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*Administrative Automation and Judicial Review: Pathological Profiles and Legal Remedies in the Algorithmic Context**

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ABSTRACT **This contribution aims to examine the cases of invalidity affecting administrative acts whose content has been determined, in whole or in part, through the use of electronic processing tools. The analysis will begin with the categories of invalidity established under Italian law, while also adopting a comparative perspective, in order to evaluate the solutions developed in legal systems that, although distinct, share structural and functional similarities with the Italian framework. The cross-cutting and recurring nature of the issues raised by the algorithmic transformation of administrative functions makes such a comparative approach particularly fruitful.**

KEYWORDS: Invalidity of administrative acts – Automation and legality

1. *The pathologies of the administrative act to the test of algorithmic transformation: preliminary remarks*

Since its earliest origins, technological evolution has been one of the silent but ceaseless drivers of legal evolution.[1] In the past centuries, however, its influence has mostly been exerted *indirectly*. It was not technological innovation itself, in its immediacy, that triggered changes in the regulatory framework, but rather the profound social and economic transformations that ensued from it,[2] which required a gradual adaptation of current legal models.[3] It would suffice, by way of example, to consider the first and, even more evidently, the second industrial revolution, at the outcome of which the advent of new systems of production and trade of goods triggered significant displacements of rural populations towards urban centers. As a result, the physiognomy of European societies underwent a profound structural transformation.[4] These socio-economic upheavals were echoed by the law, which, prompted by unprecedented demands, was forced both to reshape traditional legal institutions and to establish entirely new legal

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[1] See J. Esteve Pardo and J. Tejada Palacios, *Ciencia y Derecho: La nueva división de Poderes*, Madrid, Marcial Pons, 2013. See also N. Irti and E. Severino, *Dialogo su diritto e tecnica*, Rome-Bari, Laterza, 2001; M. Tarrés Vives, *Normas técnicas y ordenamiento jurídico*, Valencia, Tirant lo Blanch, 2003. With specific reference to issues related to the use of information technologies see A. Di Martino, *Tecnica e potere nell'amministrazione per algoritmi*, Naples, Editoriale Scientifica, 2023.

[2] T. Kemp, *Industrialization in Nineteenth Century Europe*, 2nd ed., London, Routledge, 1985.

[3] K. Polanky, *The Great Transformation. The Political and Economic Origins of Our Time*, New York (NY), Farrar & Rinehart, 1944.

[4] E. De Simone, *Storia economica. Dalla rivoluzione industriale alla rivoluzione informatica*, 5th ed., Milan, Franco Angeli, 2006.

fields that were previously unknown. In doing so, it absorbed and formalized the emerging demands of the time into its structural categories.[5]

However, in the contemporary era of digitization, which pervades many aspects of daily life, the changes appear to be not only indirect but, most notably, *direct.*[6] It is evident that various legal actors employ electronic forms to adopt acts, to enter into contracts, to convey content, to issue communications and to disseminate news. They also make use of increasingly powerful and high-performance algorithms with the aim of processing data, acquiring information and ultimately defining the content of contracts and acts of various types.

While the aspect related to the channels and techniques that can be used to transmit documents and information is certainly legally relevant, it is characterized by a different complexity related to digitization: the use of computers to replace humans in the spheres of volition that are traditionally reserved to them.[7]

The issue of *forms*, therefore, will not be addressed in this essay: its analysis would imply an investigation into the adequacy of the various instruments of externalization of legal contents, as well as the suitability of these instruments to satisfy the various needs that arise at the various stages of the administrative action.[8] This study differs from the one this research intends to carry out, which instead seeks to explore the grounds of invalidity that arise when decision-making IT tools are employed to define the *content* of administrative acts.

This latter topic is of paramount importance in the public-law debate,[9] as well as being undoubtedly complex.[10] In the contemporary era, machines make decisions in place of humans.[11] Thus, technology impacts on the structure of law, changing the physiognomy of old legal institutions and forcing legal scholars to face new challenges.[12] Law is, in fact, subjected to evolutionary stress, from which it can only emerge somewhat modified.[13]

The major distinction compared to previous industrial revolutions lies in the fact that, in past eras, machines replaced humans in their *physical* dimension - that is, in performing mechanical and manual labor. Today, however, robots are even replacing humans in their *intellectual*, *cognitive* and *decision-making* dimension.[14] In essence, computers can enter into contracts, carry out detections or measurements, express a form of "will" and make decisions. Consequently, they cease to be a sterile tool, to become something different, without it being clear exactly what that is.

Robots certainly have an impact on the structure of public power,[15] which is undergoing an internal transformation.[16] They are becoming a way of performing certain functions, to such an extent that some scholars have deemed it appropriate to qualify certain

[5] A.G. Orofino*, El uso de medios electrónicos para contrarrestar la despoblación rural*, in D. Santiago Iglesias, L. Míguez Macho and A.J. Ferreira Fernández (eds.), *Instrumentos jurídicos para la lucha contra la despoblación rural*, Cizur Menor, Aranzadi, 2021, 227.

[6] F. Bravo, Ubi societas ibi ius *e fonti del diritto nell'età della globalizzazione*, in *Contratto e impresa*, 2016, 1344.

[7] B. Marchetti, *Amministrazione digitale*, in *Enciclopedia del diritto. I tematici*, III, 2022, 75.

[8] F. Ricci, *Scritture private e firme elettroniche*, Milan, Giuffrè, 2003; A.G. Orofino, *Forme elettroniche e procedimenti amministrativi*, Bari, Cacucci, 2008.

[9] A. Rogmann*, Der elektronische Verwaltungsakt als Kernelement des E-Government*, in R. Asghari (ed.), *E-Government in der Praxis. Leitfaden für Politik und Verwaltung*, Munich, Software & Support, 2005, 211.

[10] W. Hoffmann-Riem, *Die digitale Transformation als rechtliche Herausforderung*, in *Juristische Schulung*, 2023, 617.

[11] F. Bravo, *Intelligenza artificiale, autonomia contrattuale e meccanismi di controllo*, in *Contratto e impresa*, 2024, 1070.

[12] J.-B. Auby, *Le droit administratif face aux défis du numérique*, in *Actualités juridiques droit administratif,* 2018, 835; J. Chevallier, *Le renouvellement des institutions administratives*, in L. Cluzel-Métayer, C. Prébissy-Schnall and A. Sée (eds.), *La transformation numérique du service public : une nouvelle crise ?*, Paris, Mare & Martin, 2021, 25. See also B. Deffains, *Le monde du droit face à la transformation numérique*, in *Pouvoirs*, no. 3, 2019, 43.

[13] A. Berger, *Der automatisierte Verwaltungsakt. Zu den Anforderungen an eine automatisierte Verwaltungsentscheidung am Beispiel des par. 35 a VwVfG*, in *Neue Zeitschrift für Verwaltungsrecht*, 2018, 1260: "Die Digitalisierung von Staat und Gesellschaft ist eines der zentralen politischen Themen dieser Zeit. Insbesondere die Digitalisierung der öffentlichen Verwaltung rückt in den Blick".

[14] K. Schwab, *The Fourth Industrial Revolution*, Geneve, World Economic Forum, 2016.

[15] L. Lessig, *Code and Other Laws of Cyberspace*, New York (NY), Basic Books, 1999.

[16] He speaks of the tidal wave that is hitting the administration M. Fuertes López, *Metamorfosis del Estado. Maremoto digital y ciberseguridad*, Madrid, Marcial Pons, 2022. Prefers to use the metaphor of the hurricane, instead, M. Martini, *Transformation der Verwaltung durch Digitalisierung*, in J. Ziekow (ed.), *Verwaltungspraxis und Verwaltungswissenschaft*, Baden Baden, Nomos, 2018, 11.

decision-making software programs used by public administrations as *administrative acts*.[17] Other scholars, however, have referred to computers as *virtual public officials*.[18]

The above-mentioned transformations may have a greater or lesser impact depending on the functions carried out through computers and on the type of algorithms employed. The significance of these problems is reduced when public administrations employ deterministic algorithms and when robots are used to perform certain public services.[19] Uncertainties become more substantial when machine-learning or deep-learning algorithms are employed in the performance of administrative functions that are more properly of authoritative nature.

In addition, the robotization of the administrative decision-making activity, insofar as it affects the methods by which decisions are made and the attribution of their content, may have an impact on the dynamics of one of the State's most delicate functions,[20] which is delivering justice to citizens who challenge administrative acts that affect their legal interests. The judicial-review techniques developed thus far have been tailored to assess decisions made by human beings, and whose content was elaborated according to reasoning and decision-making models typical of humans.

It is therefore necessary to investigate *whether*, and *to what extent*, the digital transformation of administrative functions affects both the validity of acts adopted by public bodies and the methods of judicial review employed by courts in assessing the legality of administrative decisions submitted to their scrutiny.[21]

This investigation can be conducted from different points of view. As is well known, Italian law provides for two types of invalidity capable of affecting (albeit in different ways) the effects of the administrative decisions adopted: nullity and annulability.[22]

Consequently, the first part of this paper will be devoted to the analysis of any hypotheses of nullity related to the use of algorithms by public administrations. The second part, on the other hand, will address the issue of the annullability of robotic decisions and the closely related issue of the judicial review techniques applied to such acts.

The above outline resumes a path explored on previous occasions in which, over twenty years ago, this author found himself investigating the issue of the pathology of the electronic administrative act.[23] Therefore, the present work therefore purports also to verify whether the conclusions drawn in that previous research are still valid and, if necessary, how they should be modified and updated.

In implementing the program outlined above, it will be necessary to draw upon the existing achievements of legal scholarship, adapting traditional legal institutions and categories to the current circumstances.[24] In the event in which such an approach is not feasible, efforts will be made to develop different solutions appropriate to the new context.[25]

[17] For a summary of the different positions on the subject see G. Gallone, *Riserva di umanità e funzioni amministrative. Indagine sui limiti dell'automazione, decisionale tra procedimento e processo*, Padua, Cedam, 2023, 87.

[18] V. Frosini, *L'informatica e la pubblica amministrazione*, in *Rivista trimestrale di diritto pubblico*, 1983, 484.

[19] We will return to this point below.

[20] A. Garapon and J. Lassègue*, Justice digitale. Révolution graphique et rupture anthropologique*, Paris, PUF, 2018.

[21] J.-B. Auby, *Contrôle de la puissance publique et gouvernance par algorithme*, in D.-U. Galetta and J. Ziller (eds.), *Das öffentliche Recht vor den Herausforderungen der Informations- und Kommunikationstechnologien jenseits des Datenschutzes*, Baden Baden, Nomos, 2018, 155.

[22] In this contribution no reference is made to irregularity, since it is a defect of decidedly minor importance, incapable of influencing the effects of acts. On this subject see P.M. Vipiana Perpetua*, Gli atti amministrativi: vizi di legittimità e di merito, cause di nullità ed irregolarità*, Padua, Cedam, 2003, 381.

[23] A.G. Orofino, *La patologia dell'atto amministrativo elettronico: sindacato giurisdizionale e strumenti di tutela*, in *Foro amministrativo CdS*, 2002, 2256.

[24] Thus A.G. Orofino*, L'informatizzazione dell'attività amministrativa nella giurisprudenza e nella prassi*, in *Giornale di diritto amministrativo*, 2004, 1371; J. Cobbe, *Administrative law and the machines of government: judicial review of automated public-sector decision-making*, in *Legal Studies,* vol. 39, 2019, 636. See, however, A. Guckelberger*, Öffentliche Verwaltung im Zeitalter der Digitalisierung. Analysen und Strategien zur Verbesserung des E-Governments aus rechtlicher Sicht*, Baden-Baden, Nomos, 2019, 143: "Im Kontext der Digitalisierung von Verwaltungsangelegenheiten wird oft ein Paradigmenwechsel im Vergleich zu bisherigen Arbeitsweisen festgestellt".

