading of law, see R. Cavallo Perin, *Ragionando come se la digitalizzazione fosse data*, 2 Diritto amministrativo 305 (2020).

In the proposed regulation on AI, to avoid interpretative problems, the Commission intended to propose a broad notion of artificial intelligence[28], capable of including both "strong" artificial intelligence, intended to duplicate the mind in computers (to create computers capable of understanding and possess cognitive states), and "weak" artificial intelligence intended to create computer systems capable of performances normally attributed to human intelligence, without assuming any analogy between minds and computer systems. Biden's executive order also proposes a definition of "AI" with a similar approach.[29]

In this context, the Italian Council of State itself suggests a "gradualistic approach", when it also frames the topic in terms of a "replacement" of the individual by machines, first and foremost due to the complexity of the algorithm. A perspective that allows us to better break down the phenomenon. These are issues that the Italian administrative judge tends to bring back to a broad notion of "artificial intelligence": «In this case, the algorithm contemplates machine learning mechanisms and creates a system that is not limited only to applying the software rules and parameters preset (as the "traditional" algorithm does) but, on the contrary, it constantly elaborates new inference criteria between data and makes efficient decisions based on these elaborations, according to a process of automatic learning».[30]

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[28] In the framework of the Proposal for a European regulation (3.1) "artificial intelligence system" (AI system) «means software developed with an or more than the techniques and approaches listed in Annex I, which can, for one certain set of human-defined objectives, generate outputs such as content, predictions, recommendations or decisions that influence the environments with which they interact».

[29] Biden Executive Order, Section 3, (b): «a machine-based system that can, for a given set of human-defined objectives, make predictions, recommendations, or decisions influencing real or virtual environments. Artificial intelligence systems use machine- and human-based inputs to perceive real and virtual environments; abstract such perceptions into models through analysis in an automated manner; and use model inference to formulate options for information or action». La definizione riprende, ma specifica, quella già proposta nel US Code (Title 15- Commerce and trade; Chapter 119 - National Artificial Intelligence Initiative; 9401 – Definitions (3).

[30] In this sense see Council State, sec. III, 25 November 2021, n. 7891; yes see already (especially for the notion of a "simple" algorithm then taken up by the judge of the second instance) in the first instance of the Regional Administrative Court of Lombardy, Milano, section. II, 31 March 2021, n. 843.

3.2. Transparency as a challenge

From this point of view, there are, to conclude, simple algorithms and artificial intelligence, of course, but also, between these first two phenomena, "variously complex" algorithms, which precisely because of their complexity (and therefore predictability, re-verifiable, non-deterministic but statistical-probabilistic) move in the (truly wide) space between simple algorithms and "true" AI. With the risk, however, of lumping together new technological phenomena by placing at the center of the discussion the presence or absence of the (human) civil servant in the decision-making process and therefore the issue of automation: this is the perspective followed by the recent Italian regulation of the contract code public (decree no. 36 of 2023). In short, the phenomenon shows a different physiognomy depending on whether it is observed from the point of view of the presence of man in the decision-making process, or from that of transparency: from this second point of observation (which is ours), we grasp well how the key is that of algorithmic opacity which is typical of both complex algorithms and real AI. Both share the challenge of explainability.

Transparency, from this point of view, is certainly the solution, but it is above all a challenge.

This is certainly the answer to making new decision-making dynamics through algorithms compatible with the unavoidable need to guarantee rights.[31] Transparency, however, is an objective that is not so simple to pursue in the face of automated processes that are becoming increasingly structurally and technologically opaque. The decision-making processes implemented through machine learning solutions, and, above all, deep learning, pose numerous problems in terms of the ability, given a certain result produced by AI, to understand the ways and reasons behind it, also taking into account the inputs received.[32] This is all the more true as the mechanization and automation of processes make the individual official marginal in the decision-making process.[33]

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[31] In this sense see G. Lo Sapio, *La trasparenza sul banco di prova dei modelli algoritmici*, 11 Federalismi.it 239 (2021).

[32] M. Ebers, *Regulating AI and Robotics: Ethical and Legal Challenges*, in M. Ebers, S. Navas (eds.), *Algorithms and Law* 48 ff. (2020); Y. Bathaee, *The Artificial Intelligence Black Box and the Failure of Intent and Causation*, 2 Harvard Journal of Law & Technology 901 (2018).

