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ARTICLE

The Administrative Precautionary Approach at the Time of Covid-19: The Law of Uncertain Science and the Italian Answer to Emergency

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The health emergency linked to Covid-19 brought to the fore the problem of the usefulness and correct application of the precautionary principle. In the paper proposed for the call, the topic will be analyzed starting from the foundations of the precautionary principle, to see consequently how it must be 'handled' in practice when the Administration (in the Italian fight against the pandemic, the Government, but also the Regions) is called to decide in contexts of health crisis. Particular attention will be paid, just from the beginning, to the relationship between science and Public Administration, in order to demonstrate how the precautionary approach represents a 'rule of action' for the public decision-maker when there is no full scientific certainty. In this perspective, the analysis will be developed starting from the definition of a general context: that one represented by the so-called 'irreducible uncertainty.' This premise will be the starting point to define a law of uncertain science,' which 'follows' the facts and is characterized for its flexibility. The problem will then be reported to the administrative decisions, called in emergency times to be 'adaptive' and reviewable. The reflection on precaution 'in action' will have the Italian case as an observation 'laboratory.' In this perspective, the investigation will be conducted by looking at the 'answer' of the Italian legal system to the emergency related to Covid-19. This will lead to see if the precautionary approach has been taken seriously by the Italian Administration and, subsequently, what characters have taken the measures to fight against the spread of the Coronavirus outbreak. In conclusion, it will be necessary to understand whether the 'postulates' of precaution 'in the books' have been translated into an adequate precaution 'in action.' In other terms, the attention will be focused on two different aspects: the first related to the 'time' of the action; the second to the content of the measures taken to fight against the spread of the virus. This will allow us to understand if the Italian Government acted promptly (in compliance with the precautionary approach) and what was the decisionmaking process that brought to these measures.

Keywords: precaution in the books and in action; Covid-19; administrative powers; non-reducible uncertainty; law of uncertain science; adaptive decisions in time of crisis; Italian answer to emergency; timeliness of action

1. Introduction

The health emergency linked to Covid-19 brought to the fore the problem of the usefulness and correct application of the precautionary principle. In this paper the topic will be analyzed starting from the 'foundations' of the precautionary principle, to subsequently see its relevance in action. Particular attention

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¹ See A. Trouwborst, *Evolution and status of the precautionary principle in International Laws* (Kluwer Law International 2002); Lila Antonopoulou and Philip Van Meurs, 'The precautionary principle within European Union public health policy' (2003) 66(2) Health Policy 179; Francesco De Leonardis, Il *principio di precauzione nell'amministrazione di rischio* (Giuffrè 2005); Rosario Ferrara, 'I principi comunitari per la tutela dell'ambiente' (2005) 3 Diritto amministrativo 509; and more recently the researches of Adrian Vermeule, *The Constitution of Risk* (Cambridge University Press 2013), 3; Marta Simoncini, 'Disaster risk regulation in the European Union: the path to resilience' in Alexia Herwig and Marta Simoncini (eds.) *Law and the management of disasters: the challenge of resilience*

will be paid to the relationship between science and Public Administration,² to demonstrate how the precautionary approach represents a 'rule of action' for the public decision-maker when there is no full scientific certainty.³

In this perspective, the investigation will be conducted also by looking at the 'answer' of the Italian legal system to the emergency related to Covid-19.⁴ This will lead to see if the precaution has been taken seriously by the Italian Administration and,⁵ subsequently, what characters have taken the measures to fight against the spread of the outbreak. More specifically, in this paper, the general reference to the Public Administration will be used wanting to include in this notion the set of Institutions (Government at a central level and Regions at a local level) that have found themselves to face Covid-19. In this perspective, the reference to the Administration is to be understood as the public decision-maker in the face of the pandemic phenomenon:⁶ for this reason the analysis will not focus on individual measures, but on a 'model' of action that emerges from the reaction to the Coronavirus, to understand if the precautionary principle has been correctly understood and applied.⁷

2. The basic elements of the precautionary approach: law in the books

The precautionary 'approach' has been defined with regard to the environmental and health protection at the International perspective.⁸ Its prediction was traced back by the 1992 Rio de Janeiro Declaration on environment and development.⁹ The principle n. 15 of the Declaration states that 'in order to protect the environment the precautionary approach shall be widely applied by States according to their capabilities.' It is specified that 'where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.' ¹⁰

This definition of precaution gives to the interpreter the idea of a principle which is graven 'in the books' with reference to some basic elements:^{11–12} risk of a serious and irreversible damage; lack of absolute scientific certainty; need for action; cost-benefit analysis.¹³ A fact that can no longer be doubted is that the precautionary approach cannot be limited to the environmental 'problem.' In a wider perspective,

⁽Taylor & Francis 2017); and also Marta Simoncini, *La regolazione del rischio e il sistema degli standard* (Editoriale Scientifica 2010), 57 on the theme of the foundation of the concepts of risk and danger and the consequent regulation of those different situations;

² See on this theme e.g. Rosario Ferrara, 'Il principio di precauzione e il "diritto della scienza incerta": tra flessibilità e sicurezza' in *Scritti in onore di Franco Gaetano Scoca* (Università degli Studi di Parma 2020).

³ In particular Vermeule (n1) 52, highlights the profile of the inadequacy of the precautionary principle. The criticism focuses on the consideration of a 'strong' version of the precautionary principle, which leads to the adoption of administrative measures that paralyze all actions. If this interpretation is followed (as the Author points out), the precautionary principle is only the expression of a limit and is not intended to be effective. The best way to regulate risk is therefore to avoid too rigid and almost obsessive visions and instead allow greater flexibility in dealing with the full range of risks.

⁴ The reason of this choice is due to the fact that Italy represents a 'special case' because of the fact that the Covid-19 outbreak 'spiralled upwards earlier and more severely than elsewhere in Europe, reaching a high mortality rate and creating the conditions for the public healthcare system's collapse' (in this sense Donato Vese, 'Managing the Pandemic: the Italian Strategy for Fighting COVID-19 and the Challenge of Sharing Administrative Powers' [2020] Eur. Jour. Risk Reg. 1).