[25] See J.-B. Auby, *Les défis auxquels sont confrontés nos droits administratifs*, in *Revue française de droit administratif*, 2024, 241, who recalls the fundamental role played by legal scholars: " On peut partager plus ou moins la sensation que, dans l'ére postmoderne, nos droits administratifs sont entrés dans une zone de mal-

2. *The nullity of algorithmic acts: introductory remarks*

With regard to measures whose content is defined by robots, it is necessary to ascertain which of the various hypotheses of nullity provided for in Article 21 *septies* (1) of Law No. 241 of 7 August 1990 may be relevant. The aforementioned provision establishes that an administrative act is void when it lacks essential elements, when it is affected by an absolute defect of attribution, when it has been adopted in violation or circumvention of a final judgement, as well as in the other cases in which nullity is expressly provided for by law.

With reference to robotic decisions, there do not appear to be any particular problems related to textual nullity, or nullity resulting from an absolute defect of attribution, or from a violation or circumvention of a final judgment. On the contrary, aspects of nullity inherent in structural profiles of the act, i.e. the lack of its essential elements, may be relevant.[26]

2.1. *The theory of the essential elements of administrative acts in the context of the robotic transition*

Unlike Article 1418 of the Italian Civil Code relating to private-law nullities, Article 21 septies of Law No. 241/1990 does not specify the elements essential to administrative acts whose lack would result in invalidity. Consequently, the identification of these elements has been entrusted to the valuable work of legal scholars and case law,[27] which have addressed it through the use of concepts derived from private law.[28]

In the context of acts adopted through algorithmic systems, the possible structural defects that may lead to nullity appear to relate, in particular, to the subject, the intent and the form.

2.1.1. *Robotic decisions as administrative measures ascribed to public administrations*

From a *subjective* point of view, an act that is not adopted by a public administration is considered null.[29] This form of nullity is indeed very difficult to occur, given that it seems at least bizarre that an individual who is completely unrelated to the administrative apparatus (so-called "usurper"[30]) would adopt a decision allegedly ascribed to a public administration. Another case, rarely occurring in practice, is that acts that cannot be ascribed to a public entity as their content has been dictated by physical[31] or moral duress.[32]

In order to give more substance to this type of invalidity, it may be useful to note that a part of administrative case law has recognized that a ground for nullity may arise when acts are adopted in execution of a criminal plan, for the pursuit of unlawful purposes, and therefore unrelated and ecen contrary to the objectives that should inspire the conduct of the competent entity. In such cases, it has been held that the public official acts for himself/herself and not on behalf of the public body, thereby severing any vicarious liability.[33]

Moreover, structural nullity may arise where the public administration operates outside the spatial limits of its authority.[34] This occurs, for example, when the act has an effect outside the physical scope of the territorial entity, thereby producing effects beyond the entity's sphere of authority.[35]

être prolongé. En tous les cas, on ne peut nier que, au-delà de leur force apparente, ils sont traversés de fortes turbulences et révèlent de fréquentes déficiences. Il appartient à la doctrine de faire évoluer les concepts dans le sens nécessaire ".

[26] M.C. Cavallaro, *Gli elementi essenziali del provvedimento amministrativo. Il problema della nullità*, Turin, Giappichelli, 2012.

[27] Also for further bibliographical references see N. Paolantonio, *Nullità dell'atto amministrativo*, in *Enciclopedia del diritto*, *Annali*, vol. I, 2008, 855;

[28] On this topic see the critical reflections of F.G. Scoca, *Appunti sulla «validità» del provvedimento amministrativo*, in *Diritto e processo amministrativo*, 2018, 1038.

[29] On the subject, for a summary of the different legal scholars' positions on the point, see R. Villata and M. Ramajoli, *Il provvedimento amministrativo*, Turin, Giappichelli, 2006, 202.

[30] G. Zanobini, *Corso di diritto amministrativo*, VIII ed., vol. I, Milan, Giuffrè, 1958, 305.

[31] S. Romano, *Corso di diritto amministrativo. Principii generali*, III ed., Padua, Cedam, 268.

[32] P. Virga, *Il provvedimento amministrativo*, Milan, Giuffrè, 1972, 396.

[33] Thus Italian Cons. St., sec. V, 4 March 2008, no. 890. Takes a different view Italian Cons. St., sec. V, 4 May 2015, no. 2237.

[34] A.M. Sandulli, *Diritto amministrativo*, XV ed., Naples, Jovene, 1989, 668.

[35] M.R. Spasiano, *Commento all'articolo 21* septies, in N. Paolantonio, A. Police and A. Zito (eds.), *La pubblica amministrazione e la sua azione*, Turin, Giappichelli, 2005, 551. In case law see Cons. St., sec. IV, 28 February 1992, no. 210. For a concrete application of this nullity hypothesis see. Tar Puglia Bari, sec. III, 26 October 2005, no. 4581, which

It is necessary to verify whether, the transition to algorithmic management of administrative procedures could derive in new (and unprecedented) cases of subjective nullity.[36]

2.1.1.1. *The prior identification of programming rules*

A first potential ground for nullity, due to subjective absence of the administrative act, may occur in cases of robotic decisions, taken by a computer, only *formally* ascribed to a public administration. This would occur with the use of machine or deep-learning algorithms capable of both autonomously acquiring the information necessary for decision-making and autonomously assuming the final volition.

In other words, subjective nullity could arise where there is a blank delegation of public powers to private operators tasked with configuring the software in charge of issuing certain administrative decisions, without any prior specification of the programming rules. In such cases, private parties (the programmers) would be entrusted with determining how to perform certain administrative functions or how to pursue certain public interests. Evidently, a problematic situation.

In this regard, it is crucial that administrative acts clearly state the criteria to program the software. Such assertion serves both to ensure intelligibility of the choices made by the program, and to ascribe such choices, allowing them to be challenged before a court; indeed, the algorithm cannot be challenged in itself, as it does not have the nature of an administrative act.[37] Prior specification of programming rules may become unnecessary in cases of non-discretionary administrative activity, whereby the lack of discretionary power makes the specification of software-programming criteria[38] superfluous.

It seems worth to notice that Article 41, paragraph 2 of the *Ley* (Spanish Law) No. 40/2015 provides that, in case of procedural automation, the bodies responsible for defining the programming criteria and for verifying the functioning of the information system[39] must be established in advance. Similarly, the *Code des relations entre le public et l'administration* provides, in Article L. 312-1-3, that public administrations "publient en ligne les règles définissant les principaux traitements algorithmiques utilisés dans l'accomplissement de leurs missions lorsqu'ils fondent des décisions individuelles". Furthermore, the same *Crpa* provides that, upon request, citizens must be informed of the rules by reason of which the algorithmic

declares null and void the administrative decision whereby a landscape protection body denied a negative opinion on the construction of a work to be carried out outside the area in which the body's landscape protection duties are exercised.

[36] On this point see E.M. Menéndez Sebastián, *La validez del acto administrativo electrónico*, in F.J. Jiménez De Cisneros Cid (ed.), *Homenaje al profesor Ángel Menéndez Rexach*, vol. 1, tome 2, Cizur Menor, Aranzadi, 2018, 445.

[37] A.G. Orofino*, La patologia dell'atto amministrativo elettronico*, cit., 2273. On this topic, see also G.J. Guglielmi*, Contrôle des algorithmes et droit du contentieux administratif français*, in *Revue générale du droit*, 2023, 14, where it is stated: " La logique des réponses contentieuses du juge administratif est cependant claire : l'algorithme lui-même n'est saisi que de façon indirecte, comme un objet factuel soumis à certaines obligations de forme et de procédure ou capable de produire des conséquences sur les intérêts en présence. Il n'est pas un acte mais un instrument de la prise de décision ". In case law, on the other hand, the contestability of the algorithm seems to be affirmed, albeit with a broad *obiter dictum*, by Tar Lazio, Rome, sec. III *bis*, 21 March 2017, no. 3742. For a detailed reconstruction of the different opinions on this point see G. Gallone, *Riserva di umanità e funzioni amministrative*, cit., 87.

[38] See A.G. Orofino and R.G. Orofino*, L'automazione amministrativa: imputazione e responsabilità*, in *Giornale di diritto amministrativo*, 2005, 1300, in which it is argued that a prior act by which the public administration indicates the criteria on the basis of which the software is to be programmed is required. In terms, A.G. Orofino and G. Gallone*, L'intelligenza artificiale al servizio delle funzioni amministrative: profili problematici e spunti di riflessione*, in *Giurisprudenza italiana*, 2023, 1738; G. Gallone, *Riserva di umanità e funzioni amministrative*, cit.,148. On this point see also A.-L. Girard, *Décision administrative algorithmique et volonté*, in Aa.Vv.*, Le droit administratif au défi du numérique, actes du colloque annuel de l'AFDA*, Paris, Dalloz, 2019, 199.

[39] Here is the full text of Article 41(2): "En caso de actuación administrativa automatizada deberá establecerse previamente el órgano u órganos competentes, según los casos, para la definición de las especificaciones, programación, mantenimiento, supervisión y control de calidad y, en su caso, auditoría del sistema de información y de su código fuente". More incisively, Art. 45, para. 4, of the no longer in force Ley 30/1992, 26 november, Régimen Jurídico de las Administraciones Públicas y del Procedimiento Administrativo Común, provided: "Los programas y aplicaciones electrónicos, informáticos y telemáticos que vayan a ser utilizados por las Administraciones Públicas para el ejercicio de sus potestades, habrán de ser previamente aprobados por el órgano competente, quien deberá difundir públicamente sus características".

processing is defined,[40] so that "le responsable du traitement doit s'assurer de la maîtrise du traitement algorithmique et de ses évolutions afin de pouvoir expliquer, en détail et sous une forme intelligible, à la personne concernée la manière dont le traitement a été mis en œuvre à son égard".[41]

Software explicability therefore assumes the adopted acts contain programming instructions. The Italian Council of State has also ruled in the same sense in several earlier decisions.[42] However, the administrative judge, while affirming the need for formal approval and incorporation of software rules adopted by private entities, has – somewhat contradictorily - stated that such approval may be both subsequent and uncritical. That is to say, it may be given after the software has been developed and without the public body being able to understand its mode of operation or to verify its features. This appears rather peculiar.[43]

Although the need for a formal act incorporating the programming rules is widely recognized, it is generally held that the most invalidating pathology (nullity) can only arise in cases of complete lack of any act ascribing to the software house the task of developing and managing the program.[44] Therefore, nullity would not arise for mere lack of specific indications concerning the design and functioning of the program. In this case, in fact, there would be no substitution of a private actor for the public administration, as the act is still formally ascribed to a public body.[45] Rather, what does occur is the infringement of legal rules that ought to inspire the algorithmic action, resulting in the voidability of the administrative decision.