[33] On the topic of the necessary "humanity" of decision-making processes, see B. Marchetti, *La garanzia dello "human in the loop" alla prova della decisione amministrativa algoritmica*, 2 BioLaw Journal – Rivista di BioDiritto 367 ff. (2021); see formerly

Also in the Italian case, the administrative judge seems to prefer a "broad" notion of artificial intelligence, which can be useful for delimiting this downwards compared to less complex algorithms but leaves unresolved on closer inspection the interpretative issue (which instead promises to be truly challenging) of what to mean by AI and whether and how to distinguish this phenomenon from that of the use of complex algorithms.

The ridge of transparency allows us to distinguish two very different phenomena, thus excluding from the problematic field automated but not opaque decisions, the result of «a finite sequence of instructions, well defined and unambiguous, so that they can be executed mechanically and such as to produce a certain result»[34], neither the machine learning processes nor, overall, the so-called "AI".

3.3. The black box problem

It is the black box problem[35]: AI systems suffer from an opacity that depends on some characteristics of the phenomenon. The first, linked to data which, especially in the logic of big data[36], are processed in ways that (due to volume, variety, and speed) make the decision-making process impossible to repeat; the second, linked to the machine (deep) learning algorithm, which is removed from deterministic logics and disconnected from the dynamics of a priori predictability but also, in its most advanced forms, from those of a posteriori re-verification.

Precisely this fundamental difference allows, at the moment, with a first approximation, to place the discussion on transparency on the definitional ridge suggested by the Italian administrative judge, understood however as a distinction between "simple/deterministic" algorithms and "complex/predictive" algorithms (with reservation, therefore, to better clarify if and when we can talk about artificial intelligence, which is a concept that should not be trivialized). An issue whose relevance grows with the growth of the

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S. Civitarese Matteucci, "*Umano troppo umano*". *Decisioni amministrative automatizzate e principio di legalità*, 1 Diritto Pubblico 5 ff. (2019).

[34] Council of State, III, 25 Nov. 2021, n. 7891.

[35] F. Pasquale, *The Black Box Society. The Secret Algorithms That Control Money and Information* (2015).

[36] See M. Falcone, *"Big data" e pubbliche amministrazioni: nuove prospettive per la funzione conoscitiva pubblica*, in 3 Rivista trimestrale di diritto pubblico 601 ff. (2017).

phenomenon of the use of these technologies, in the perspective of a government through algorithms that involve both the level of political choice and that (which first poses questions to the judge and, therefore, to the interpreters in non-abstract terms) of the administrative choice.

In any case, it is clear that transparency, in this context and the face of these processes, is a challenge, even before a necessary solution. The challenge of algorithmic knowability challenges the ability of transparency to truly operate as a principle, as such on the one hand exceeding the mechanisms that constitute its main form of realization, but on the other capable of changing to adapt to the transformations it encounters in the dynamics social and technological issues with which it deals. This is because, as confirmed precisely by its decline in the new algorithmic dimension, «in its articulation and/or action, transparency must necessarily change due to the evolution of the subject itself and the changing conditions of the context in which it moves».[37]

4. The "desired" transparency of algorithmic power
4.1. The premises and the first elaborations

It is no coincidence that the theme of necessary transparency accompanies the evolution of reflection on the governance of new technological phenomena.

It is no coincidence that the theme of necessary transparency accompanies the evolution of reflection on the governance of new technological phenomena.

It is already with the Asilomar conference that, in outlining the need to guide the use of artificial intelligence, principles are proposed that can accompany the development of these technologies, guiding their application and mitigating their risks. Without being able to retrace here the main documents that accompany, in a rapid crescendo, the evolution of the strategy for regulating artificial intelligence, it is no coincidence that, in the EU proposal for a regulation[38] of AI, transparency returns as a principle that, through several declinations, is called upon to play a central role in the matter.

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[37] See D. Donati, *Il principio di trasparenza in Costituzione*, cit. at. 85.

[38] European Commission, E*thics guidelines for trustworthy AI. Independent High-Level Expert Group on Artificial Intelligence set up by the European Commission*, Brussels, April 8, 2019; Consultative Committee of The Convention for the Protection

transparency returns as a principle that, through more declinations, is called to play a central role in the matter.