⁵ Reference has been made to a 'failure' of public Institutions, due the incorrect application of the Precautionary Principle as a 'guiding decision rule' to be applied to face the Coronavirus (see Marcello Basili, 'L'epidemia di CoVid-19: il principio di precauzione e i fallimenti istituzionali' [2019] 3 Mercato concorrenza regole 475).

⁶ Following the distinction of Vermeule (n1), 49, we have two kinds of risks: first and second order risks (such as those of a political nature that the constitution is called upon to regulate). The first-order risks are represented by wars, diseases and other social damages. In particular, the author refers to 'fat tail' risks, which are unlikely to materialize, but if they materialize, they are extremely harmful, as in the case of a pandemic. These words of the Author, even if written seven years before the outbreak of the pandemic crisis from Covid-19, can be applied without doubt to this one.

⁷ See Alberto Alemanno (eds), *Governing Disasters: The Challenges of Emergency Risk Regulation* (Edward Elgar 2011), with particular regard to emergency regulation like action undertaken in the immediacy of a pandemic to mitigate its impact.

⁸ See Raffaella Dagostino, 'The spillover rule of the administrative Court to increase resilience', (2019) 29 Rivista Italiana Diritto Pubblico Comparato 1 51, who speaks about precaution as a 'modus procedendi' for the public decision-maker.

⁹ The Rio Declaration contains a set of principles which are the basis of Environmental Law (https://doi.org/10.1007/978-1-4020-9160-5_648 accessed 9 July 2021).

¹⁰ Simoncini, *La regolazione del rischio* (n1) 71, noted how risk regulation is complicated by the fact that 'structurally elusive' situations have to be faced; in these situations not even science is able to formulate conclusive judgments.

We want to take up in this paper the dichotomy outlined in the well-known article by Roscoe Pound, 'Law in books and Law in action' (1910) 44 Am. Law Rev. 12, which has been more recently studied by Jean-Louis Halpérin, 'Law in Books and Law in Action: The Problem of Legal Change' (2011) 64 (1) Maine Law Rev 45.

¹² See Neil A. Manson, 'Formulating the precautionary principle' (2002) 24 (3) Environmental Ethics 263.

¹³ See David M. Driesen, 'Cost-benefit analysis and the precautionary principle: can they be reconciled?' [2013] Mich. St. Law Rev. 771.

the European jurisprudence has long clarified that the precautionary principle has a general value in the European Community Law:¹⁴ it entails an obligation for public Administrations to take adequate measures to deal with health, safety and environmental risks.¹⁵

In such a perspective we can say that the precautionary principle has been the subject of particular attention by the European Court of Justice (ECJ) in all cases where it was necessary to deal with a risk situation. A common feature of ECJ's case-law on the precautionary principle is the special attention paid to the conditions for applying precautionary measures. The 'justification' of the precautionary action in many cases has been identified in the fact that such a principle has a special value: it provides that where there are uncertainties about the existence or extent of risks to human health, protective measures may be taken without waiting for the actual existence and seriousness of such risks to be fully demonstrated. The idea that emerges from ECJ's jurisprudence is therefore that of the precautionary principle as a 'principle of action' addressed to the Public decision-makers in all cases where there is a threat of imminent harm, without scientific certainty.

The first and basic requisite to refer to precaution is represented, as mentioned, by a risk of a 'serious' and 'irreversible' damage associated to a particular situation. From this point of view, the logic of the precautionary principle is that which leads to an anticipation of the protection threshold.¹⁹ There is an idea which is at the basis of the precautionary principle: the irreversibility of the damage derives from the fact that it cannot be repaired *ex post*. It is not possible to resort to forms of subsequent correction of the damage once it has occurred. But at the same time it is not possible to proceed with a mitigation of the damage (as it happens in the case of preventive action).²⁰

In other terms, at the basis of the precautionary action there is the awareness of a risk of damage that is not 'acceptable,'21 and for this reason it must be stopped immediately.22 In conclusion, the precautionary principle ends up determining a paradigm shift: from the 'wait and see' model we move to an approach based on the idea of maximum caution expressed by 'better safe than sorry'.23

It can be said that such a 'serious and irreversible' risk has manifested itself with regard to the epidemic of Covid-19:²⁴ its 'birth' in China was associated from the beginning with an uncertainty.²⁵ We found ourselves faced with a new and unknown virus, whose lethality soon became visible and its effects manifested

¹⁴ See Nicolas de Sadeleer, Environmental Principles. From Political Slogans to Legal Rules (Oxford University Press 2005) 200.

¹⁵ See, as an example, in this perspective Case T-74/00 DEP *Artegodan v Commission* EU:T:2006:286 where there is a reference to the need to make the protection of these interests prevail over the economic ones.

¹⁶ See, for example, more recently Case C-111/16 *Fidenato* EU:C:2017:676, which expressly refers to provisional risk management measures that can be taken on the basis of the precautionary principle.

Such an idea emerges, for example, just from the first ECJ rulings on the precautionary principle. In this perspective it is possible to mention, with regard to GMOs question, the well-known judgment Case C-236/01 Monsanto EU:C:2003:431, [2003] ECR I-08105. And most recently Case C-41/02, EU Commission v Netherlands EU:C:2004:762, [2014] ECR I-11375 where it is affirmed that the precautionary principle justifies the adoption of restrictive measures where it is impossible to determine with certainty the range of a risk due to the insufficient and imprecise nature of the results of the studies carried out, but the likelihood of real damage to human or animal health or to the environment persists in the event that the risk is realised.

¹⁸ See, as an example in this precise perspective, Case C-157/14 Neptune Distribution EU:C:2015:823.

¹⁹ See Fabrizio Fracchia, Enviromental Law. Principles, Definitions and Protection Models (Napoli Editoriale scientifica 2015).

See, for the distinction between precaution and prevention, A. Trouwborst, 'Prevention, Precaution, Logic and Law: The Relationship between the Precautionary Principle and the Preventative Principle in International Law and Associated Questions' (2009) 2 (2) Eras. Law Rev 105.

²¹ See Matthew D. Adler, 'Fear Assessment: Cost-Benefit Analysis and the Pricing of Fear and Anxiety' (2004) 29 Administrative and Regulatory Law News 4, who dwells on the theme of 'fears' of public opinion and on the 'price' of fear and anxiety in relation to the choices of the public decision-maker.