2.1.1.2. *The subsequent "acceptance" of the content of the act*

A structural ground for subjective nullity could emerge when endorsing the content of the robotic act requires the public administration to carry out subsequent activities through the adoption of human administrative decisions, which according to some interpretations, ought to be deemed a necessary component of the legal construct of the administrative decision, insofar as functional to the completion of the administration's volitional path.[46]

However, rules concerning the possible need for human control and confirmation of the content of the robotic decision[47] seem to pertain more to the manner in which administrative functions are performed, than

[40] It reads in L. 311-3-1: "Sous réserve de l'application du 2° de l'article L. 311-5, une décision individuelle prise sur le fondement d'un traitement algorithmique comporte une mention explicite en informant l'intéressé. Les règles définissant ce traitement ainsi que les principales caractéristiques de sa mise en œuvre sont communiquées par l'administration à l'intéressé s'il en fait la demande". The following Art. L. 311-3-1-2 then provides: "L'administration communique à la personne faisant l'objet d'une décision individuelle prise sur le fondement d'un traitement algorithmique, à la demande de celle-ci, sous une forme intelligible et sous réserve de ne pas porter atteinte à des secrets protégés par la loi, les informations suivantes : 1° Le degré et le mode de contribution du traitement algorithmique à la prise de décision ; 2° Les données traitées et leurs sources ; 3° Les paramètres de traitement et, le cas échéant, leur pondération, appliqués à la situation de l'intéressé ; 4° Les opérations effectuées par le traitement". On this subject, see also Article L. 312-1-3 of the Crpa, in the mind of which: "Sous réserve des secrets protégés en application du 2° de l'article L. 311-5, les administrations mentionnées au premier alinéa de l'article L. 300-2, à l'exception des personnes morales dont le nombre d'agents ou de salariés est inférieur à un seuil fixé par décret, publient en ligne les règles définissant les principaux traitements algorithmiques utilisés dans l'accomplissement de leurs missions lorsqu'ils fondent des décisions individuelles".

[41] Cons. const., 12 June 2018, No. 2018-765 DC, para. 71.

[42] In this sense, see Italian Council of State, section VI, 24 October 1994, no. 1561; Council of State, section VI, 7 February 1995, no. 152; Council of State, section VI, 11 July 2000, no. 3885; Council of State, section VI, 24 October 2000, no. 5682.

[43] For a critical examination of the above guidelines and the reasons behind them see A.G. Orofino, *The Implementation of the Transparency Principle in the Development of Electronic Administration*, in *European Review of Digital Administration & Law*, 2020, no. 1-2, 123.

[44] G. Gallone, *Riserva di umanità e funzioni amministrative*, cit., 192. poses the problem, offering a partially different solution.

[45] On the topic see Trga Trento, 15 April 2015, no. 149, according to which the answers given by the computer system are objectively attributable to the public administration, as a plexus. In the same terms, commenting on art. 30, see the report of 7 December 2022 adopted by the Council of State on the outline of the Public Contracts Code.

[46] On the various theses on the subject see G. Gallone, *Riserva di umanità e funzioni amministrative*, *passim.*

[47] See, for instance, Article 30(3)(b) of Legislative Decree No. 36/2023, according to which decisions taken by means of automation respect the principle of non-exclusivity of the algorithmic decision, whereby there is in any case a human contribution in the decision-making process capable of controlling, validating or denying the automated decision. On the subject see G. Gallone, *Digitalizzazione, amministrazione e persona: per una "riserva di umanità" tra spunti codicistici di teoria giuridica dell'automazione*, in *Persona e amministrazione*, vol. 12, no. 1, 2023, 329.

to attribution of such functions. Consequently, any breach of these rules may, at most, lead to the annulment of the act, but not to its nullity.[48]

This conclusion appears even more convincing when one considers that, in algorithmic administration, the moment of final decision-making and the adoption of the final act assume less importance compared to other procedural phases. Indeed, it is not unreasonable to suggest that, in certain cases, this decision-adoption phase may even be lacking.[49] Therefore, it does not seem appropriate to overemphasize its importance.

2.1.2. *The intent of the algorithmic decision*

Intent is commonly included among the essential elements of an administrative act.[50] Indeed, it has been held that only consciously-intended acts can be ascribed to their authors. The same rule applies to administrative decisions.

The fact that machines or algorithmic systems define the content of certain acts casts doubts as to whether such acts truly reflect an authentic intent,[51] potentially leading to arguments in favor of their nullity. However, such a line of argument procedure appears to be excessively influenced by private-law theories on intent, according to which a legal transaction (il negozio) is considered voidable if one of the parties did not truly intend it, or did not intend it with that content. Therefore, in private-law terms, intent refers to both the act itself and its content.[52]

Instead, intent, understood as the structural requirement of an administrative decision, takes on an objective character. Therefore, acts may be deemed valid insofar as they are *willed* by the entity to which they are ascribed, regardless of the author's psychological state.[53] Therefore, an administrative decision is deemed valid if it was *consciously* adopted by the entity to which it is ascribed. In this sense, intent becomes hypostatized.

Moreover, the content of the act is determined as the outcome of proceedings involving multiple offices and bodies, each contributing to the final decision and to the formation of the volition therein expressed. This observation leads to a devaluation, with regard to administrative acts and decisions, of the relevance of the psychological state of the agent (*i.e.*, the organ to which the final decision is ascribed).[54]

Given this clarification, it may be affirmed that an electronically-processed administrative act does not lack the element of intention. Even if its content has not been precisely identified by the issuing authority, the act is nonetheless the expression of the intent of that authority. It is the outcome of a precise procedure aimed at its very adoption. During this procedure, the intent underlying the act also manifests in the choice of letting the software determining the final content of the decision.[55] Intent is further expressed through the formulation of instructions for the

[48] Thus G. Gallone, *Riserva di umanità e funzioni amministrative*, cit., 188.

[49] A.G. Orofino and R.G. Orofino, *L'automazione amministrativa*, cit., 1309; D. Keats Citron, *Technological Due Process*, in *Washington University Law Review*, vol. 85, issue 6, 2008, 1249 and spec. 1260; G. Marongiu, *L'attività amministrativa automatizzata*. *Profili giuridici*, Sant'Arcangelo di Romagna, Maggioli, 2005, 161.

[50] For a summary of the various opinions on the point see S. Perongini, *Teoria e dogmatica del provvedimento amministrativo*, Turin, Giappichelli, 2016, 192.

[51] The theme already emerges in K. Zeidler, *Über die Technisierung der Verwaltung. Eine Einführung in die juristische Beurteilung der modernen Verwaltung*, Müller, 1959. Departing from Zeidler's theses, Luhmann states that "Schließlich leidet die Diskussion an der Unbestimmtheit des Willensbegriffs - man ist versucht zu sagen: an seiner unbewältigten Vergangenheit" (transcribed from N. Luhmann, *Recht und Automation in der öffentlichen Verwaltung. Eine verwaltungswissenschaftliche Untersuchung*, Berlin, Duncker & Humblot, 1966, 32). On this subject see A.-L. Girard, *Décision administrative algorithmique et volonté*, cit., 199. See also G.J. Guglielmi, *Contrôle des algorithmes et droit du contentieux administratif français*, cit., 18.

[52] M Giorgianni, *Volontà (diritto privato)*, in *Enciclopedia del diritto*, Milan, Giuffrè, 1993, vol. XLVI, 1043. On the problems that the use of telematics poses with reference to the externalization of the intent in civil law see. R. Taricco, *Volontà e accordo nella contrattazione telematica*, in *Nuova giurisprudenza civile*, 2003, II, 201; G.B. Ferri, *Il ruolo della volontà negoziale ed il documento informatico*, in *Riv. dir. comm.*, 2003, I, 281; A. Gentili, *La volontà nel contesto digitale: interessi del mercato e diritti delle persone*, in *Riv. trim. dir. e proc. civ.*, 2022, 701; E.M. Incutti, *Sistemi di riconoscimento delle emozioni e ruolo dell'autonomia privata: linee evolutive di un umanesimo digitale*, in *Giustizia civile*, fasc. 2, February 2022, 515.

[53] Of a partially different opinion Cons. St., sec. V, 4 May 2017, no. 2028, which considers the act to be vitiated insofar as it is inspired by a criminal intention.

[54] S. Perongini, *Teoria e dogmatica del provvedimento amministrativo*, cit., 192.

[55] U. Stelkens, *Der vollständig automatisierte Erlass eines Verwaltungsakts als Regelungsgegenstand des VwVfG*, in Hill, Kugelmann and M. Martini (eds.), *Digitalisierung in Recht, Politik und Verwaltung*, Baden-Baden, Nomos, 2018, 81.

program's self-determination.[56]

2.1.3. *The form of the automatic act*

Form is also considered a structural element of the administrative decision.[57] With regard to automatic administrative decisions, the issue of form does not appear to arise differently from traditional electronic acts.[58] It can therefore be stated that, whenever an act lacks the form requirement prescribed by law, it matters little whether its content was determined automatically or by a public official.

Perhaps some issues could arise if interactions between private operators and public administrations required to fill out forms whose rigid architecture prevented them from submitting certain requests, making certain declarations, or producing certain annexes. For instance, imagine a situation in which citizens submitting their applications were required to provide data that they are unable to indicate. Or, on the contrary, that they wish to enter information that is relevant, even essential, for the acceptance of their request, but that the system improperly refuses to accept. In such cases, the software's lack of flexibility would end up preventing citizens from having a fruitful dialogue with the public administration.

To clarify the issue, it may be appropriate to use an example. Imagine that, in order to apply for a benefit, one is required to use a form made available on a public digital platform. Now suppose that, in order to proceed with the completion of the form and gain access to the subsequent steps, the applicant must necessarily certify that he or she possesses certain qualities, which he or she indeed does not possess. In such a scenario, the system would prevent the submission of the application, effectively resulting in a system block, because the applicant was unable to certify that he or she meets the required prerequisites. In such cases, the structure and the design of the platform's interface would prevent individuals from exercising their entitlements. And this could also potentially occur in violation of the legal provisions governing the procedure.

Something like this occurred, for example, when an association of municipalities attempted to complete a register template as a requirement for carrying out certain activities. However, it was unable to complete the operation because the platform displayed a message stating that the applicant could not proceed with the registration, as it did not meet the legal requirements.

The message automatically generated by the platform was challenged before the Regional Administrative Court of Lazio, which, however, declared the appeal inadmissible, holding that such message did not constitute a challengeable administrative act.[59] The Italian Council of State, by contrast, took a different view. It emphasized that the *implicit* intent emerging from the system was to be interpreted in the light of the provisions governing the case.[60] In this way, the appellate court appears to have relied on the theory of the implicit act,[61] in order to identify a challengeable administrative decision.[62]

On another occasion, the interruption of a telematic registration procedure, carried out through the completion of an online form, was considered unlawful, since the halt caused by a system error unduly prevented the applicant from proceeding further in the submission request.[63] In yet another occasion, it was held

[56] In terms A. Ravalli, *Atti amministrativi emanati mediante sistemi informatici: problematiche relative alla tutela giurisdizionale*, in *Tribunali amministrativi regionali*, 1989, II, 262; U. Fantigrossi, *Automazione e pubblica amministrazione*, Bologna, Il Mulino, 1993, 55; A. Masucci, *L'atto amministrativo informatico*, Naples, Jovene, 1993, 85; A.G. Orofino, *La patologia dell'atto amministrativo*, cit., 2262; F. Saitta, *Le patologie dell'atto amministrativo elettronico e il sindacato del giudice amministrativo*, in *Diritto dell'economia*, 2003, 615; G. Gallone, *Riserva di umanità e funzioni amministrative*, cit., 192. It may be useful to point out that in the explanatory report that preceded the amendment of Article 35a of the German law on Administrative Procedure (Verwaltungsverfahrensgesetz), it is expressly stated: "Beim Einsatz vollautomatischer Systeme fehlt es aber an einer Willensbetätigung im jeweiligen Einzelfall, diese wird vielmehr bei der Programmierung des Systems gleichsam vorweggenommen".

[57] The topic was also addressed by the judicial decision of the Bundesverfassungsgericht, 8 December 1992, no. 1 BvR 326/89. On the form of automatic acts in German law, see l'37 Verwaltungsverfahrensgesetz.