The relevance of the principle of transparency is confirmed both at a regulatory and strategic level by the numerous initiatives[39] that tend to enhance this principle, at a national, European, and international level, concerning the use of advanced algorithmic solutions and AI. All the main documents reiterate how the transparency of these artificial systems constitutes one of the unavoidable bases for the creation of solutions capable of creating trust and producing a real social benefit. [40]

It is precisely in the face of technological opacity (which risks slipping into the unknowability of the occult), that transparency shows its importance for its ability to modulate itself to respond to new problems and new challenges: this, in particular, in the interpretation that the administrative judge gives of it, in the Italian experience.[41]

of Individuals with Regard to Automating Processing of Personal Data (Convention 108), *Guidelines on Artificial Intelligence and Data Protection*, Strasburgo, 25 gennaio 2019, 1 ff.; OECD, *Recommendation of the Council on Artificial Intelligence*, Paris, OECD, 2019; Science and Technology Committee (House Of Commons), *Algorithms in decision-making*, May 15, 2018, 3 ff.; Council of Europe (CoE), *Recommendation CM/REC (2020)1 of the Committee of Ministers to member State on the human rights impact of algorithmic systems*, April 8, 2020.

[39] In a scenario of European ferment on the subject, confirmed by further resolutions, and reports, in the context of the European Strategy for Artificial Intelligence, the European Commission therefore published on 21 April 2021, the proposal for a regulation on the European approach to Artificial Intelligence Artificial, proposing the first European legal framework on AI (European Commission Brussels, 21 April 2021, COM(2021) 206 final 2021/0106 (COD) *Proposal for a Regulation of the European Parliament and of the Council laying down harmonized rules on Artificial Intelligence (Artificial Intelligence act) and amending certain union legislative acts* {SEC(2021) 167 final} – {SWD(2021) 84 final} – {SWD(2021) 85 final}). On this proposal, see e.g. C. Casonato, B. Marchetti, *Prime osservazioni sulla proposta di regolamento della Commissione Ue in materia di intelligenza artificiale*, 3 BioLaw Journal – Rivista di BioDiritto 415 ff. (2021); G. Marchianò, *Proposta di regolamento della Commissione europea del 21 aprile 2021 sull'intelligenza artificiale con particolare riferimento alle IA ad alto rischio*, 2 Ambientediritto.it 616 ff. (2021); see A. Masucci, *L'algoritmizzazione delle decisioni amministrative tra Regolamento europeo e leggi degli Stati membri*, 3 Diritto Pubblico 943 ff. (2020).

[40] Si v. es. High-Level Expert Group on Artificial Intelligence, *Ethics Guidelines for Trustworthy AI*, cit. at 1 ff.; L. Floridi et al., *AI4People – An Ethical Framework for a Good AI Society: Opportunities, Risks, Principles, and Recommendations*, 28 *Minds and Machines* 689 ff. (2018).

[41] At length, on this point, among others, see E. Carloni, *I principi della legalità algoritmica. Le decisioni automatizzate di fronte al giudice amministrativo*, 1 Diritto

4.2. The multiple forms of algorithmic transparency

Artificial administration transparency is on the one hand a general requirement, on the other hand an objective that is achieved in parts, sometimes piecemeal, and is only partially fulfilled through the combination of a plurality of mechanisms and declinations.

Only through plural forms can transparency seek to guarantee the indispensable requirements of knowledge that are in turn, from the perspective of administrative law, essential conditions for the protection of the rights and interests involved in the various administrative events. This is a consideration that, however, also immediately confronts us with the limits of the construction of algorithmic legality. Algorithmic transparency is not able to place itself in the fully satisfactory terms of the full knowability of the algorithmic decision, and therefore fails to fully realise the needs of guarantee of rights satisfied by traditional "analogical" dynamics.

This poses obvious problems from the point of view of the introduction of new technologies, especially when applied to administrative action. The issue that scientific reflection and jurisprudence itself are addressing is that of the perceived need to avoid setbacks in the protection of the citizen, who runs the risk of finding himself disarmed in the face of a technological opacity that renders public decision-making paths incomprehensible.

4.3. The transparency necessary for "due process"

Faced with this challenge, the first natural reaction is to consider irreversible, and not revisable, the legal achievements codified in the laws and principles on due process, which provide for full knowledge on the part of the interested party and full traceability of the decision-making process in court.[42] From this perspective,

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amministrativo 273 ff. (2020); E. Carloni., *IA, algoritmos y administración pública en Italia*, 30 IDP. Revista de Internet, Derecho y Política 1 ff. (2020); P. Otranto, *Riflessioni in tema di decisione amministrativa, intelligenza artificiale e legalità*, 7 Federalismi.it 187 ff. (2021).

