

AS GOOD AS IT GETS: ON RISK, LEGALITY AND THE PRECAUTIONARY PRINCIPLE

B. de Vries & L. Francot-Timmermans

ABSTRACT

Legality offers legal certainty in the sense that it prohibits the exercise of arbitrary power. As an aspect of the rule of law it provides boundaries to the State's playing field (only if and when foreseen by law, the State may act). The precautionary principle stipulates that the absence of scientific certainty is no reason not to act to prevent (environmental) harm. Here, uncertainty is the basis for action (in the end the principle seeks to reduce uncertainty, but it is uncertain if the desired result is within reach). The precautionary principle potentially expands the possible actions of the State. The certainty-uncertainty axis exposes a tension between legality and the precautionary principle. It is this tension that is subject to analysis in this article.

1. PATIENT ZERO

The world seemed to be relieved when the source of the Mexican flu virus could be traced; it was a cute ten-year-old Mexican child.¹ The relief had little to do with the cuteness of the boy and more to do with the fact that science was able to locate the source of the pandemic. It seemed that locating the source meant control over its spread. This is, of course, against better judgement. What the Mexican flu threat shows is our interdependency of a global scale. Across the world instances of the virus in humans were reported and all these instances were, in one way or the other, interrelated. The reactions were of a precautionary nature and rightly so. Nation-states – at least those who have the means – had antiviral medication produced in mass quantities and geared their researchers towards developing the antidote. Precautionary measures also entailed the quarantining of Mexicans who had flown abroad without showing any symptoms of the flu.² As if nationality alone could be a source of infection. Of course, it is not only viruses that become global. More typical of our contemporary society is globalisation at a structural level, found not only in transport, trade, agriculture, tourism, but also in human rights, the war on terror, immigration and other areas.

It shows that processes of globalisation are multidimensional and capture economic, political, cultural, social and legal dimensions. It puts a strain on the *raison d'être* of the modern State. This strain is not only related to territory and territorial boundaries, but perhaps more

¹'From Edgar, 5, Coughs Heard around the World', *The New York Times*, 28 April 2009 <www.nytimes.com/2009/04/29/world/americas/29mexico.html?_r=1>, 17 November 2009).

²'Even as Fears of Flu Ebb, Mexicans Feel Stigma', *The New York Times*, 4 May 2009, <<http://www.nytimes.com/2009/05/05/world/asia/05china.html>>, 17 November 2009.

importantly, to the institutions such as the rule of law, that determine the playground of the modern State – a playground that can be bigger than its territory. These institutions both grant and curb the power of the State. Pivotal is the concept of legality as an aspect of the rule of law, or its European continental twin brother, *Rechtsstaat*. The rule of law is understood in this contribution as possessing four interrelated characteristics. It entails the aspect of legality, suggesting that power can only be legally exercised on the basis of rules that themselves have been formulated on the basis of a known procedure. This procedure refers to the second characteristic, which entails the democratic element. It suggests that the rule-making procedure is democratic and that those who make and/or apply the rules are democratically elected. The third characteristic refers to the distribution of this rule-based power among different institutions: legislative (the aforementioned rule-makers), executive and judicial powers. Finally, the contents of the rules are based upon, or stem from, certain fundamental values or organising principles for society. These principles find expression first and foremost in human rights. These four characteristics of the rule of law are connected to the notion of the nation-state; from within the nation-state the concept of the rule of law was developed into the above four characteristics. This article puts a special emphasis on legality.

Although the State still performs an important role on the world stage, globalisation, in all its dimensions, not only puts a strain on the State and its functions, but riddles it with uncertainties. Social theories that describe our contemporary age perceive these uncertainties in terms of global risks and fears, to an extent that these risks both contribute to and result from increasing global interdependencies – not only among States, but also among other social actors, such as organisations, groups and individuals.³ Traditionally, law is an instrument that contributes to reducing uncertainty.⁴ Law customarily addresses the problem of uncertainty by attributing responsibility or liability through employing a conditional normativity on the basis of an ‘if... then...’ formula. This requires linear causality. The problem - indeed the central problem - of global risk is that linear causality cannot be established. This poses a problem for law. This problem is tackled through the implementation of a contemporary version of the principle of *prudentia*, viz. the precautionary principle.⁵ Central to the principle is the absence of legal causality as a condition for distributing responsibility. It may well be that the precautionary principle contributes to solving the problem of uncertainty. As any principle of this kind comes with its own side effects, a fierce academic debate is ongoing.⁶