[58] In comparative perspective see R. Abraham, *Das Schriftformerfordernis in der Verwaltungsdigitalisierung Tradierte Gesetzgebung und -anwendung trifft auf moderne Gesellschaft*, in *Multimedia und Recht*, 2022, 530.

[59] Tar Lazio, Rome, sec. I bis, 23 December 2006 no. 15685.

[60] Cons. St., Sec. IV, 4 February 2008, no. 296.

[61] S. Pedrabissi, *Il provvedimento amministrativo implicito. Una lettura critica*, Naples, Editoriale Scientifica, 2022.

[62] A.G. Orofino, *Forme elettroniche e procedimenti amministrativi*, cit., 107.

[63] Tar Marche, ord. 20 December 2016, no. 422.

that blocking a passport application because of a terminal query, could be qualified as an electronic administrative decision, as it effectively prevented granting the passport to the applicant.[64]

An implicit act was also the object of a ruling by the *Trga* of Trento, in an appeal brought against a denial of participation in a competitive procedure for the assignment of a pharmaceutical license in the Province of Trento. Candidates were required to submit their applications through an online platform, but due to certain rigidities of the system, one aspiring candidate was unable to submit his application, so he appealed against the implied *online* decision to reject his application. The court, after stating that the rejection of the IT platform could be ascribed to the public administration that had launched the competitive procedure, held that such rejection could be challenged by the private party.[65]

In the aforementioned cases, the blockage of the computer system caused a halt to the procedure, resulting in an immediate infringement of the party's interests as stated in the appeal before the Regional Administrative Court. In some circumstances, this made it necessary for the court to rely on a merely fictitious act - the implicit act - in order to legitimize its intervention. This expedient has become necessary due to the appellate structure of the administrative-court proceedings,[66] which require aggrieved parties both to lodge an appeal against an *act*, and to do so within a strict statute of limitation, which starts running from the moment the harm alleged in the appeal has actually occurred. However, when no procedural halt occurs, the infringement does not clearly manifest itself, so that it is possible to wait for the conclusion of the administrative procedure and the adoption of an explicit act, which may be affected by invalidities that arose during the course of the procedure itself.

That is why the final decision approving a ranking list was held challengeable before courts in a case in which a malfunction in the IT system had prevented the inclusion of the plaintiff. In fact, it was held that the plaintiff's exclusion, caused by , by the digital platform acting autonomously, effectively consisted in an administrative decision excluding the plaintiff that lacked any procedure, any motivation, any public official who had assessed the case and correctly expressed the relevant administrative determinations. Therefore, such exclusion had occurred *de facto*, and was strongly criticized i for the evident unreasonableness, unfairness and irrationality of a system for submitting applications which, due solely to technical malfunctions, ends up exercising impersonal yet authoritative administrative activity.[67]

There have also been situations in which the constraints imposed by electronic forms have limited the submission of applications, preventing citizens from fully articulating their request or from providing relevant information. This evidently affected the outcome of the ensuing administrative decisions. However, even in these cases, the courts focused not on the legitimacy of the partial procedural halt caused by the software, but rather on the final administrative decision, insofar as it was conditioned by the rigidity of the instrument used to interact with public administrations. Indeed, it has been held that it is unlawful for the structure of a telematic procedure to restrict private individuals in their interactions with public administrations.[68] Furthermore, it has been affirmed that the principles of cooperation and good faith, which must apply to the relationship between citizens and public bodies according to the rule laid down by Article 1, paragraph 2-*bis*, of Law No. 241/1990, do not legitimize the use of unsuitable software whose inadequacy ends up working to the detriment of private individuals.[69]

In the aforementioned cases, the courts, rather than evaluating the legal relevance of system-generated messages that prevented the submission of applications or limited their

[64] Cons. Giust. Amm. Sic, 8 October 2007, no. 927.

[65] Trga Trento, 15 April 2015, no. 149, which compares the situation of a person who is prevented by the system from submitting an application with that of a citizen whose paper-based request is rejected by a civil servant who has unduly considered that he could not accept the envelope delivered to him.

[66] L. Mazzarolli, *Il processo amministrativo come processo di parti e l'oggetto del giudizio*, in *Diritto processuale amministrativo*, 1997, 463; A. Police, *Il cumulo di domande nei «riti speciali» e l'oggetto del giudizio amministrativo*, in *Diritto processuale amministrativo*, 2014, 1197.

[67] Tar Puglia, Bari, sec. I, 9 June 2016, no. 768. In the same terms, Tar Lazio, Rome, sec. III *bis*, 20 July 2016, no. 8309.

[68] Cons. St., sez. VII, 16 February 2024, no. 1588.

[69] Cons. St., sec. VI, 25 October 2024, no. 8537.

articulation, deemed it more useful to focus their attention on the final administrative acts concluding procedures initiated through the use of electronic forms or, when necessary, by relying on the legal fiction of the implicit act. In doing so, the administrative judge, driven by an evident pragmatism, preferred to deliver justice in the manner most suited to the logic of administrative litigation, without altering its fundamental structure.

Hence, it is not surprising that the Italian Council of State - finding itself assessing automatically-generated messages– expressly stated that it did not wish to take a position on their legal nature[70] and on the validity requirements that such messages would need to meet in order to be considered legally existent. Rather than venturing into a difficult theoretical digression, the court preferred to consider the matter as involving an implicit administrative act, whose scrutiny could have been conducted according to well-established judicial-review techniques.[71]

All this makes it possible to affirm that, except on rare occasions,[72] the issue of the form of automated acts (although certainly of theoretical interest), assumes less practical impact whenever it is possible to deliver justice without "directly" addressing the questions of the legal significance assumed by automatic messages generated by public platforms.

This is confirmed by the circumstance that, in the case of automated administrative acts, current legislation downplays the relevance of the signature moment, allowing this type of act to be signed through mechanical stamping.[73] The most recent case law has held that manual signatures may be replaced by mere stamps even in cases of measures drafted using automated systems, such as injunctions orders issued for traffic violations.[74]

3. *Robotic decisions and judicial review of defects of the act*

Another form of invalidity of administrative acts is voidability (annullability). As is well known, it occurs when the act is affected by lack of competence, breach of law or abuse of power.

This form of invalidity occurs much more frequently than nullity. In fact, it can be said that whenever an act is submitted to the scrutiny of administrative judges, they are called upon to rule on the existence of one of the three aforementioned defects.

This demonstrates the clear importance of the subject matter, which proves to be a nodal point within the field of public-law analysis. This importance has led the issue of judicial review of automatic decisions to be among the first to attract the attention of administrative courts, which have long had the opportunity to engage with it.[75]

The controversy on judicial review of algorithmic administrative acts has recently been fueled in many Western countries by recent scholarly and caselaw contributions. In Italy, in particular with some well-known decisions of the Regional Administrative Court of Lazio, concerning the outcome of a mobility procedure managed with the aid of IT tools.

The reference is to the decisions related to the well-known "Buona scuola" affair. The facts of the case concerned the mobility procedure conducted by the Ministry of Education through a software. The algorithm that guided the procedure for assigning the various teachers to vacant posts was supposed to follow a precise order of preference and priority. However, it made grave mistakes which resulted in a number of teachers suing before the Regional Administrative Court of Lazio to challenge the algorithm's decisions.

Through several rulings issued over time, the roman Regional Administrative Court upheld the teachers' objections.[76] This led many to speak of a "runaway algorithm" and express concerns about the legitimacy of the use of decision-making IT tools by public

[70] Thus, *verbatim*, Cons. St., sez. IV, 4 February 2008, no. 296.

[71] F. Follieri, *Logica del sindacato di legittimità sul provvedimento amministrativo. Ragionamento giuridico e modalità di sindacato*, Padua, Cedam, 2017.

[72] On this point, Tar Puglia, Lecce, sec. I, 14 December 2011, no. 2093, which declares invalid (without ruling on the type of invalidity) an electronic act since it is completely lacking any requisite that gives it legal value or objective reliability with particular regard to its origin. See also Cons. St., sec. VI, 12 February 2015, no. 769, where it is stated that a minister's communication made through a social network does not constitute an administrative act.

[73] Cf. Art. 3(2) of Legislative Decree No. 39 of 12 February 1993

[74] Cass., sec. II, 14 March 2024, no. 6791; Cass., sec. II, 4 August 2022, no. 24231.

[75] A.G. Orofino*, La patologia dell'atto amministrativo elettronico*, cit., 2263.

[76] See, *inter alia*, Tar Lazio, Rome, sec. 3 *bis*, 10 September 2018, 9224.

administrations. However, it must be noted that such criticisms seem to overlook the fact that automated tools have long been used with positive results in mobility procedures, also at the national level.[77]

The rulings delivered by the Regional Administrative Court of Lazio in the "Buona scuola" affair have rekindled interest in the topic among Italian legal scholars. However, it cannot be ignored that, as early as in 1992, a first series of judicial decisions was issued addressing the issues related to computerised administrative action. These judicial decisions anticipated many of the problems that have later emerged in recent decades, often proposing solutions that were at times no less insightful and interesting than those offered by more recent case law. Nevertheless, most of the scholarship produced in Italy over the last decade seem to ignore these earlier rulings, which are rarely taken into account.

Those to which reference has just been made are, for the most part, judicial decisions reviewing the results of certain written exams in important (and heavily attended) public competitions. In some of these competitions, exams were carried out by means of multiple-choice tests, in which candidates were required to place a cross on the correct solution, selecting it from among the incorrect options. Or, in other competitions, participants were required to take a typing test, consisting of recopying a basic script distributed to the candidates within a set time limit. The exam papers prepared by the candidates (i.e. the typed texts they produced within the time available to them, the multiple-choice tests) were acquired by the processor by means of optical scanning systems equipped with Ocr detectors. As a result of this acquisition, the computer was able to compare the standard script prepared by the examining board with each candidate's script and, depending on the discrepancies detected, it proceeded to evaluate each individual test, awarding a precise score calibrated on the errors made by each candidate.

The correction of the exam scripts was therefore carried out entirely by computers, so that the final ranking was drawn up on the basis of the evaluations performed by the processor, even though the machine's indications were then *formally* transposed by human beings. Even in that case, some decisions made by the computers as a result of the correction of the exam papers were challenged before the administrative courts, which had the opportunity to review automatic administrative acts.

Among the statements found in the judicial decisions published in the 1990s, one is particularly relevant for our purposes. From the point of view of judicial review, administrative action that makes use of information technology does not differ in any way from ordinary administrative action. This is because the legal-logical framework to be applied is still identified with the general one that requires the need to verify the conformity of the action and its effects with the law regulating them, in relation to the detailed complaint made by the party invoking such a review, alleging a personal, direct and current injury.[78]

Even robot-generated decisions are reviewable by the judge, in accordance with the rule outlined in Article 113 of the Italian Constitution, according to which judicial protection is always admitted against acts of the public administration and cannot be excluded or limited to particular means of appeal or to certain categories of acts. This applies even more so to decisions adopted by public administrations through the use of algorithms.

3.1. *Lack of competence*

Understandably, the methods of judicial reviewvary depending on the nature of the alleged defect and, above all, on the manner in which the illegitimacy manifests itself. No particular difficulties arise when the violation is immediately perceptible, without the need for in-depth investigation of the content of the act or the formation of the intention it expresses. In this sense, the review concerning the competence of the issuing authority - and the possible annulment of the act for lack of competence - does not seem excessively

[77] On this subject A.G. Orofino, *L'informatizzazione dell'attività amministrativa nella giurisprudenza e nella prassi*, cit., 1371. See also A.L. Girard, *Décision administrative algorithmique et volonté*, cit., 201, who acknowledges the existence of a system for automatically assigning teachers and students to the various French schools, following an order of preference manifested by the interested parties themselves.