[42] On the traditional features and trends of due process principles in Europe, see, from different angles, e.g. G. della Cananea, *Il nucleo comune dei diritti amministrativi in Europa. Un'introduzione* (2019); A. Ferrari Zumbini, *La creazione giurisprudenziale tra fine ottocento e primo novecento dei principi del giusto procedimento nel diritto amministrativo austriaco*, 3 Diritto processuale amministrativo 1029 ff. (2018).

transparency is seen as a necessary condition for the exercise of algorithmic power to be considered permissible.

Thus clearly in the first jurisprudence on these issues of the Italian administrative judge, for whom transparency is at the heart of the fair algorithmic procedure[43], constituting «direct specific application of the art. 42 of the European Charter of Fundamental Rights [...] where it states that when the Public Administration intends to adopt a decision that may have adverse effects on a person, it must listen to him before acting, to allow him access to its archives and documents, and, finally, he must give the reasons for his decision».[44]

In this sense, following the indications of the administrative judge, a transparency that we can define as "strong" must be ensured: the «knowability of the algorithm must be ensured in all aspects: from its authors to the procedure used for its development, to the mechanism of the decision, including the priorities assigned in the evaluation and decision-making procedure of the data selected as relevant». Otherwise, following this approach, the algorithmic rule underlying the decision must be considered unlawful[45]: this, in particular, when, for example, it is not «given to understand why the legitimate expectations of subjects [...] were disappointed». In fact, «the impossibility of understanding the methods [...] constitutes in itself a flaw capable of invalidating the procedure».[46]

The administration is ultimately required to demonstrate the presence of this algorithmic transparency, as it cannot simply limit itself to "affirming" the coincidence between legality and algorithmic operations: a coincidence «which must instead always be proven and illustrated on a technical level, at least clarifying the

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[43] G. Botto, *Intelligenza artificiale e canone del giusto procedimento: linee di tendenza della più recente giurisprudenza*, 9 *GiustAmm.it* 10 ff. (2021); see L. Floridi et al., *AI4People – An Ethical Framework for a Good AI Society: Opportunities, Risks, Principles, and Recommendations*, cit. at 699 ff.

[44] Council of State, sec. VI, n. 8472/2019. On this declination of the principle of transparency, see G. Orsoni, E. D'Orlando, *Nuove prospettive dell'amministrazione digitale: Open Data e algoritmi*, 3 Istituzioni del federalismo 593 ff. (2019).

[45] As well stated in the aforementioned sentence no. 8472 of the Council of State, these needs are particularly strong and are not satisfied by (solely) «rigid and mechanical application of all the minute procedural rules of the law. n. 241 of 1990»: Council of State, sec. VI, sentence. n. 8472 of 2019.

[46] Again Council of State, section. VI, sentence n. 2270 of 2019.

circumstances mentioned above, i.e. the instructions given and the operating methods of the IT operations».[47]

Robotic procedures must therefore be balanced by «a strengthened declination of the principle of transparency, which also implies that of the full knowability of a rule», even if expressed in computer language.[48]

4.4. Transparency as reviewability (and judicial control)

A principle according to which the citizen must always be assured of understanding the rule that guides the decision, even when this is expressed «in a language different from the legal one»[49] and its traceability must be guaranteed.[50]

The algorithmic decision, and therefore the algorithm that leads to the decision, must be knowable to the citizen[51], but also capable of being placed under the full knowledge of the judge[52], and in particular of the administrative judge who must be able to evaluate its reasonableness, proportionality, logic.[53] In the face of new challenges, we can conclude, in conclusion, with the key role of transparency, in its various forms, as a catalyst for new rights.[54]

The problem, however, is, again, the fact that in technological dynamics full access to information and decision-making mechanisms is not always technically possible: the ability to explain the reasons that led to a specific final choice is not intrinsic in these processes, nor often possible. In this context, it is necessary to operate

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[47] Council of State, sec. VI, sentence. 13 December 2019, n. 8472.

[48] Thus Council of State, section. VI, n. 2270/2019.

[49] So Council of State, sec. VI, n. 2270/2019.

[50] D.-U. Galetta, J.G. Corvalán, *Intelligenza Artificiale per una Pubblica Amministrazione 4.0? Potenzialità, rischi e sfide della rivoluzione tecnologica in atto*, 3 Federalismi.it (2019); F. Patroni Griffi, *La decisione robotica e il giudice amministrativo*, *www.giustizia-amministrativa.it*, August 28, 2019.