²² See Maurizio Cafagno, Principi e strumenti di tutela dell'ambiente (Giappichelli 2007), 262, where it is specified that the precautionary method poses the impossibility of waiting for the damage to be certain, in a context in which scientific uncertainty could lead to the choice of post-poning the intervention of the public decision-maker.

²³ Cass R. Sunstein, Laws of fear. Beyond the precautionary principle (Cambridge University Press 2003).

In this perspective, with particular regard to the Covid-19 pandemic context, it is important to underline the different point of view developed by F. Follieri, 'Precaution, prevention and rule of law during the covid-19 emergency' [2020] 2 Persona e amministrazione 81. The Author argues that 'the Covid-19 pandemic is a danger, not a risk: enough is known of how the virus spreads and how to slow down or stop the spread. Thus, the administrative measures to manage the Covid-19 pandemic are preventive, not precautionary measure.'

²⁵ We can refer to unknown and unimaginable diseases, whose appearance is so unpredictable and rare to be able to be associated with the birth of a 'black swan,' following the image of Nassim N. Taleb, *The Black Swan* (Penguin Books 2010).

themselves in irreversible terms for human health.²⁶ This virus was surrounded by an overall uncertainty that covered several aspects:²⁷ its origin, the way of its transmission, the necessary remedies to fight against it. For this reason it is now necessary to reflect on the second basic element of the precaution, which can be defined as the theme of non-reducible uncertainty.²⁸

3. Non-reducible uncertainty and uncertain science law in the case of Covid-19

The definition of the precautionary approach connects together the risk of a 'serious' and 'irreversible' damage and a situation of scientific uncertainty. This means that it is impossible, in the face of the scientific data 'available,' to clearly demonstrate (absoluteness) the causal relationship between a fact and an event: for this reason it is recognized that in such cases the causal link is, in all or in part, uncertain, doubtful or obscure.²⁹

The health emergency we have experienced with Covid-19 has brought to the fore the problem of the relationship between science, Administration and politics.³⁰ The dramatic situation we have experienced clearly demonstrates the impossibility of science to offer in any case univocal solutions, capable to identify a clear answer for a health problem. The expression that, better than any other, is able to grasp the meaning of this imperfect character of scientific knowledge is that of an 'uncertain science.'³¹ But what is meant by this expression? It can be said that it expresses the unstable and changeable character of science, its being subject to changes and adaptations in the sign of the continuous evolution of knowledge.³² This uncertainty can be appreciated both on a subjective and on an objective level.

On a subjective level, this character derives from the non-neutrality of science and its operators, from its being strongly permeated by a plurality of instances that correspond to different 'values.'³³ On an objective level, scientific uncertainty is closely connected to a set of factors that contribute to determine its extremely relative and changing nature.³⁴ We can qualify these factors referring to two general paradigms: complexity and non-uniqueness: the reference to these two factors leads us to define the unitary concept of 'irreducible ignorance.'³⁵

First of all, the growing complexity must refer to the factual context, especially with regard to the non-homogeneity of the concrete situations to be faced.³⁶ The idea, proposed by the most modern sociology, of a 'risk society' demonstrates how the same concept of risk is connected with contexts characterized by

- In this direction, it must be recognized that the scientific data available and also the statistics on the spread of the virus were not predictive with regard to what the situation would be in the short and medium term, after the outbreak of the pandemic in China (as observed by Cheng-Cheng Zhu, Jiang Zhu, 'Spread Trend of COVID-19 Epidemic Outbreak in China' (2020) 17(4) Mathematical Biosciences and Engineering 3062).
- In this case the uncertainty has manifested itself in its deepest meaning, which coincides with a situation of doubt on the reliability, accuracy or relevance of a set of information related to Covid-19. The theme has been addressed in its widest dimension by Michael D. Rogers, 'Scientific and Technological Uncertainty, the precautionary principle, scenarios and risk management' (2001) 4(1) Jour. Risk Reg. 1.
- ²⁸ As a particular declination of uncertainty (see, in general, Terje Aven, 'On different types of uncertainties in the context of the precautionary principle' [2011] 31[1] Risk anal. 1515).
- ²⁹ In this perspective, for example, François Ewald, 'Philosophie politique du principe de précaution' in François Ewald, Christian Gollier & Nicolas de Sadeleer (eds), d *Le principe de précaution* (Presses Universitaires de France 2008; Marco L. Antonioli, 'Precauzionalità, gestione del rischio e azione amministrativa' [2007] Rivisita Italiana di Diritto Pubblico Comunitario 51.
- 3º See Fabrizia Fracchia, 'Coronavirus, senso del limite, de-globalizzazione e diritto amministrativo: nulla sarà più come prima?' (2019) 100 Il diritto dell'economia 575.
- ³¹ In the meaning described by Mariachiara Tallacchini, 'Before and beyond the precautionary principle: epistemology of uncertainty in science and law' (2005) 207 Tox. and App. Pharm. 645; Helga Nowotny, Peter B. Scott and Michael T. Gibbons, *Re-thinking science. Knowledge and the public in an Age of uncertainty* (Wiley 2001).
- ³² Helga Nowotny, Peter B. Scott and Michael T. Gibbons (n31), 1, where there is specified that the uncertainty of scientific knowledge is not simply understood in the traditional sense of precariousness and provisionality, but of continuous questioning by subjects unrelated to the scientific community.
- 33 All this means that various evaluation components are recognized within science. The idea is that of a pluralism of truth,' for which see Serge Gutwirth, éric Naim-Gesbert, 'Science et droit de l'environnement: réflexions pour le cadre conceptuel du pluralism de verités' 1 (1995) 34 Revue interdisciplinaire détudes juridiques 33.
- 34 Tallacchini (n31).
- ³⁵ About this concept see Malte Faber and John L.R. Proops, *Evolution, Time, Production and the Environment* (Springer 1990), 118. The Authors highlight how it is possible to qualify different forms of 'irreducible ignorance': 'factual' and 'informative.' The Covid-19 experience has brought out both of these forms, from the point of view of 'phenomena' (facts of damage) and from that of information deficiency.
- ³⁶ The issue of complexity in relation to the environmental and social context is framed in a broader key by Crawford S. Holling, 'Understanding the Complexity of Economic, Ecological, and Social Systems' (2001) 4 Ecosystems 390.

complexity.³⁷ Complexity brings with it an inevitable risk factor: this risk generates insecurity (and sometimes fear)³⁸ and from all this premises arises a need for adequate forms of control.