[78] Thus, *verbatim*, Cons. St., section VI, 7 February 1995, no. 152. In terms Cons. St., 24 October 1994, no. 1561; Cons. St., section VI, 23 November 1994, no. 1687; Cons. St., section VI, 24 October 2000, no. 5682; Cons. St., section VI, 7 May 2001, no. 2531.

complex.[79]

The assessment of whether the defect exists is the result of a scrutiny that does not require an evaluation of elements intrinsic to the act itself.[80] That is to say, the analysis is carried out solely by examining whether the authority to which the robotic decision is attributed had the competence to issue it. If the act - albeit produced by a computer - turns out to formally originate from a subject that does not have the competence to adopt it, it is vitiated and must be annulled.

The discourse, if anything, might shift to a parallel level: that concerning the advisability of delineating spheres of competence in a rigorous manner - as it happens, as a rule, in the "ordinary" exercise of administrative functions - even when the adoption of the act is not entrusted to a human being, but to an automated system. In procedures managed through algorithmic tools, in fact, the formal attribution of competences risks assuming a more symbolic than substantial value, given the marginal role that the human will may play in determining the content of the act.

Without delving too deeply into the merits of individual issues, it still makes sense to speak of competence even in the context of robotic administration. It is true that recourse to automation entails a progressive loss of centrality of the decision-making phase of the administrative procedure, to the advantage of the phases in which the software programming criteria are defined the input- or autonomous acquisition of data - is implemented by the system. However, the definition of a clear centre of competency remains essential to guarantee the possibility of asserting liability, even of omissive and organisational nature, related to the adoption of the necessary measures for the effective and correct use of digital tools.[81]

3.2. *Breach of law*

Similarly, it is considered that there are no particular difficulties in carrying out judicial review according to the typical logic applied in cases of breach of law. When breach of a statutory provision is alleged,[82] it will be sufficient to verify whether the challenged administrative act contravenes the requirements set forth in the comparative legal parameter. This technique of verification and analysis presupposes that the object of the scrutiny is solely the administrative decision, as it came into being when it was finalised. Thus, the review does not appear to be influenced by the manner in which the intent of the administration was defined and then expressed in the final administrative decision.

To explain what has been said with an example, it can be stated that, in assessing the legitimacy of any demolition order concerning a purportedly unlawful building, reference must be made to the content of the order itself and to the parameters governing the performance of the (repressive) function exercised by the public administration. Such an order will therefore be either lawful or unlawful depending on whether or not the alleged violations actually exist. On the other hand, the fact that the order may have been adopted in a completely automatic manner, for example through a possible survey carried out by a drone that later transmits data to a computer, which later autonomously process the data and transfuse them into a robotically-adopted demolition order, will not bear any legal relevance.

There is, therefore, no difficulty in reviewing the final outcome of a decision when such outcome is in conflict with a legal parameter governing the performance of the activity actually carried out.[83] This was done, for example, by reviewing the results reached by an algorithm for evaluating technical bids submitted in public tenders, which deviated from the evaluation canons indicated in the Italian Public Contracts Code.[84]

[79] Thus A.G. Orofino, *La patologia dell'atto amministrativo elettronico*, cit. 2271. *Contra* E. Barbin, *Le contrôle juridictionnel de l'outil numérique d'aide à la décision administrative*, in *Revue française de droit administratif*, no. 3, 491.

[80] A. Crosetti, *Incompetenza (atto amministrativo)*, in *Digesto discipline pubblicistiche*, Turin, Utet, 1993, vol. VIII, 204.

[81] A.G. Orofino and R.G. Orofino, *L'automazione amministrativa: imputazione e responsabilità*, cit., 1308. On this topic see also the study Conseil d'État, *Puissance publique et plateformes numériques : accompagner " l'ubérisation "*, Paris, La documentation Française, 2017, 116.

[82] It seems superfluous to recall that Italian scholarship attributes to the symptomatology of violation of the law the failure to comply with any provision, including those adopted from regulatory sources: R. Laschena, *Violazione di legge (diritto amministrativo)*, in *Enciclopedia giuridica Treccani*, Istituto Enciclopedia Giuridica, Rome, vol. XXXII, 1994, 2.

[83] A.G. Orofino, *La patologia dell'atto amministrativo elettronico*, cit., 2272.

[84] Tar Marche, 29 January 2020, no. 82.

3.3. *Excess of power. Techniques for detecting defects in electronically processed administrative decisions*

On the other hand, greater problems are posed by judicial review concerning excess of power. As is well known, this is an instrument through which it is possible to check the exercise of discretionary administrative functions by relying on various symptomatic indicators, variously structured and of heterogeneous consistency.

This means that excess of power is configured as a vice with an "open" figure, i.e. susceptible to include new and additional pathological figures.[85] Therefore, the techniques for conducting judicial review also change according to the different manner in which the defect manifests itself and it can be appreciated by the reviewing court.

3.3.1. *Lack of proportionality, illogicality, manifest injustice, unreasonableness*

In light of the considerations made in the preceding paragraphs, and resuming and developing reflections already made with reference to breach of law or lack of competence, it may be said that there are no particular problems in carrying out the review according to techniques already tested by administrative case law when illegitimacy is grasped, so to speak, extrinsically. This is the case where the assessment of legitimacy is carried out by comparing the content of the challenged act with certain parameters that govern its adoption. Parameters that (as mentioned) may be normative but need not necessarily be so. Therefore, it does not appear particularly complicated to deduce defects involving the decision embodied in the act and its conflict with the canons that inform the actions of public administrations.

Therefore, there will be no difficulties in asserting the manifest illogicality of an act, its unfairness, or its unreasonableness. The same can be said with reference to a disproportionate decision. Judicial review concerning lack of proportionality requires an analysis of the adequacy of the means used with respect to the pursued objective, through a technique that implies a balancing of interests.[86] On one side, there are the public interests to whose pursuit the adoption of the administrative act is preordained. On the other, those of private individuals who are confronted with administrative action, whose protection implies that the citizens' sphere is affected only to the strictly necessary extent to protect the public interest.

The proportionality assessment is, so to speak, an external judgement, which is made on an extrinsic level: that of the analysis of the opposing values (public and private) that come into play, and that of the solutions adopted to ensure the fair balancing of these values. Precisely because the judgement is made on an extrinsic level - and therefore it does not concern the *making process of* the administrative decision, but its *final outcome* - there will be no significant difficulties in carrying out judicial review on grounds of legality according to traditional techniques.

3.3.2. *Symptomatic figures that can be compared with the public administration's previous determinations*

Nor do there seem to be any particular difficulties when the defect is found when comparing the content of a previously adopted decision with one adopted at a later date. This is an unlikely case, since the software should always decide in the same way, avoiding contradictions. Disparity could therefore exist where there has been a change in programming parameters, or at the outcome of a self-learning process operated by artificial-intelligence programs, which leads the program to "reconsider" previous guidelines.

If a public body were to decide differently in two perfectly identical cases, the discrepancy would prove the existence of abuse of power due to unequal treatment or inconsistency. Certainly, it would not matter how the public administration formed its intent: whether through an automated act or a human decision.

In the past, courts found this defect when a public administration decided to change the software during the correction by means of an Ocr system of certain competition tests submitted by candidates in a selection procedure for the recruitment of public employees. This led the new software to interpret certain graphical marks differently

[85] F. Modugno, *Eccesso di potere amministrativo*, in *Enciclopedia giuridica Treccani*, Istituto Enciclopedia Giuridica, Rome, 1989, 6.

[86] V. Fanti, *Dimensioni della proporzionalità. Profili ricostruttivi tra attività e processo amministrativo*, Turin, Giappichelli, 2012. 145.

compared to how they were interpreted by the previous software used by the administration. This clearly resulted in a disparity in the evaluation of papers.[87]

3.3.3. *Symptomatic figures attributable to an error conditioning the decision*

It has been noted that it does not appear arduous to scrutinise the legitimacy of acts according to techniques aimed at stigmatising the errors committed by the public administration or the misinterpretation of the facts, when the defect directly emerges from the analysis of the act itself. The review becomes more complicated, but still possible, when it relates to the formative stage of the administrative decision and to the assumptions underlying the decision.[88] Such a review, however, requires an exact and circumstantial report of the errors or contradictions committed by the machine[89] and a precise indication of the prejudicial consequences on the claimant's legal positions.

When examining such types of claims, the administrative judge will need to rely on verifications or expert opinions capable of assisting him/her in the assessment of the actual existence of machine malfunctioning that influenced the content of the contested act.[90] That is unless, of course, the error is so obvious as to render superfluous any further investigative activity by the judicial panel.[91]

However, the stigmatization of erroneous assumptions does not necessarily emerge if the content of the algorithmic act does not allow to understand how the final decision was reached, as it does not disclose the steps that led the processor to prefer the solution actually adopted. And this, as already mentioned, raises clear concerns regarding the structure and effectiveness of judicial protection, certainly making the use of software for the performance of discretionary functions significantly more complicated. Nonetheless, when errors do exist and are detectable from the context of the act, it is certainly easy to contest them in court.[92]

Proceeding to a brief analysis of the relevant case law, it can be seen that administrative courts have, at times, deemed it possible to review potential abuse of power through *misinterpretation of the facts*, in the administrative decision declaring a candidate's failure in a practical examination, where such failure was caused by the incorrect functioning of the computer tools used for correcting the typing tests.[93] It was also held that abuse of power was also to be found in *the irrationality to count as failing mistakes*[94] typed passages (this was also a typing test) that had been correctly prepared. The counting resulted in candidates failing a competitive procedure for admission to public employment. The failure was deemed to have been caused by a software malfunction (the erroneous counting).

3.3.4. *Symptomatic indicators attributable to a lack of preliminary investigation*

What said above must also be reiterated with reference to shortcomings in the investigative phase of the proceeding. It will not be impossible to appreciate the defect whenever it emerges *ab externo*, through a simple analysis of the final decision.

It was, for example, possible to acknowledge the *lack of investigative proceeding* for an act adopted on the basis of an optical scan of the application submitted by a private individual. It had happened that the application had been reviewed only by tools that proceeded to the optical scanning of pre-printed forms. Due to an error made by the applicant when filling in the pre-printed application form, the OCR system did not detect the presence of annexes, even though they had been submitted along with the application itself. The court held that the rigid procedural formalism imposed by the use of

[87] Tar Lazio, Rome, sec. II, 16 September 1992, no. 1809.
[88] Conseil d'État, 8ème-3ème chambres réunies, 4 May 2018, 410950; Cour administrative d'appel de Paris, 9ème chambre, 11 February 2022, 20PA04263.
[89] Cons. St., sec. VI, 24 October 2000, no. 5682.
[90] See Council of State, Section VI, 7 February 1995, no. 152, where it is stated that, for the purpose of the administrative judge's verification of the presence of errors in the processing of the administrative act, it is required a knowledge of computer science to such a degree as to enable it to assess the content of those precepts and the functionality of the machines, considering the final result to which the machine, in perfect working order, has arrived by executing them. And although the judge is *peritus peritorum*, such an assessment can only be referred to the judgement of expert consultants.
[91] Tar Lazio, Rome, sec. II, 16 September 1992, no. 1809.
[92] On this point, see what will be said below, especially in section 3.3.5.1.
[93] Cons. Stato, sez. VI, 24 October 2000, no. 5682.
[94] Tar Lazio, Rome, sec. II, 16 September 1992, no. 1809.