[51] See C. Benetazzo, *Intelligenza artificiale e nuove forme di interazione tra cittadino e pubblica amministrazione*, 16 Federalismi.it 4 ff. (2020)

[52] Question on which see P. Piras, *Il processo amministrativo e l'innovazione tecnologica. Diritto al giusto processo versus intelligenza artificiale?*, 3 Diritto processuale amministrativo 473 ff. (2021).

[53] S. Sassi, *Gli algoritmi nelle decisioni pubbliche tra trasparenza e responsabilità*, in 1 *Analisi giuridica dell'economia* 109 ff. (2019); G.M. Esposito, *Al confine tra algoritmo e discrezionalità. Il pilota automatico tra procedimento e processo*, 1 Diritto e processo amministrativo 39 ff. (2019).

[54] See V. Brigante, *Evolving pathways of administrative decisions. Cognitive activity and data, measures and algorithms in the changing administration* 165 (2019): «Transparency seems to be the key to resolution».

proactively to mitigate the effects of the so-called. black box[55], without giving up to the court the advantages that the use of the most advanced learning and decision-making techniques determines.

4.5. Explainability: Transparency and motivation of algorithmic decisions

A corollary of "strong" algorithmic transparency is certainly that of the ability to motivate the decision taken in a mechanized way or any case based on a "relevant" contribution of algorithms and AI. It is what in the literature on the topic is defined as decision explainability[56], as the effective ability to explain and motivate the decision-making processes of the algorithms and therefore the decisions taken on this basis.

A problem that arises in different contexts, in which technological opacity is confronted with the necessary "explainability" of its processes and therefore with the challenge of transparency.[57]

A transparency that is articulated, in the face of administrative decisions, first of all specifically in the form of the necessary justification. This need for transparency and knowability, which can be traced back in essential terms «to the principle of motivation and/or justification of the decision» (and therefore can be placed in the line well traced by the law on the procedure with the duty to motivate administrative acts) takes on an importance in this case. not formal but substantial, as well stated in the aforementioned sentence. n. 8472 of the Council of State, and is not exhausted, and does not find a substitute, in the «rigid and mechanical application of all the minute procedural rules of the law. n. 241 of 1990» (such as the communication of initiation of the procedure or the formal appointment of a person responsible for the procedure).[58]

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[55] In this regard, see G. Lo Sapio, *La "black box": l'esplicabilità delle scelte algoritmiche quale garanzia di buona amministrazione*, 16 Federalismi.it 136 ff. (2021).

[56] The importance of explainability in relation to AI systems is recognized, for example, in European Commission, High-Level Expert Group on Artificial Intelligence, *Ethics Guidelines for Trustworthy AI*, cit., 18; yes see also OECD, *Recommendation of the Council on Artificial Intelligence*, cit., par. 1.3; Council of Europe, *Recommendation CM/REC (2020)1 of the Committee of Ministers to member State on the human rights impact of algorithmic systems*, 8 April 2020, para. 4.1.

[57] See, for exemple, G. Lo Sapio, *La "black box": l'esplicabilità delle scelte algoritmiche quale garanzia di buona amministrazione*, cit. at 136 ff.

[58] Council of State, sec. VI, sentence. n. 8472/2019. See e.g. G. Pinotti, *Amministrazione digitale algoritmica e garanzie procedimentali*, 1 Labour & Law Issues 77 ff. (2021).

4.6. The (problematic) aspiration for "strong" transparency

Following this approach, the knowability of the algorithm "must be guaranteed in all aspects: from its authors to the procedure used for its development, to the decision mechanism, including the priorities assigned in the evaluation and decision-making procedure and the data selected as relevant" . Here in this sense is the Italian jurisprudence which, in the absence of legislative discipline, formulates the principles of algorithmic legality and requires «full knowledge of the algorithm and the criteria applied for its functioning», to be guaranteed on all aspects of the decision.[59]

This, as we will try to see, is however complex, so much so that a request for "full transparency" as total traceability and intelligibility of the processes is not only difficult but sometimes technologically impossible in the scenario of advanced algorithms and artificial intelligence. Against which the transposability of the "technical rule" that guides and governs the decision (or the cognitive process that determines it) into a "legal rule" is controversial.[60]

The path of algorithmic transparency is not, therefore, just that of a principle that must be affirmed, preaching its necessity, but rather that of a principle that must be placed in the context, and adapted to the different challenges. This places us in front of a problematic and multifaceted picture: transparency must be expressed in perhaps less satisfying but more plausible terms multifaceted transparency, which cannot be "strong" but through a plurality of "faces" can, if not exposed in broad daylight, at least remove the decision-making paths and choices of the algorithmic administration from the area where the shadow is thickest.