Second, the paradigm of non-uniqueness, which can be assessed on two levels: in relation to the origin of certain phenomena ('upstream') and with regard to the connection between these and the 'downstream' effects. In many cases this character of uncertainty is welded with the lack of data or, in any case, with their insufficiency: from this premise 'divergent or indeterminate scientific propositions' are developed.³⁹ The Covid-19 case seems to demonstrate all this with evidence. In this global pandemic situation, uncertainty assumed a primary role and manifested itself in a progressive form:⁴⁰ it involved the origin of the virus and its spread; from here emerged the most diverse theses regarding contrast therapies. In this 'groping in the dark' each thesis was first advanced and then subjected to the principle of 'falsifiability,' which strengthened its character as a component of every scientific discourse.⁴¹

A unitary framework can therefore be delineated, where uncertainty is considered as a component of what could be defined in the more general terms of an 'irreducible unknown.'⁴² This concept expresses a particular situation in which the absence of knowledge (in terms of 'ignorance') is qualified on the basis that it is not possible to identify predefined schemes to deal with an event. The irreducible uncertainty, as it has been pointed out, 'affects the future' and is linked to 'crisis' situations:⁴³ these are qualified by the fact of placing an element of rupture with respect to a model based on safety, classification, regulation and predictability. Irreducibility means 'non-reduction' of a phenomenon and its developments to the logic of preventive action: such a logic allows the measurement, with sufficient certainty, of the type of impact that may arise from it.⁴⁴

This relative and imperfect nature of the scientific knowledge creates a further problem concerning the legal 'answer' to such a situation. ⁴⁵ How is it possible to qualify the legal answer to situations like that one of Covid-19? It is at this point that we can speak about 'a law of uncertain science. '46 This expression indicates a two-way correspondence: the uncertainty of science generates a correlative uncertainty regarding 'how' law regulates these complex cases. ⁴⁷

The best model appears that of an 'adaptive' public decision, which is related to the concrete case and 'follows' its evolutions.⁴⁸ In any case, the 'answer' of law to these situations is not given in abstract, but must be sought concretely, in the perspective of a decision that does not precede but 'follows' events, and is based on the logic of the so-called 'muddling-through.'⁴⁹ The justification for the intervention by the Public Administration lies in the urgency. Urgency, as in the case of Covid-19, does not allow to wait, but asks for an immediate and effective intervention to deal with the spread of the virus.⁵⁰

In these cases the Administration must decide without the complete 'coverage' of science. There are no clear and indisputable scientific studies, but only many thesis, often divergent, and all subjected to a general

³⁷ We refer to the known theory of Ulrich Beck, Risikogesellshaft. Auf dem wegin eine andere moderne (Suhrkamp Verlag 1986); and for an in-depth reading from the point of view of administrative law, Rosario Ferrara, La protezione dell'ambiente e il procedimento amministrativo nella «società del rischio» (2006) 4 Diritto e Società 507, 522; Jean B. Auby, 'Le droit administratif dans la société du risque. Quelques réflexions' (2005) 56 Études et documents du conseil d'État 351.

³⁸ See Mariachiara Tallacchini 'Ambiente e diritto della scienza incerta' in Stefano Grassi, Marcello Cecchetti, and Alessandro Andronio (eds), *Ambiente e diritto* (L.S. Olschki 1999) 77, who refers to the 'irrational' fear of the public.

³⁹ Tallacchini (n31).

⁴⁰ So much to think of a real 'failure' of science (see in this context B. Carte, 'When science fails, just use the precautionary principle' [2006] 58 [4] Rev. Inst. Pub. Aff. 33).

⁴¹ According to the famous reconstruction of Karl R. Popper, *The logic of scientific discovery* (Psychology Press 1959).

⁴² See more recently Ferrara, 'Il principio di precauzione' (n2).

⁴³ Edgar Morin, *Où va le monde?* (L'Herne 2007).

⁴⁴ Following the model of the preventive environmental impact assessment described in general terms by John Glasson & Riki Therivel, *Introduction to environmental impact assessment* (Routledge 2019).

⁴⁵ It cannot be denied in this regard – as observed by Nicolas de Sadeleer, 'The precautionary principle in EC Health and Environmental Law' (2006) 12(2) Eur. Law Jour. 139 – that 'while the jurist seeks certainty, the scientist points to the uncertainty inherent in ecological risk.'

⁴⁶ Tallacchini, 'Before and beyond the precautionary principle' (n31).

⁴⁷ Ferrara, 'Il principio di precauzione' (n2).

⁴⁸ The theme is addressed by John B. Ruhl, 'Regulation by adaptive management. Is it possible?' (2005) 7 Minn. J.L. Sci. & Tech 21.

⁴⁹ We refer to the thesis of Albert O. Hirschman, 'Social conflicts as pillars of democratic market society' (1994) 22(2) Political Theory 203.

⁵⁰ See William J. Baumol & Wallace E. Oates, *The Theory of environmental policy* (Cambridge University Press 1988) 190, where the theme of irreducible uncertainty is combined with that of emergency-urgency.

principle of 'changeability' in a short time.⁵¹ This is what happened, for example, in the Italian case. The Government had to adopt very restrictive measures within a few days (so-called lock-down), based on the assessments of a technical-scientific Committee set up for the emergency.⁵² These measures – as pointed out by some Scholars – have been adopted without a 'minimum recall' to an 'evident' scientific risk assessment.⁵³ A problem of evidence in the scientific foundation for public decisions against Covid-19 has been also posed in the French legal system with the establishment of an *ad hoc* 'committee': the Research and Expert Analysis Committee (CARE).⁵⁴ However, there was no lack of criticism, especially regarding the legal basis of this body and the fact that it expresses only a part of the scientific community.⁵⁵

All of this poses a problem about precaution in action. The idea of an effective and adaptive emergency decision brings reflection to the operational framework within which the precautionary action is placed. Only after having clarified the operational framework of the precaution (and the connected adaptive logic) it will be possible to reflect on the problem of the timeliness of the action.⁵⁶

4. Some indications about precaution in action and the risk assessment in the Italian case

Referring to the particular kind of approach which is at the basis of precaution, the problem is how to define the concrete rules of the precautionary action. The issue was posed and addressed by the Communication of the European Commission of February 2nd 2000, specifically dedicated to the precautionary principle.⁵⁷

The Communication refers to a real precautionary 'dilemma,' which has given rise to contradictory views.⁵⁸ This dilemma stems from the fact that decision-makers have to balance the freedom and rights of individuals, industry and organizations with the 'need to reduce the risk of adverse effects to the environment, human, animal or plant health,'⁵⁹ On this basis, there are some principles that have to guide public decisions taken under the 'umbrella' of precaution. In this perspective, we may wonder how much these counter-limits to precautionary action have found application in the case of Covid-19.