IT tools was functional to simplification[95] of the activity carried out and therefore legitimated the decision to deny the benefits.[96] The Italian Council of State took a different view, deeming the error in filling out the application form to be irrelevant, and emphasizing the fact that the applicant did attach all necessary documentation. Thus, the automatic act denying the benefit was annulled.[97]

The judge of Palazzo Spada held that the examination of the prerequisites relevant to the adoption of administrative decisions may be expedited through the use of computers but cannot be entirely replaced by the use of electronic tools. Certainly, the use of automated systems characterized by a certain rigidity justifies the demand for special attention from private individuals who interact with public authorities by filling in forms or pre-structured models. However, this does not mean that the responsibility of the public body is limited to planning in the best possible way the acquisition of the data necessary for the adoption of the administrative decision, forewarning the interested party of the negative consequences resulting from non-compliance with the formalities that are necessary for the profitable use of automated systems. Indeed, the principle of loyal cooperation between public administration and citizens implies the duty of the administrative case officer to assess, in the investigative phase, the conditions of admissibility, the requirements of legitimacy and the relevant assumptions for the issuance of the administrative decision. This evaluative activity must be performed by the case officer, who has the burden of scrutinizing and correcting errors both inherent in the technological tools employed and made by citizens when using the technical tools through which they are required to interact with the public administration.[98]

3.3.5. *The examination of the legitimacy of the act through the use of inferential techniques*

It is certainly more complex to deduce invalidity relating to the *intrinsic* content of an algorithmic administrative decision. This category includes defects that presuppose scrutiny of the logical procedure followed when the final decision is taken. This occurs both when the motivation behind the decision is subject to review, and when the applied judicial-review techniques require a scrutiny of the administrative activity preceding the adoption of the administrative act subject to judicial review.

Where the defect emerges *ictu oculi* from the analysis of the administrative decision, as previously noted, no particular issue arise. The problems, rather, arise when one seeks to assess the adequacy of the manner in which the administrative function was carried out,[99] without having clear knowledge of how the computer operated and, therefore, how it arrived to the decision formalized in the final act.[100]

The aforementioned difficulties have led part of the case law to consider decision-making algorithms unsuitable for the performance of activities characterised by use of discretionary powers. This is because the devolution of discretionary choices to an algorithm could make it difficult to scrutinise its evaluations, given that the computer would not justify them.[101]

As a result, efforts have been made to anticipate the moment of protection by providing for the establishment of a register of source codes for software agents and other intelligent programs used by public administrations,[102] made available in open format through an accessible list.[103] These

[95] A.G. Orofino, *La semplificazione digitale*, in *Diritto dell'Economia*, vol. 65, issue 3, 87.
[96] Tar Lazio, Rome, sec. III, 16 June 1997, 1354.
[97] Cons. St., Sec. VI, 14 October 1999, no. 1360.
[98] These are arguments taken from Cons. St., sec. VI, 14 October 1999, no. 1360. In terms Cons. St., sec. VI, 27 October 2003, no. 6608; Cons. St., sec. VI, 17 December 2003, no. 8235.
[99] F. Benvenuti, *Eccesso di potere amministrativo per vizio della funzione*, in *Rassegna di diritto pubblico*, 1950, 1.
[100] P. Craig, *Administrative Law*, 9th ed., London, Thomson Reuters, 2021, 245.
[101] Cons. St., sec. VI, 8 April 2019, no. 2270.
[102] F. Bravo, *Contrattazione telematica e contrattazione cibernetica*, Milan, Giuffrè, 2007, 324. More recently see F. Bravo, *A Software di intelligenza artificiale e istituzione del registro per il deposito del codice sorgente*, in *Contratto e impresa*, 2020, 1412.
[103] F. Bravo, *Trasparenza del codice sorgente e decisioni automatizzate*, in *Diritto dell'informazione e dell'informatica*, 2020, 693. On these issues see also I. Martín Delgado, *La aplicación del principio de transparencia a la actividad administrativa algorítmica*, in E. Gamero Casado (ed.), *Inteligencia artificial y*

indications have been endorsed by the *Commission nationale de l'informatique et des libertés*, which has proposed the creation of a national audit platform for algorithms, so as to anticipate the scrutiny of the legal nature of the programs created by implementing audit and verification systems for the software that public administrations will use.[104] This changes the way in which guarantees are granted. In addition to *participatory* and *jurisdictional* safeguards, *organisational* safeguards are added.

And, when the latter are flanked by the former, no issues whatsoever seem to arise. Perplexities emerge, on the other hand, when it is assumed that the anticipatory measures of protection, through the prior screening of algorithms, might lead to a weakening of the other types of guarantees,[105] or even to their suppression.

Critical issues arise from the fact that the legal systems of many democratic countries vigorously emphasize the importance of citizens' judicial guarantees *vis à vis* administrative acts. This is the case of Italy, where the inviolability of the right of defense is emphatically proclaimed in Article 24 of the Constitution. Furthermore, Article 113 of the Constitution always allows judicial protection against acts adopted by public administrations. According to this constitutional provision, such protection cannot be excluded or limited to specific means of appeal or for certain categories of administrative decisions, least of all those adopted through robotic tools.

Participatory guarantees are also becoming increasingly important in Italy. It is well known that the principle of due process, after an initial cautious approach by the Constitutional Court, is gaining increasing importance, even in constitutional caselaw.[106] This has led recent administrative caselaw to reconsider its previous position,[107] and affirm that participatory protections[108] should be granted also with reference to algorithmic administrative activity.[109]

3.3.5.1. *The judicial review of motivation*

One of the inferential techniques used to scrutinise the legitimacy of an act, as is well known, relates to the scrutiny of the motivation.

Historically, Italian legal scholarship considered that the obligation to state reasons would necessarily apply to automatic acts. Indeed, it has been argued that the need for protection is not attenuated when the decision is taken by a computer, given the opacity that the use of algorithms can bring with it.[110] It has also been affirmed that the rule laid down in Article 3 of Law No. 241/1990 applies without exceptions to all administrative acts.[111]

The earliest Italian case law dealt with this issue between the end of the last millennium and the beginning of the current one and showed little consistency. Some judicial decisions held that the use of automated proce-

sector público: retos, límites y medios, Valencia, Tirant lo Blanc, 2023, 131.

[104] See the report of the Commission nationale de l'informatique et des libertés, *Comment permettre à l'homme de garder la main ? Les enjeux éthiques des algorithmes et de l'intelligence artificielle*, 2017, 57, where a national platform for the audit of algorithms is proposed: "Développer l'audit des algorithmes de manière à contrôler leur conformité à la loi et leur loyauté est une solution fréquemment évoquée pour assurer leur loyauté, leur responsabilité et, plus largement, leur conformité à la loi".

[105] E. Barbin, *Le contrôle juridictionnel de l'outil numérique d'aide à la décision administrative*, cit., 1765.

[106] L. Buffoni, *Il rango costituzionale del giusto procedimento e l'archetipo del processo*, in *Quaderni costituzionali*, 2009, 277.

[107] Cf. Cons. St., section VI, 3 November 1998, no. 1517, where it is stated that the rules laid down by law no. 241/1990 are not applicable to automated procedures.

[108] C. Djeffal, *Künstliche Intelligenz in der öffentlichen Verwaltung*, in *Berichte des NEGZ*,, no. 3 2018, 1; J. Valero Torrijos, *The Legal Guarantees of Artificial Intelligence in Administrative Activity: reflections and contributions from the viewpoint of Spanish Administrative Law and Good Administration Requirements*, in *European Review of Digital Administration & Law*, vol. 1, issue 1-2, 2020, 55. On a more general note, see also the interesting volume by E. M. Menéndez Sebastián, *Las garantías del interesado en el procedimiento administrativo electrónico. Luces y sombras de las nuevas leyes 39 y 40/2015*, Valencia, Tirant lo Blanc. 2017.

[109] Cons. St., sec. VI, 13 December 2019, no. 8472.

[110] A. Masucci, *L'atto amministrativo informatico*, cit., 99; A. Usai, *Le prospettive di automazione delle decisioni amministrative in un sistema di teleamamministrazione*, in *Diritto dell'informazione e dell'informatica*, 1993, 163 and spec. 178; A. G. Orofino, *La patologia dell'atto amministrativo elettronico*, cit., 2270; F. Saitta, *Le patologie dell'atto amministrativo elettronico*, cit., 641; D. Marongiu, *L'attività amministrativa automatizzata*, cit., 124.

[111] For an analysis of the constitutional caselaw on the motivation of administrative acts see A.G. Orofino, *La trasparenza oltre la crisi. Accesso, informatizzazione e controllo civico*, Bari, Cacucci, 2020, 77. On the subject see also I.M. Marino, *Giudice amministrativo, motivazione degli atti e "potere" dell'amministrazione* (2003), now in A. Barone (ed.), *I.M. Marino. Scritti giuridici*, vol. II, Naples, Editoriale Sicentifica, 1019.

dures made it superfluous to provide a statement of the reasons underlying the evaluations made, since the use of electronic tools itself would constitute an adequate guarantee as to the legitimacy of the adopted decisions, such as to render the motivation unnecessary.[112] An intermediate position held that a motivation for each single automated act ought not to be required , provided that the act was adopted in compliance with criteria and guidelines established in advance.[113] A third line of case law held that motivation was necessary even for automatic administrative acts. Consequently, it annulled a robotic decision that contained errors of assessment not justified by the administration for lack of motivation, affirming the possibility to use automation only for the adoption of administrative acts that do not require discretionary evaluations or motivations linked to the peculiarities of the actual case.[114] It has in fact been argued that, when the decisions to be taken involve assessments and motivations that are differentiated in relation to the specific features of individual cases, IT tools could only be used as a means of documentation and support for the activity of public administration bodies, but not for decision-making itself.[115]

It is worth pointing out that the difficulties in clarifying and justifying the reasoning behind the decisions adopted on the basis of self-learning algorithms have led some foreign courts to severely limit the use of decision-making tools in the performance of decision-making functions. These include the French Conseil Constitutionnel[116] and the Dutch Council of State.[117] The District Court of The Hague, in a judicial decision dated 2 February 2020, also deemed illegitimate the use of a tax fraud detection system (SyRI), whose operating mechanism lacked transparency as it could not be precisely explained by the authorities employing it.[118] It is also worth noting that both the Slovak Constitutional Court[119] and the German Federal Constitutional Court[120] have identified limits to the use of decision-making information technology, considering it illegitimate when there is a massive and disproportionate reliance on personal data for the purpose of adopting automated decision.

The most recent Italian case law, almost in line with the aforementioned orientations, seems to have taken a very critical attitude towards algorithmic administrative processing. It has repeatedly been affirmed the necessity to motivate even algorithmic acts. From this requirement, it has inferred the uselessness of electronic decision-making tools for the adoption of discretionary administrative decisions, given the inability of the processor to explain the reasons underlying its choices. The latter orientation was upheld, in particular, in the rulings of the Regional Administrative Court of Lazio, concerning the "Buona Scuola" case.[121]

In so ruling, the most recent developments in case law seem to offer a view that partially diverges from earlier interpretations, in which it was affirmed that admissibility of the robotic elaboration of the administrative act does not depend so much on whether or not the function is discretionary, but rather on the possibility (which is however *scientific,* rather than legal), of reconstructing the logical process on the basis of which the act itself can be issued by means of automated procedures.[122] The Italian Council of State has also expressed itself in the same sense.[123]

One way to ensure the explainability of choices could be to proceed to the prior exhaustion of discretion through self-binding[124]

[112] Cons. St., sez. IV, 18 October 2002, no. 5758, where, in a ruling on a military drafted notice, it was stated that the lack of motivation of the precept-card is justified by the automated nature of the service, since it is only and exclusively possible to compare the content of the precept with the so-called office printouts, which are available to the interested parties at the Military Service Districts. Tar Campania, Naples, section II, 9 December 2003, 15135 held otherwise.