5. Possible transparencies and "sufficient" explainability
5.1. Organizational transparency and accountability

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[59] In this sense, finally, see e.g. Council of State, sec. V, February 4, 2020, n. 881: «This knowability of the algorithm must be guaranteed in all aspects: from its authors to the procedure used for its development, to the decision mechanism, including the priorities assigned in the evaluation and decision-making procedure and the data selected as relevant».

[60] On this need, see again e.g. Council of State no. 881/2020, on which see widely G. Gallone, A.G. Orofino, *L'intelligenza artificiale al servizio delle funzioni amministrative: profili problematici e spunti di riflessione. Nota a sent. Cons. Stato sez. VI 4 febbraio 2020 n. 881*, 7 Giurisprudenza italiana 1738 ff. (2020). See also L. Torchia, *Lo Stato digitale* (2023).

In the proposed European regulation, transparency, which also occurs in multiple forms (the document refers to the concept and principle twenty-seven times) is expressed in a perspective that is first and foremost organizational and related to the "model" rather than to the specific decision.

It is a risk-oriented approach, which orients the challenge of transparency more in the sense of the responsibility of the systems and organizations that use them, rather than in terms of a justification/explanation of the individual decision. The approach focuses on activities with different levels of risk[61], which certainly include a large part of the activities of public administrations. [62] The draft European regulation (for which I refer extensively to the specific in-depth analysis), in focusing on a distinction by type of activity and related "risk", places transparency as a specific burden for carrying out high-risk activities (among which include many administrative activities and the provision of public services), but what is required is the transparency of a primarily planning and organizational nature, and in any case not complete but "sufficient" (art. 13 speaks of «functioning [...] *sufficiently* transparency of AI systems»): a "sufficiency" understood not as full comprehensibility of decisions, but as the ability for users to «interpret the output of the system» and «use it appropriately».

5.2. The transparency of the "algorithm": the right of access to the software

The principle was initially expressed in the form of the right of access to the algorithm as an "electronic administrative act" (and as such susceptible to falling within the scope of Art. 22 of law 241 of 1990).

The right of access to the algorithm is the first form of transparency, and its importance is evident: even in the face of the maturation of forms of transparency capable of allowing a less complex

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[61] The regulatory framework defines 4 levels of risk in AI: unacceptable risk, high risk, limited risk, minimal or no risk.

[62] According to the proposed regulation, AI systems identified as high risk include AI technology used in: critical infrastructure; vocational education or training, which can determine access to education and the professional course of someone's life; product safety components; employment, worker management and access to self-employment; essential private and public services; law enforcement that may interfere with people's fundamental rights; management of migration, asylum, and border control; administration of justice and democratic processes.

comprehensibility of algorithmic action, this form of access maintains its role. The description/transparency may not be sufficient to reconstruct the relationship between the inputs and the outputs obtained in terms understandable for individuals[63], and even for expert users.[64]

In Italy this right to know the algorithm takes the form of a particular exercise of the right of access to documents provided for by the law on proceedings: the algorithm is therefore interpreted as an electronically processed administrative act". From this "assimilation" the judge derives the duty for the administrations «to provide not only all the instructions relating to the functioning of the algorithm, ensuring that the functioning of the software is comprehensible even to the common citizen, but also the source computer language (so-called "source code") of the algorithmic system».[65]

This perspective raises an important question regarding the possibility of using, in the public sector, proprietary technological solutions, covered by industrial property rights. The need for transparency, both in the form of testing the algorithm and its «democratic" accountability and in the form of ex-post reviewability by the interested party, requires transparent algorithms at least in the form of the "non-secrecy of the algorithm».

5.3. Transparency as "algorithm documentation"

Partially connected to this approach is the one that requires administrations (but more overall, in the perspective of the future European regulation, the "owners" of the algorithm) to support its use with adequate documentation that allows its operating logic to be fully understood. This is a transparency that is a "precondition" for the use of algorithmic power, which precedes its use in the concrete case but is a condition of the actual ability to understand the algorithmic activity.