First, proportionality. It indicates the adequate level of a decision, compared to the desired level of protection, also in consideration of the type of impact on individual interests. ⁶⁰ A proportional precautionary decision is characterized by the fact that it is 'tailored' both to the situation to be addressed and to the interests that come into play. If it is evident that risk 'can rarely be reduced to zero,' it is at the same time important to underline that 'a total ban may not be a proportional response to a potential risk in all cases:" however, in certain cases, it is the sole possible response to a given risk. ⁶¹ The Italian answer to Covid-19 can be framed in this type of approach: the so-called lock-down has been considered the sole possible answer to the spread of the virus. It was an extreme measure, which was reached gradually and which allowed personal movements only for reasons of extreme urgency (for example, health reasons, urgent needs for assistance to relatives or people with disabilities). ⁶²

⁵¹ Following this logic, the changing nature of science determines the consequence that the public decision-maker has to put in place mechanisms to 'incorporate' this trend. The theme is analyzed in Edith Brown Weiss, *In fairness to future Generations: International Law, Common Patrimony and Intergenerational Equity* (Transnational Publishers 1988) 52.

⁵² See Antonio Barone, 'Brevi riflessioni su valutazione scientifica del rischio e collaborazione pubblico-privato' [2020] Federalismi, 5.

⁵³ Barone (n52).

A technical body commissioned by President Macron, with the aim of strengthening the weight of doctors and researchers in government decisions. The events that led to the establishment of this committee are explained in Olivier Beaumont, 'Coronavirus: pourquoi Macron s'entoure de plus en plus de scientifiques' *Le Parisien* (Paris 25 March 2020).

⁵⁵ As underlined by Philippe Cossalter, 'Droit administratif de l'urgence et gestion du risque pandémique' (2020).

⁵⁶ Cafagno (n32).

⁵⁷ Commission, 'Communication of 2 February 2000 from the Commission on the precautionary principle' (Communication) COM(2000) 1 final.

⁵⁸ This is a problem that arises with regard to the choice to act according to the precautionary model. In particular, the question is posed in relation to the two 'versions' of the precautionary approach: the weak and the strong one. The theme has been deepened by Daniel Steel, 'The Precautionary Principle and the Dilemma Objection' 3 (2013) 16(3) Ethics, Policy & Environment 321.

⁵⁹ Commission (n57)

⁶⁰ See Nicholas Emiliou, *The principle of proportionality in European Law. A comparative study* (Kluwer Law International 1996). In this perspective, the principle of proportionality is framed in a double logic. It must be related both to the type of risk to be faced and eliminated, and to the individual interests that come into play.

⁶¹ Commission (n57).

⁶² See Gary P. Pisano, Raffaella Sadun, and Michele Zanini, 'Lessons from Italy's Response to Coronavirus' (Harvard Business Review 2020) https://hbr.org/2020/03/lessons-from-italys-response-to-coronavirus accessed 9 July 2021 where it is stressed 'the importance of systematic approaches and the perils of partial solutions.'

Second, non-discrimination. It means that the level of protection chosen to face an extraordinary event must not lead to treat equal situations differently. The precautionary choice is characterized by a strong rate of discretion on the part of the decision-maker: this discretion cannot lead to arbitrary solutions.

Third, consistency. The precautionary measures should be consistent 'with the measures already adopted in similar circumstances or using similar approaches.' It is necessary to look at the measures that have been adopted in the past to deal with emergency situations similar to the one to be addressed. The Covid-19 case demonstrates the impossibility of applying this type of approach to address the present health emergency. The declarations of the political exponents in the days of the greatest spread of the virus referred to an unprecedented health crisis. For the first time since the end of the second world war, it was necessary to limit some fundamental freedoms guaranteed at the constitutional level. Expose the second world war, it was necessary to limit some fundamental freedoms guaranteed at the constitutional level.

Fourth, cost-benefit analysis and connected examination of scientific developments.⁶⁶ In this case, it is important to consider the profile of the effectiveness and socio-economic impact of the various options.⁶⁷ The cost-benefit analysis must be related to the level of scientific knowledge at a given moment. Each subsequent evolution of scientific knowledge requires the need for a new cost-benefit assessment: this new analysis is followed by new measures that are adapted to the changed context. This means that measures based on the precautionary approach 'shall be re-examined and if necessary, modified depending on the results of the scientific research and the follow up of their impact.'⁶⁸ It is at this point that we can still refer to an 'adaptive' model in governing the precautionary action of public bodies.⁶⁹

In this perspective, some Scholars, refer to a 'reflexive Administration.'⁷⁰ a model which is characterized by flexibility in the forms of public action. This means that a change in the factual situation requires a parallel adjustment of public decisions referred to that new context. The idea is that one of a dynamic Administration. Such Administration is capable of relating to concrete facts and, if necessary, of retracing its steps.⁷¹ The tools available to achieve this result are the review and revision of previous decisions, based on the development of scientific research and the possession of more complete data.

The reaction of the Italian institutions to Covid-19 was, from this point of view, uncertain. The problem arises thinking about the scientific assessment that was the basis for the first measures taken by the Italian government. The first precautionary measures – as already mentioned – were taken without an 'evident' scientific foundation. The public choice must be the point of arrival of a clear and 'visible' risk assessment process for the citizen. In the Italian 'answer' to Covid-19 there was a real paradox:⁷² a mismatch between the abstract dimension and the concrete dimension. In other terms, the political reference to the central role of science in tackling the health emergency has not been followed up in the procedure that led to the precautionary measures.⁷³ These measures were adopted without the necessary transparency and objectivity in the risk analysis. The precautionary decisions adopted by the Italian government referred to assessments

⁶³ Commission (n57).