[113] Cons. St., sec. IV, ord. 29 September 1998, no. 1537.

[114] Cons. St., sec. VI, 24 October 2000, no. 5682.

[115] Cass., sec. I, 28 December 2000, no. 16204.

[116] Cons. const., 12 June 2018 , no. 2018-765 DC: "Ne peuvent être utilisés, comme fondement exclusif d'une décision administrative individuelle, des algorithmes susceptibles de réviser eux-mêmes les règles qu'ils appliquent, sans le contrôle et la validation du responsable du traitement".

[117] Afdeling Bestuursrechtspraak van de Raad van State, 17 May 2017, ECLI:NL:RVS:2017:1259.

[118] Rechtbank Den Haag, 5 February 2020, ECLI:NL:RBDHA:2020:865, with regard to which see the comment by A. Meuwese, *Regulating algorithmic decision-making one case at a time: a note on the Dutch 'SyRI' judgment*, in *European Review of Digital Administration & Law*, vol. 1, issue 1-2, 2020, 209.

[119] Ústavný súd Slovenskej republiky no. PL. ÚS 25/2019 of 10 November 2021.

[120] Bundesverfassungsgericht, ord. 18 December 2018, No. 1 BvR 142/15.

[121] See above, in para. 3.

[122] Tar Lazio, Rome, sec. III *bis*, 21 March 2017, no. 3742, cited above.

[123] Cons. St., sec. VI, 4 February 2020, no. 881. See also Cons. St., sec. VI, 8 April 2019, no. 2270

[124] D. Marongiu*, L'attività amministrativa*

and predetermination of decision-making criteria that reset to zero or substantially reduce discretionary power.[125] Self-binding measures are employed, for example, in competitive selection procedures in which the predetermination of evaluation rules results in the annulment of discretionary power. According to Italian case law, this renders superfluous the subsequent justification of acts when they find in the self-limiting measure the justification for the choice made by "gradual formation".[126] This is a solution proposed in Germany[127] where, given a legal provision on administrative procedure that severely limits recourse to automation in the presence of discretionary acts,[128] it is considered legitimate to robotize functions when discretion has been exhausted "upstream" by the public administration through a self-binding act.[129] In this regard, however, it would seem appropriate to highlight that Article 39 of the Verwaltungsverfahrensgesetz allows the omission of the motivation in the case of automated administrative acts, when the circumstances of the specific case make such motivation superfluous.[130]

In reality, the need for explainability of the choices made by artificial-intelligence systems is not only a concern felt among legal scholars. Also computer-science scholars acknowledge the need to overcome the structural opacity that characterizes certain decision-making tools by. Indeed, one of the most advanced fields of research is that of *explainable AI*,[131] which aims to make intelligible the solutions chosen by complex algorithms,[132] thereby enabling their human scrutiny.[133]

3.3.6. *Toward a new symptomatology of robotic acts: the adequacy of the tool as a validity requirement for the algorithmic act*

The issue of the invalidity of automated acts can also be declined with regard to the adequacy of the tools used by public administrations. The problem may *actually* arise in relation to the specific case conducted with means that are suspected to be inadequate. It may also *abstractly* arise when the use of tools and software is mandated and their deployment was subject to a prior evaluation and authorization.

It can certainly be stated that the adequacy of the *decision-maker* with respect to the decision to be taken is not a new issue, as it has long been explored even with regard to human decision-makers.[134] The issue of the

automatizzata, cit., 69.

[125] P.M. Vipiana, *L'autolimite della pubblica amministrazione. L'attività amministrativa fra coerenza e flessibilità*, Milan, Giuffré, 1990.

[126] A. Police, *Trasparenza e formazione graduale delle decisioni amministrative*, in *Diritto amministrativo*, 1996, 229.

[127] C. Fraenkel-Haeberle, *Fully digitised administrative procedures in the German legal system*, in *European Review of Digital Administration & Law*, vol. 1, issue 1-2, 2020, 105; E. Buoso, *Fully automated administrative acts in the German legal system*, *ivi*, 113.

[128] In this sense, see Paragraph 35.a of the Verwaltungsverfahrensgesetz (VwVfG), on: "Vollständig automatisierter Erlass eines Verwaltungsaktes", which expressly provides that: "Ein Verwaltungsakt kann vollständig durch automatische Einrichtungen erlassen werden, sofern dies durch Rechtsvorschrift zugelassen ist und weder ein Ermessen noch ein Beurteilungsspielraum besteht". On this topic see A. Berger, *Der automatisierte Verwaltungsakt. Zu den Anforderungen an eine automatisierte Verwaltungsentscheidung am Beispiel des par. 35a VwVfG*, cit., 1260. See also the volume of R.-M. Polomski, *Der automatisierte Verwaltungsakt Die Verwaltung an der Schwelle von der Automation zur Informations- und Kommunikationstechnik*, Duncker & Humblot, Berlin, 1993. On this point, however, it is worth mentioning that a very different solution was adopted for automation in tax matters, as can be seen from Section 88(5) and Section 155(4) of the Abgabenordnung.

[129] M. Martini and D. Nink, *Subsumtionsautomaten ante portas? - Zu den Grenzen der Automatisierung in verwaltungsrechtlichen (Rechtsbehelfs-) Verfahren*, in *Deutsches Verwaltungsblatt*, 2018, 1128 and spec. 1130: "Einen Grenzfall zulässiger Vollautomatisierung i. S. d. § 35a VwVfG markieren ermessenslenkende Verwaltungsvorschriften. Wenn sie den grundsätzlich bestehenden behördlichen Ermessensspielraum im Wege der Selbstbindung (Art. 3 Abs. 1 GG) auf Null verengen, belassen sie einer Software im Ergebnis faktisch keine Wertungsaufgaben mehr".

[130] Section 37(2)(3) states: "(2) Einer Begründung bedarf es nicht, [...] (3) wenn die Behörde gleichartige Verwaltungsakte in größerer Zahl oder Verwaltungsakte mit Hilfe automatischer Einrichtungen erlässt und die Begründung nach den Umständen des Einzelfalls nicht geboten ist".

[131] F. Cabitza, A. Campagner, G. Malgieri, C. Natali, D. Schneeberger, K. Stoeger and A. Holzinger, *Quod erat demonstrandum? - Towards a typology of the concept of explanation for the design of explainable AI*, in *Expert Systems With Applications*, vol. 213, Part A, 2023, 118888.

[132] T. Miller, *Explanation in artificial intelligence: insights from the social sciences*, in *Artificial intelligence*, 2019, vol. 267, 1.

[133] B. Mittelstadt, C. Russell and S. Wachter, *Counterfactual explanations without opening the black box: automated decisions and GDPR*, in *Harvard journal of Law & Technology*, 2018, vol. 31, no. 2, 841; A. Deeks, *The judicial demand for explainable artificial intelligence*, in *Columbia Law Review*, 2019, vol. 119, 1829.

[134] J. Barthelemy, *Le problème de la compétence dans la démocratie*, Paris, F. Alcan, 1918.

skills possessed by those who work for public administrations is of such importance that it has also been taken into consideration by the Italian Constitution, to the extent that the Constitutional Court itself has emphasized the necessity for those who perform public functions to have professional skills and educational qualifications appropriate to the activities they are required to perform.[135] The issue has also arisen with reference to *ad hoc* bodies, such as evaluation committees, where specific expertise in disciplines consistent with those of the competitive examinations has been demanded.[136] It is, therefore, essential that those acting on behalf of public entities possess adequate capabilities in relation to the decisions to be made.

When the issue of competence is declined with reference to human actors, it is resolved through a *a priori* assessment (carried out at the time of recruitment) of the experience and skills of those selected to perform public functions – especially where the roles are not filled through the electoral process.

When moving to automated administration, the problem of the decision maker's adequacy comes up again with new nuances and renewed articulation. Adequacy is not so much to be seen in terms of the possession of sufficient cultural and professional competence with respect to the performance of the assigned tasks. Rather, it must be appreciated with reference to the computational characteristics of the computing system employed by the administrations, in light of the specific tasks it is expected to carry out.

As briefly mentioned above,[137] the reflection on the adequacy of algorithms can be approached from different perspectives.

First of all, a distinction can be made based on the *type* of functions performed by the public administration, distinguishing between authoritative and non-authoritative functions. In the field of public services, in particular, the use of robots tends to be less sensitive,[138] except in cases where the performance of certain services directly affects the safeguarding of rights that enjoy special constitutional protection, such as the right to privacy[139] or the right to health.[140] For example, no particular concerns seem to arise in relation to the use of software programs for the automated management of traffic light timing[141] or traffic regulation.[142] More significant issues, on the other hand, might arise when algorithms are used for the management of facial recognition systems or the management of emergency medical calls: it is no coincidence that the AI Act contains a special discipline for such systems.[143]

A further classification criterion can be proposed based on the absence or existence of discretion in the performance of the functions delegated to the machine.[144]

Another differentiation can be made with reference to the type of algorithms used: the uncertainties posed by non-deterministic algorithms are certainly fewer than those posed by deterministic ones.[145]

A further distinction can be made based on

[135] *Ex multis*, see C. cost., 15 maggio 1974, n. 131; C. cost., 23 luglio 1993, n. 333. In this regard, see R. Cavallo Perin, B. Gagliardi, *La dirigenza pubblica al servizio degli amministrati*, in *Riv. trim. dir. pubbl.*, 2014, 309, who recall that those entrusted with public functions have the duty to perform them with discipline and honour (Article 54 of the Constitution), being at the exclusive service of the Nation (Article 98 of the Constitution).

[136] Cons. St., sec. II, 4 June 2020, no. 3542.

[137] See para. 1.

[138] D. Marongiu, *Inteligencia artificial y administración pública*, in García Novoa and Santiago Iglesias (eds.): *4ª Revolución industrial: impacto de la automatización y la inteligencia artificial en la sociedad y la economía digital*, Cizur Menor, 2018, 395. On this topic see also G. Gallone, *L'improcrastinabile esigenza di tracciare una via "italiana" per l'intelligenza artificiale nel procedimento amministrativo. Opportunità e legittimità di un intervento regolatorio nazionale a corredo dell'AI Act*, forthcoming in *Giustizia insieme.*

[139] See the decision in France by Cons. const., 17 May 2023, no. 2023-850 DC.

[140] F. Cimbali, *La governance della sanità digitale*, Padua, Cedam, 2023.

[141] T. Fischer, *Geschäftsprozessoptimierung im Rahmen des E-Government*, in A. Bortfeldt, J. Homberger, H. Kopfer, G. Pankratz and R. Strangmeier (eds.), *Intelligente Entscheidungsunterstützung. Aktuelle Herausforderungen und Lösungsansätze*, Wiesbaden, Gabler, 2008, 315.

[142] P. Gräfe, L.M. Wehmeier, J. Bogumil and S. Kuhlmann, *Digitalisierung der Verwaltung in Deutschland. Zwischen Anspruch und Wirklichkeit*, Baden Baden, Nomos, 2024.

[143] L. Cotino Hueso and P. Simón Castellano (eds.), *Tratado sobre el Reglamento de Inteligencia Artificial de la Unión Europea*, Las Rozas, Aranzadi, 2024; Huergo Lora (ed.), *The EU Regulation on Artificial Intelligence: A Commentary*, Padua, Cedam, 2025.