The manifestation of this multiple and multifaceted transparencies is required by paragraph 2 of Art. 30 of the future European regulation, and is an "organizational precondition": the administra-

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[63] See V. Dignum, *Responsible Artificial Intelligence. How to Develop and Use AI in a Responsible Way* (2019)

[64] Cfr. S. Quattrocolo, *Equo processo penale e sfide della società algoritmica*, in A. D'Aloia (ed.), *Intelligenza artificiale e diritto. Come regolare un mondo nuovo* (2020)

[65] S. Sassi, *Gli algoritmi nelle decisioni pubbliche tra trasparenza e responsabilità*, cit. at. 109 ff.

tions are required to ensure (in the purchase or development of automation solutions) «the availability of the source code, the related documentation, as well as any other element useful for understanding the operating logic». This precondition, which must be ensured first and foremost in the relationship with the supplier of digitalization services, is a prerequisite for the use of automated solutions but is also a necessary prerequisite for effective control (of the administrations themselves and citizens) over the forms of operation of algorithmic power.[66]

The recent Italian legislation moves in a similar direction (often using the same textual expressions): in regulating and encouraging automated administrative activity (the administrations «to improve efficiency [...] take steps, where possible, to automate their activities using technological solutions, including artificial intelligence»[67]): in this context, administrations are required to ensure («in the purchase or development of automation solutions») «the availability of the source code, the related documentation, as well as any other element useful for understanding the logic of operation».[68] This precondition, which must be ensured first and foremost in the relationship with the supplier of digitalization services, is a prerequisite for the use of automated solutions but is also a necessary prerequisite for effective control (of the administrations themselves and citizens) over the forms of operation of algorithmic power.

5.4. *Transparency as knowability of the algorithmic decision*

It is, in fact, first and foremost "knowability" of the exercise of algorithmic power. A principle that we already derive from the GDPR and which is expressed in organizational terms and as an administrative duty, but also expressly in terms of a right «to know the existence of automated decision-making processes that concern him». It must be said that this principle-right of "knowability of the algorithm" (now codified in Italy by the code of the public contract)

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[66] On the new public power deriving from the application of algorithms to the public function, see widely M. Falcone, *Ripensare il potere conoscitivo pubblico tra algoritmi e big data* (2023).

[67] Art. 30, c. 1, legislative decree n. 36 of 2023, the new "Public Contracts Code" (which dedicates an important part to the digitalization of administrative activity).

[68] Art. 30, c. 2, legislative decree n. 36 of 2023.

was derived starting from the privacy legislation[69], where the right to know «the existence of an automated decision-making». This principle becomes a rule for administrative action, in Italy first through administrative jurisprudence and now explicitly with Legislative Decree no. 36 of 2023. The right to knowledge belongs, we can say, to the interested party (i.e. to those who are directly involved in the exercise of this power), but the legislation also proposes it as a right of anyone, as a form of widespread control over an automated power which, to be exercised, must be subjected to public scrutiny concerning the cases in which it is used (according to paragraph 5 of the same art. 30[70] of Legislative Decree no. 36).[71] The question is interesting because it concerns a discussion on transparency which is not only an instrument of guarantee for the interested party, but also a condition of democratic control over power, and therefore now over the new algorithmic power.

5.5. Transparency as comprehensibility of algorithmic "logic"

This therefore translates into new forms, in the face of an algorithmic decision, and, where the overall ability to illustrate the different steps and data used, materializes first and foremost in the right to decipher the logic of the algorithm. The citizen has, in other words, the right to know «the logical process based on which the act itself [was] issued using automated procedures as to its dispositive content».

In this sense, the reference to the GDPR is relevant, as in the reasoning of the administrative judge: which states that «the interested party should therefore have the right to know and obtain communications in particular about the purpose for which the personal data are processed [as well as] to the *logic* to which any automated data processing responds and, at least when it is based on

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[69] On the systemic value of personal data protection regulation and its specificities in the public sector, see widely B. Ponti, *Attività amministrativa e trattamento dei dati personali* (2023). Sul rilievo di fonti europee nella disciplina dell'attività amministrativa, cfr. L. Muzi, *European Union rules governing administrative procedures*, 2 Italian Journal of Public Law 254 ff. (2023).

[70] Art. 30, c. 5, «the public administrations publish on the institutional website, in the «Transparent Administration» section, the list of technological solutions referred to in paragraph 1 used for the purposes of carrying out their activities».