⁶⁴ See, for example in the Italian case, the speech by the Prime Minister, Giuseppe Conte, to the Senate of the Republic, on the Covid-19 emergency held on 26 March 2020 (published on https://www.governo.it). It refers to the fact that 'the spread of the Coronavirus epidemic has triggered, in Italy and in Europe, an unprecedented crisis, which, as we are seeing, is exposing us to a severe test'

⁶⁵ In this perspective Jason Horowitz & Emma Bubola, 'On day 1 of lock-down, Italian officials urge citizens to abide by rules' New York Times (New York 8 March 2020), who talk about an establishment of 'unprecedented limitations to individual freedom and rights for a non-authoritarian regime.'

⁶⁶ See Ferrara, 'Il principio di precauzione' (n2).

⁶⁷ On the issue of the need for a cost-benefit analysis that goes beyond the economic dimension, in a broader perspective, *see* Mark Geistfeld, 'Reconciling cost-benefit analysis with the principle that safety matters more than money' (2001) 76(1) NYU Law Rev. 114.

⁶⁸ Commission (n57).

⁶⁹ Ruhl (n38)

Yee, from the sociological point of view, Ulrich Beck, Anthony Giddens, Scott Lash, Reflexive modernization (Stanford University Press 1994); and in the Italian administrative law reflection Antonio Barone, Il diritto del rischio (Giuffrè 2006).

⁷¹ Barone (n70).

⁷² Barone (n52).

⁷³ See, in this direction, the reference to the 'technical-scientific Committee' which is expressly mentioned among the 'conditions' of the Presidential Decree April 10th, 2020. In the same perspective the Presidential Decree March 8th 2020 refers to the necessity to take 'into account the indications formulated by' such a Committee. The Law-decree n. 19 of 25th March 2020 refers to the necessity to 'consult' the Committee, which has become the government's support body (when previously it was only the body operating in support of the Civil Protection Department).

conducted by a technical-scientific committee, but the results of these assessments have not been shared and brought to the attention of citizens.⁷⁴

With regard to the Italian case, the question related to the involvement of the technical-scientific committee in the decision-making process aimed at facing the emergency can be better specified. The activity of such a committee has been framed referring to a form of support with respect to Italian Government action, following the aim of conferring greater rationality (in terms of 'justification' anchored to technical parameters) with regard to the procedures linked to the health emergency.⁷⁵ The Italian legislator provided that the committee has to be heard before adopting measures to combat the spread of Covid-19. The committee must issue an opinion on the technical-scientific aspects and on the assessments of the adequacy and proportionality of these measures. This last reference has caused discussion, precisely because it also affects profiles other than the technical one and which are an expression of pure discretion. Such a broad assessment (which concerns adequacy and proportionality) should have been supported by greater guarantees in terms of 'visibility' and transparency, in particular on the risk analysis profiles. This consideration is not secondary, because of the fact that a greater visibility in the risk assessment process would have helped to ensure greater procedural rationality of the emergency measures.⁷⁶ Moreover, when it is not possible to appeal to the resolving authority of a univocal and neutral scientific knowledge, the containment of fear and its treatment is inevitably linked to cooperation between experts, policy makers and representative groups. From this derives the identification of specific mechanisms that facilitate the formation of consensus between bearers of different instances, thus ensuring visibility and rationality to the entire decision-making process (these elements do not seem to have emerged in the risk assessment conducted by the technical-scientific committee).⁷⁷

Even the Italian Administrative judge, with particular regard to the question of access to the minutes of the committee, qualified the Administration's behavior as illogical and contradictory: if the legal system recognizes the importance of the right of access with respect to individual measures that have a much lower social impact, the same argument must apply to acts (such as the minutes of the committee) that have a strong social impact on territories and communities.⁷⁸ To this, we must add the fact that, after the establishment of the technical-scientific committee, another committee of experts in economic and social matters was set up with the function of monitoring the subsequent phases of the pandemic emergency. Such a committee, which is the expression of a 'task force' of experts in support of government action, was created with a proactive and 'planning' function of the gradual resumption of economic-productive and social activities.⁷⁹ Also in this case, many critics have been advanced, with particular regard to the unconditioned trust in a technical-specialist knowledge and on the correlative lack of representativeness of the new committee. The

⁷⁴ See Arianna Vedaschi & Chiara Graziani, 'Coronavirus, health emergencies and Public Law issues' (Verfassungsblog, 6 March 2020) https://verfassungsblog.de/coronavirus-health-emergencies-and-public-law-issues/ accessed 9 July 2021, who highlight that 'openness towards citizens is a primary duty of public authorities, even during emergency, as long as information is verified and correct, and its disclosure is necessary in the light of public interest. Lack of information may impair people's confidence towards public institutions, resulting in the erosion of democracy.'

⁷⁵ See, in this perspective, Lorenzo Cuocolo, 'I diritti costituzionali di fronte all'emergenza Covid-19: la reazione italiana' [2020] Federalismi 1.

⁷⁶ The issue of procedural rationality has been analyzed by Herbert A. Simon, *Decision making and administrative organization* (Bobbs-Merrill 1944), 16; at the same time, see the reflections of Niklas Luhmann, *Legitimation durch verfahren* (Suhrkamp 1983) who specifies that the organizational and procedural methods should not be exclusively traced back to an objective of saving 'activities and superfluous steps,' but they must find their ultimate criterion in the rationality of deciding, that is, in the number of possibilities that they allow to grasp and ponder over a limited period of time.

And this seems to confirm the (incorrect) idea that in the face of an emergency situation, participatory guarantees and the need for transparency involve an intolerable procedural aggravation. On the contrary, the concept of procedural rationality requires that every decision (even that brought back within the framework of the precautionary approach) is configured in terms of a 'synthesis' that brings to the center the function of mediation between different interests operated by the public decision-maker.