[144] A. Tischbirek, *Ermessensdirigierende KI. Zum Einsatz intelligenter Systeme in der ermessensermächtigten Verwaltung*, in *Zeitschrift für das gesamte Datenschutzrecht*, 2021, 307.

[145] M. Martini, *Blackbox Algorithmus - Grundfragen einer Regulierung Künstlicher Intelligenz*, Berlin, Springer, 2019.

the role played by the processor: whether it merely assists in decision-making or replaces the human in the choice of solution to be adopted.[146]

In the four classificatory hypotheses outlined above, the distinction is made on the basis of an assessment formulated *ex ante*. That is to say, it was made on the basis of preliminary parameters, leaving aside a concrete analysis of the system actually employed.

However, for the purposes of determining the validity of the adopted act, it seems advantageous for the evaluation to be done also *ex post*, i.e. through the judge's scrutiny of the actual soundness of the individual programme. This scrutiny is obviously rendered exceedingly difficult by the need to carry out a technical analysis, involving disciplines in which the judge lacks expertise and, therefore, cannot deliver a reliable judgement.[147]

It has been held, in fact, that judicial review of software programmes cannot be excluded outright. However, this presupposes that the claimant puts forward specific objections and submits actual evidence aimed at proving that the alleged inadequacy of the software system has had prejudicial consequences for him/her.[148] In the absence of such allegations and evidence, the request for the appointment of a technical expert to verify the functioning of the automated system would resolve itself into an inadmissible attempt to review the administrative decisions.[149] And it is also for the aforementioned reason that administrative case law, when faced with the issue, has tended to hold that the public administration's decision to rely on automated procedures to carry out administrative action is not challengeable in court. Insofar as it pertains to the exercise of discretionary functions, the decision to adopt a decision-making IT system has generally been considered to fall outside the scope of judicial review, except in cases of manifest illogicality of the choices made.[150]

In the presence of objections and actual evidence regarding the malfunctioning of the system, the judge must appoint an expert capable of understanding the technical tools' mode of operation. Mere empirical observations carried out by the court through an analysis of the choices made by the system are not sufficient for this purpose.[151] That is, unless the pathological profiles are so obvious as to make the technician's intervention unnecessary. Accordingly, it has been held to be unlawful, as being irrational, to use computer systems to correct the papers produced by candidates in public employment competition where the evaluation process requires complex logical reasoning, since such processes, at the state of technical knowledge, could not be programmed in a computer, but could only be carried out by the human brain.[152] Similarly, unlawfulness could arise from the obsolescence and inadequacy of the software and hardware used.[153]

3.3.6.1. *Calibration and type approval*

The increased importance of technical tools and the difficulty of proving their malfunctioning prompted the legislator to anticipate

[146] It may be useful to note that German scholarship draws a distinction, regarding legal prerequisites, between fully automatic administrative decisions and administrative decisions adopted with the aid of automatic measures. Only in the former case would the provisions of Section 35.a of the Verwaltungsverfahrensgesetz be applicable: U. Stelkens, *Der vollständig automatisierte Erlass eines Verwaltungsakts als Regelungsgegenstand des VwVfG*, cit, 81, where it is said: "Es besteht Einigkeit, dass der Begriff des „vollständig durch automatische Einrichtungen erlassenen Verwaltungsakts " des § 35a VwVfG nicht mit dem in § 28 Abs. 2 Nr. 4, § 37 Abs. 5 und § 39 Abs. 2 Nr. 3 VwVfG einheitlich verwendeten Begriff des „mit Hilfe automatischer Einrichtungen erlassenen Verwaltungsakt" deckungsgleich ist. Nicht jeder „mit Hilfe automatischer Einrichtungen erlassener Verwaltungsakt" i. S. des § 28 Abs. 2 Nr. 4, § 37 Abs. 5 und § 39 Abs. 2 VwVfG ist i. S. des § 35a VwVfG zugleich „vollständig durch automatische Einrichtungen erlassen" (cit., 85). However, it should be noted that human review of the computational outcome is not always effective nor, in some cases, practically feasible. In particular, human control tends to be reduced to a mere formal fulfilment when algorithmic solutions are generated through the processing of such a mass of data as to make substantial and conscious scrutiny impossible for the civil servant. On these issues see G. Gallone, *Riserva di umanità e funzioni amministrative*, cit., 165.

[147] V. Cons. St., Sec. VI, 7 May 2001, no. 2531

[148] Cons. St., section VI, 23 November 1994, no. 1687; Cons. St., section VI, 24 October 2000, no. 5682; Tar Puglia, Bari, section I, 30 June 2001, no. 2623.

[149] Cons. St., sec. VI, 6 February 2001, no. 2383.

[150] Cons. St., sec. VI, 26 June 1998, no. 1027; Tar Marche, 26 February 1999, no. 236.

[151] Cons. St., sec. VI, 3 February 1995, no. 152.

[152] Tar Campania, Naples, sec. I, 26 October 1992, no. 333.

[153] Tar Sicilia, Palermo, 30 April 1996, no. 468, which, however, excludes that in the case before the court there was the claimed obsolescence.

the adequacy of the instruments used.

In the field of traffic control systems, for instance, this is achieved through the prior approval and subsequent periodic calibration of the models used to make certain assessments, which are preliminary to the adoption of administrative acts. Consider, for example, the use of speed cameras to detect the speed of passing vehicles. The Constitutional Court has deemed legitimate the use of radar speed-detection devices only where their reliability is ensured by periodic calibration procedures, since such instruments physiologically tend to malfunction directly proportionate to the time element.

Evident is the compression of the legal positions of the citizens affected by automated speed cameras. Notwithstanding the probative value of the measurements made by the speed cameras,[154]equally evident is is the difficulty for the individuals concerned to provide counterevidence that would demonstrate possible error made by the device in carrying out a measurement (of the speed of the vehicle) that is, by its very nature, unrepeatable. The aforementioned compression is therefore acceptable only when it is possible to retain a reasonable reliance on the functionality of the device, which presupposes periodic calibrations and constant checks on the radar's functioning.[155] Consequently, the performance of recurrent checks on the device used for the automatic ascertainment of a fact constitutes a requirement for the validity of the administrative act adopted as a result of the machine's detection.[156]

In a different context, it has been held that the use of tools based on automated measurement systems, employed to evaluate candidates' performance in competitive procedures for the recruitment of firefighters, requires specific safeguards. Such tools must be previously verified by authorized entities in order to ascertain their type approval, calibration, correct installation and full functioning. This is because the way tests are conducted affects a fundamental right, such as the candidates' right to work.[157]

3.3.6.2. *Platforms certification*

Another instrument for the preliminary attestation of the quality of the systems used consists in the certification of the platforms employed to perform certain functions.

This system was recently transposed by the Italian Public Procurement Code, which established that the platforms used by contracting authorities to conduct public tenders must be certified by the Agenzia per l'Italia Digitale. It will be up to Agid to certify compliance with technical standards established by Agid itself in agreement with Anac, the Presidency of the Council of Ministers, Department for Digital Transformation, and the National Cybersecurity Agency.[158]

The problem with such forms of certification lies in the fact that the certifying authority, in order to be able to make a reliable judgement as to the platform's trustworthiness, should be able to thoroughly scrutinise how it operates. This means having access to the source code of the software that powers such platforms, in order to fully examine the logic underlying their functionality. However, this does not seem to take place.

3.3.6.3. *The lack of quality of the data used as an indicator of the unlawfulness of the administrative act*

Finally, a profile of unsuitability could derive from the poor quality of the data used by automated systems.[159] This presupposes that the lack of quality is clearly identifiable, or that the system uses data other than those previously indicated in certain administrative or regulatory acts which precisely define the data source from which a given AI system must draw.[160]

A similar form of inadequacy, referring to the automated systems previously used by the Inps, was inferred from the incompleteness of the company archive used by the Institute.

[154] See Article 45(6) and Article 142(6) of Legislative Decree no. 285 of 30 April 1992.
[155] C. Const., 18 June 2015, no. 113.
[156] Cass., sec. II, 30 October 2023, no. 30126.
[157] Cons. St., sec. III, ord. 1 December 2023, 4857.
[158] See Art. 26 of Legislative Decree no. 36 of 31 March 2023.
[159] On this topic see the contributions published in F. Bravo, J. Valero Torrijos (eds.), *Data Governance, Open Data and Data Protection in the Public Sector*, in *European Review of Digital Administration & Law*, vol. 3, Iss. 2, 2022, 5. See also R. Dagostino, *La gestione dei dati nell'era digitale: un difficile equilibrio fra esigenze di sicurezza, trasparenza e solidarietà*, in *Persona e amministrazione*, vol. 1, 2024, 555.
[160] M. Martini, *Do it yourself im Datenschutzrecht. Der „GeoBusiness Code of Conduct" als Erprobungsfeld regulierter Selbstregulierung*, in *Neue Zeitschrift für Verwaltungsrecht Extra*, vol. 35, 2016, 1.

According to a well-known decision of the Court of Auditors, the failure to update this archive would have fueled the phenomenon of tax evasion, affected the timely recovery of the corresponding credits and the failure to update insurance positions. All of this would have made it possible to make undue disbursement of benefits, resulting in financial damage to the public treasury.[161]

4. *Concluding remarks*

Having reached the end of the analysis, it is appropriate to propose some concluding remarks. The path traced thus far has highlighted how the use of automated systems in administrative action raises particularly complex issues, not only in terms of the efficiency of public action,[162] but also in relation to the judicial reviewability of the acts thus generated and the necessary protection of the legal positions involved. The issues highlighted transversally invest the entire system of public law, and their resolution appears destined to significantly affect the future configuration of this branch of the legal system.

The close relationship between the evolution of administrative law and scientific and technological progress has already been emphasized in the introductory paragraph. The sphere - in many ways, still undefined - of judicial review of algorithmic administrative acts does not escape this dynamic.

The basic demands, linked to the protection of fundamental rights, compliance with the principle of legality and the achievement of good administration, remain unchanged. However, the instruments through which they may be pursued are evolving, as do the pathologies that need to be remedied.[163]

It is within this framework that the technical and conceptual innovations introduced by artificial intelligence into administrative law must be welcomed, with the necessary caution but also with an open mind. The role of the legal scholar also consists in adapting established legal categories to new and unprecedent contexts, without abdicating the fundamental principles of the rule of law.[164] So that even "algorithmatisation" may be directed towards fulfilling the "great task in which the administration participates: to serve humanity".[165]

[161] Court of Auditors, sec. contr., 11 July 1989, no. 2038.

[162] L. Guggenberger, *Einsatz künstlicher Intelligenz in der Verwaltung*, in *Neue Zeitschrift für Verwaltungsrecht*, 2019, 844.

[163] On the risks and opportunities of algorithmic administration see, also for further bibliographical references, C. Coglianese and D. Lehr, *Regulating by Robot: Administrative Decision Making in the Machine-Learning Era*, in *The Georgetown Law Journal*, vol. 105, 2017, 1147.

[164] Notes S.C. Morse, *When Robots Make Legal Mistakes*, in *Oklahoma Law Review*, vol. 72, 2019, 213 and spec. 218 that "the function of explainability - or not - in the development of the law created by robots still deserves further study".

[165] These are the words of U. Allegretti, *Amministrazione pubblica e Costituzione*, Padua, Cedam, 1996, 11. On the subject, see E. Menéndez Sebastián, *La administración al servicio de la justicia social*, Madrid, Iustel, 2016. See also A.G. Orofino, *La solidarietà in diritto amministrativo: da strumento di protezione dell'individuo a parametro di disciplina del rapporto*, in *Diritto dell'Economia*, vol. 102, no. 2, 2020, 571.