[71] See on the matter D.-U. Galetta, *Digitalizzazione, Intelligenza artificiale e Pubbliche Amministrazioni: il nuovo Codice dei contratti pubblici e le sfide che ci attendono*, 12 Federalismi.it (2023).

profiling, to the possible consequences of such processing»; and that the interested party is provided with information on the «existence of an automated decision-making process, including profiling [...], and, at least in such cases, significant information on the logic used, as well as the importance and expected consequences of such processing».[72]

This is demonstrated well by the French legislation, where legislation centered on a complex system of transparency guarantees has been prepared to rebalance the dynamics of digitalization. This legislation[73] provides that when an individual decision based on the algorithmic processing of personal data is adopted, the interested party must be informed not only of the use of an algorithm but also of the right to know the essential elements of its functioning («les principals caractéristiques de sa mise en œuvre») of the algorithm used.

In the Italian experience, this perspective is now codified by the new contract code, which provides, in line with the GDPR, that in the presence of automated processing, the interested party has the right to the "understandability" of the algorithm, to be understood as the right «to receive significant information on the logic used». The GDPR also provides for a similar right (and the same expression is used there too: «significant information on the logic used») which however perhaps has a broader scope because it is also linked to the right to know «the importance and expected consequences» as a result of automated data processing.

One can reflect on whether within the broader principle of transparency, there is, in essence, a duty that refers to a principle of "loyalty" to the algorithm concerning the logic that guides it and which must be knowable and understandable.[74]

6. As a conclusion: "strong" transparency through the human in the loop

These plural declinations of transparency perhaps illuminate the algorithm weakly, not allowing a "deep" (full, complete) understanding of the decision-making process, but counteract the opacity of the algorithm.

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[72] Thus in the art. 13, paragraph 2, letter. f).

[73] So, art. L.311-3-1, Code des relations entre le public et l'administration (CRPA).

[74] D. Cardon, *Le pouvoir des algorithmes*, 164 Pouvoirs 65-66 (2018); G. Orsoni, E. D'Orlando, *Nuove prospettive dell'amministrazione digitale*, cit. at. 614-615.

However, the construction of the other conditions/principles of algorithmic legality (which in Italy is mentioned in Art. 30 of the new code of public contracts, but which we can already derive by analogy from the GDPR) once again calls transparency into question.

An "internal" transparency (to the advantage of the official as it can control, validate, or deny the automated decision) whose presence is necessary to allow the official to intervene with knowledge (and not with subordination) and does not appear to be exhaustible within the terms of the weak transparency we talked about.

Affirming the "non-exclusivity of the algorithmic decision", e.g. recognizing that «in any case there is a human contribution in the decision-making process capable of controlling, validating or denying the automated decision», means affirming the need that at least internally the algorithm is understandable in deeper terms than those of the possibility of examining its "logic" alone. It means the necessary presence of a person responsible for the algorithm, a natural person who becomes an unavoidable interface for interested parties for a broader, deeper, and more substantial understanding of the decision-making process followed by the machines. This is because if the civil servant is unable to secure this deeper understanding, it is inevitable to admit his subordination to an automated decision that he cannot fully understand and therefore cannot reasonably deny or review.

Transparency passes, in these terms, through the capacity of the administration. The civil servant himself becomes a necessary mediator[75], and therefore responsible not only for internal supervision but also for external comprehensibility, and thus transparency in the relationship with the citizen. The challenge of "strong" transparency (as in full comprehensibility) is thus linked to the resilience of another principle of algorithmic legality, which is in turn challenged (in terms of the individual's substantial capacity to operate a syndicate on the decisions made by artificial intelligence) by the knot of technological opacity. The risk of a substantial subordination of humans is reflected in the capacity of the artificial administration to propose itself in terms (also) of full transparency.

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[75] From a different perspective, on the importance of "mediators" in transparency processes, see for example B. Ponti, *La mediazione informativa nel regime giuridico della trasparenza: spunti ricostruttivi*, 2 Il Diritto dell'informazione e dell'informatica 388 ff. (2019).

Responses, in this sense, pass in the first place through the capacity of the administration: a quality public administration, endowed with adequate skills, can reduce the gap that arises (however inevitably) between its officials and artificial intelligence systems, consequently reducing the gap between the citizen's cognitive needs and the effective capacity to understand in the new technological environment.