The case concerned the request for access to five minutes of the technical-scientific committee (relating to the measures adopted under the lock-down regime) by the Einaudi Foundation to the Civil Protection Department. The request for access was denied by the Department and postponed 'at the end of the state of emergency.' The Italian administrative judge (TAR Lazio, section I-quater, 22 July 2020, n. 8615) instead accepted the appeal against the temporary denial and specified how the minutes of the committee constituted the prerequisite for adopting targeted measures to strongly compress the rights of citizens.

⁷⁹ The most recent evolution of the pandemic scenario has led the new Government chaired by Mario Draghi to develop a strategy that is part of the Next Generation EU. In this perspective, the National Recovery and Resilience Plan (PNRR) was presented to the Council of Ministers on 12 January 2021 and is currently being approved by the Italian Parliament. This is a very ambitious action plan that focuses on the role of the Public Administration as an 'engine' for growth and development of the economic and social system after the pandemic crisis.

result of this 'proliferation' in terms of comitology was pointed out referring to the creation of a 'parallel' and extraordinary emergency administrative organization:⁸⁰ it is a 'competing' (and 'alternative') emergency organization which arises next to ordinary administration: it determines structural changes justified by the urgency to provide and suggests at the end a certain 'trend to *adhocracy*.'⁸¹

But we cannot stop here, because another critical profile linked to the Italian precautionary action in the case of Covid-19 is represented by the 'time' of the reaction to the pandemic risk.⁸²

5. The problem of the timeliness of the action: the Italian 'reaction' to Covid-19

The principle n. 15 of the Rio de Janeiro Declaration contains a methodological indication with regard to the time.' Scientific uncertainty cannot represent a 'pretext' to post-pone the adoption of 'adequate and effective measures.'⁸³ It has been observed that the timeliness of the action, in a broader perspective that looks towards the scenarios of a future reconstruction, is essential to help recovery, without forgetting its contribution to insure the legitimacy of the public power.⁸⁴ The idea is that timeliness becomes an essential component in strengthening the Administration's 'credibility:' a condition to re-create citizens trust in public Institutions. It can be said that there is a direct proportionality relationship between timeliness and good administration.⁸⁵

How timely and immediate was the precautionary action of the Italian Government in contrasting the spread of Covid-19? The idea that can be drawn from the consideration of the measures adopted by the Italian Government since 31st January 2020 is that of a substantial uncertainty in the choice of the 'tools' to be put in place.⁸⁶ The resolution of the Council of Ministries of January 31st 2020 contained the declaration of the State of emergency as a consequence of the health risk 'associated with diseases deriving from transmissible viral agents.' In order to contain the health risk, the Head of the Civil Protection Department was legitimated to adopt extraordinary measures in derogation 'of all current provisions,' with compliance with the limits set for *extra-ordinem* powers.⁸⁷

The declaration of January 31st 2020 represented the logical starting point to outline a model of public intervention in a 'scalar' form, divided into three steps. ⁸⁸ The first corresponding to the civil protection orders. The second represented by the ordinances of the Ministry of Health (for the definition of the so-called red areas). The third characterized by the use of the instrument of the Law-Decree and the subsequent Decrees of the Prime Minister. ⁸⁹ The result was that of an action strategy that hides behind itself an uncertainty of a

⁸⁰ It is interesting to underline, at this regard, how some Scholars (in particular see Giuseppe Martinico & Marta Simoncini, 'Emergency and Risk in Comparative Public Law' (Verfassungsblog 9 May 2020) https://verfassungsblog.de/emergency-and-risk-in-comparative-public-law/ accessed 9 July 2021 have highlighted the element represented by the (*ex post*) risks posed by the use of extraordinary administrative measures, especially at the end of the emergency, when the of the Government should be subject to legal scrutiny in order to avoid deviations from the original objectives).

⁸¹ See in this perspective, among the Italian scholars, Gabriele Trombetta, 'Emergenza COVID-19: un tentativo di inquadramento' [2020] Amministrazione in cammino 1, who refers to the fact that the limited rationality of the public decision-maker has caused the degeneration of the system towards the post-democracy.

The special relevance of time in the context of precautionary action has been highlighted by Ilona Cheyne, 'Taming the precautionary principle in EC Law: lessons from waste and GMO regulation' (2007) 4(6) Journal for European Environmental & Planning Law 468.

⁸³ It is said that 'lack of full scientific certainty shall not be used as a reason for post-poning cost-effective measures to prevent environmental degradation.'

⁸⁴ See Luisa Torchia, 'Dall'amministrazione dell'emergenza all'amministrazione della ricostruzione: responsabilità, controlli, tempestività' (Istituto di Ricerche Sulla Pubblica Amministrazione, 1 April 2020) https://www.irpa.eu/dallamministrazione-della-ricostruzione-responsabilita-controlli-e-tempestivita/ accessed 9 July 2021.

⁸⁵ Torchia (n84)

⁸⁶ As underlined by Cesare Pinelli, 'Il precario assetto delle fonti impiegate nell'emergenza sanitaria e gli squilibrati rapporti fra Stato e Regioni' [2020] Amministrazione In Cammino 1.

⁸⁷ The issue of 'free ordinances' has been carefully addressed by Italian Scholars. In this perspective see Rosario Ferrara, *Introduzione al diritto amministrativo* (Editori Laterza 2014); G. Morbidelli, 'Delle ordinanze libere a natura normativa' [2016] Diritto amministrativo 1–2

⁸⁸ See Pisano, Sadun, Zanini 'Lessons from Italy's Response to Coronavirus' (n. 62).

⁸⁹ The gradual succession of the precautionary measures adopted by the Italian Government, in order to stop the spread of the Coronavirus is described by Maria L. Ruiu, 'Mismanagement of Covid-19: lessons learned from Italy' (2020) 23 Journal of Risk Research 1007 where it is specified that 'the restrictions imposed by the government involved fines on anyone entering or leaving outbreak areas, suspension of public events, ban of people gatherings, closure of schools and Universities, suspension of public transport and closure of not essential shops.'

public power still unprepared to face a pandemic crisis never experienced.⁹⁰ This uncertainty led to a delay in contrasting the spread of Covid-19.

In particular, the non-timeliness of the Italian Government's action can be associated with two considerations. The first is non-legal and concerns the underestimation of the risk associated with Covid-19.91 At the beginning of the outbreak, the virus was described as 'non-dangerous:' the first Government statements referred to a situation 'under-control.'92 The second concerns the legal model that was followed to set up the Covid-19 law enforcement strategy. The strategy followed at the beginning was that of *ex post* tools to fight against the spread of the virus. This choice was the subject of a strong criticism, for the fact that it would have been necessary to use preventive contrast tools (*ex ante*), and not the instrument of the civil protection ordinances which represent a subsequent instrument.⁹³

Civil protection ordinances are based on the assumption of situations, events or disasters already occurred;⁹⁴ a not insignificant element when there is a need to prevent *ex ante* and manage the spread of an outbreak *'in itinere.'* The conclusion of this reasoning leads to believe that in the Italian case there has been a setting error that can be assessed on a methodological level.⁹⁵

6. Conclusions

Among the different 'lessons' that can be drawn from the Covid-19 case, it is possible to refer to three aspects concerning how the precautionary principle was implemented in the Italian case.

First, the precautionary method was only partially taken seriously. This aspect can be understood by looking at the problem of the scientific basis of the precautionary decisions. In the concrete application of the precautionary principle, there was a 'logical jump' between the lack of full scientific certainty and the choice to act on the basis of data and assessment not disclosed to the public. The public of the publ

Second, it is possible to highlight that the precautionary action was not timely. The Italian experience shows that there has been no immediate continuity between the abstract and the concrete dimension. After the national health emergency declaration (end of January), the first operative measures to contrast Covid-19 arrived only at the beginning of March. Once again, there was a problem with switching from a precaution 'in the books' and a precaution 'in action.'

Last, the Italian 'answer' to Covid-19 demonstrates how a fundamental element that underlies the precautionary approach is represented by flexibility and gradualism in decisions. The idea of gradualism can be traced back to the identification of some 'phases' of the national emergency: each of these phases corresponds to specific decisions.⁹⁹

The so-called 'Phase 1' was the most critical one, in which the Government had to take the most restrictive measures. In this case, a progressive method was followed, starting from the measures of 'social distancing,' to arrive at the most extreme measure of the ban on movement.

The 'Phase 2' coincides with what could ideally be called the 'descending branch' of the parabola. Also in this case, a progressive method was followed, overcoming the most restrictive measures and planning a gradual 're-opening' of the various activities. The ban on moving has been overcome, even if the social distancing measures have been maintained.

The third phase is the one that characterized the period from June to September 2020, which has just closed. The key word of this phase, in continuity with the second phase, has been that of monitoring. In this case, there was a comeback to soft regulation measures, such as, for example, the recommendations to maintain a certain behavior, without any provision for penalties. This phase did not last very long, because the resumption of the infections imposed a new phase.

⁹⁰ Horowitz, Bubola, 'On day 1 of lock-down, Italian officials urge citizens to abide by rules' (n. 65).

⁹¹ Ruiu (n89).

⁹² See Fernanda G. Nicola, 'Exporting the Italian model to fight Covid-19' (The Regulatory Review 23 April 2020) https://www.theregreview.org/2020/04/23/nicola-exporting-italian-model-fight-covid-19/ accessed 9 July 2021 who precise that 'Authorities not only underestimated the economic impact of the pandemic, but also delayed Rome's response to Covid-19 until mid-March.'

⁹³ Pinelli, Il precario assetto delle fonti impiegate nell'emergenza sanitaria (n. 86).

⁹⁴ ibid

⁹⁵ Basili (n5), who speaks about a 'failure' of Italian Institutions.

⁹⁶ Barone (n52).

⁹⁷ ibid.

⁹⁸ Nicola (n92).

⁹⁹ Pisano, Sadun, and Zanini (n62).

The most recent history shows that, unfortunately, there is also a 'fourth phase' in the Covid-19-related emergency. This phase shows that there is a kind of 'circularity' in the way the risk manifested itself. The significance of this circular logic in the Coronavirus can be grasped if we look at what is happening in Italy, as in all the other European and world countries in the last weeks. Covid-19, after a brief period of attenuation coinciding with the range June-August, has resumed its spread on a large scale. Once again, the Italian Government has been forced to adopt new measures to fight against the spread of the second wave of the pandemic. Unfortunately, the method has not changed, as if to show that there is still much to learn about how to implement precautionary measures. There is a need for greater coordination between the central level (State-Government) and the local level (represented by the Regions and, in general, by local self-governments); and we also need greater 'awareness' of the type of measures to be taken to get to the root of the problem of the spread of the pandemic. This kind of situation ends up putting uncertainty over other uncertainty. The first uncertainty is that which arises from science and its responses in the face of a virus yet to be explored. The second uncertainty is that which comes from the institutions called upon to take appropriate and not disconnected actions.¹⁰⁰ The two elements, represented by the linking and the effectiveness of precautionary measures, can avoid the paradox of a precautionary principle that risks to be applied according to the model of 'variable geometries,' with disproportionate solutions from level to level.

In conclusion, the Italian case confirms how the precautionary approach – if correctly understood and applied – represents a solution for an emergency health situation. We could refer to a 'flex-security principle' for exceptional situations, ¹⁰¹ which in the absence of typical intervention measures appears to be the most effective way to make decisions in times of crisis. History repeats itself, now as then. In front of Covid-19, as in the case of Dr. Jon Snow in 1854 in London during the cholera epidemic, the public decision-maker had to run across a 'last mile': ¹⁰² in the absence of the 'umbrella' of science the responsibility of public Institutions has returned to have a leading role.

Competing Interests

The author declares that, in the publication process of his paper, there is no competing interest with Utrecht Law Review. In particular: there are no interests that might conflict with the work he is publishing for religion and gender; there are no personal or organizational (financial or non-financial) interests that might influence or might appear to influence the work he is publishing.

An example of this uncertainty is represented by the request of the President of the Campania Region to the central Government with the aim of obtaining a new National lock-down. Alternatively, the President said he was ready to start a lock-down on a regional basis, already anticipated by the closure of schools in Campania and the return to forms of distance learning. Although, this intention was then denied by the President himself, who was waiting for a more decisive statement by the Government.

¹⁰¹ Ferrara, 'Il principio di precauzione e il 'diritto della scienza incerta' (n2).

¹⁰² Fracchia, 'Coronavirus, senso del limite, de-globalizzazione e diritto amministrativo: nulla sarà più come prima?' (n30).

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