In this article we are not concerned with the question of whether the precautionary principle contributes in its application to resolving the contemporary problems encapsulated in the notion of modern risk. Rather, the article assumes that it does, but that it puts, as a side effect, the notion of legality under strain. It does so as it allows the withdrawal of legislative procedures from the requirements of legality and, hence, it allows the withdrawal of regulation and its application

³ On the relevance of the different social actors in the world risk society, see also L. Francot & B. de Vries, ‘No Way Out? Contracting about Modern Risks’, *ARSP* 95 (2009): 199-215.

⁴ Cf. N. Luhmann, *Law as a Social System*, trans. K.A. Ziegert, (Oxford: Oxford University Press, 2004), 94.

⁵ C. Tinker, ‘State responsibility and the Precautionary Principle’, in *The Precautionary Principle and International Law - The Challenge of Implementation*”, edited by D. Freestone & E. Hey (The Hague: Kluwer Law International, 1996).

⁶ See, for example, D. Freestone, D. & E. Hey. (eds.) *The Precautionary Principle and International Law - The Challenge of Implementation* (The Hague: Kluwer Law International, 1996).

from parliamentary and legal control. In doing so, it defeats the very purpose of legality: to establish legal certainty in the relationship between citizens and State.

Uncertainty is a social phenomenon of all times, but what is new is our heightened awareness of how uncertainty may threaten our daily life. In contemporary society our heightened awareness of uncertainty is, amongst other things, expressed in our awareness of certain types of risks that threaten our daily lives and activities, such as those illustrated by past events - for example, the disasters in Bhopal, Chernobyl and, more recently, the train disaster in Viareggio, Italy. It is the concept of modern risk that will be our focus of attention in the remainder of this article. Indeed, the article starts with a societal diagnosis aiming to clarify the concept of modern risk in a globalising world. The diagnosis builds upon the work of Beck, in particular his work on the risk society, the term he coined in 1986 in *Risikogesellschaft – Auf dem Weg in eine andere Moderne*.⁷ The article then sketches the precautionary principle as a response to the problem of risk and does so from a European legal perspective. It addresses the different interpretations of the principle and the criticisms the principle provokes. In the next section, we analyse the extent to which the rule of law is under siege in the risk society, with a particular emphasis on the concept of legality. The article suggests that the concept of legality is not threatened by the nature of the risk society itself, but by the responses to the problem of risk, such as the precautionary principle. More abstractly, the article suggests that legality as a modern concept addressing the problem of State power and subordination is ill-equipped to deal with the responses to contemporary social problems relating to the ecological environment and, by implication, the welfare and health of man and woman. It is this that this article seeks to highlight, with the aim of provoking a discussion as to how answers can be found with regard to the exercise of legality and to whom it applies in a globalised world in which the role of the modern State is changing profoundly.⁸

2. SOCIAL DIAGNOSIS: UNCERTAINTY IN A GLOBAL WORLD

The extensive world-wide legal debate about the pros and cons of the precautionary principle implies that the description of world society as a risk society, a description coined by Ulrich Beck as far back as 1986, is adequate and to the point.⁹ ‘Risk society’ does not merely pertain to the

⁷ U. Beck, *Risikogesellschaft – Auf dem Weg in eine andere Moderne* (Frankfurt am Main: Suhrkamp, 1986).

⁸ See also: J. Fulcher, ‘Globalisation, The Nation-State and Global Society’, *The Sociological Review* 48 (2000): 522-43.

⁹ The literature on the precautionary principle is endless. The following texts are illustrative and include texts – (governmental) reports, books, articles – from different jurisdictions: C.R. Sunstein, *Laws of Fear – Beyond the Precautionary Principle* (Cambridge University Press, 2005); A. Trouwborst, *Precautionary Rights and Duties of States*, Nova et Vetera Iuris Gentium Series, Vol. 25, Leiden/Boston: Martinus Nijhoff Publishers 2006 (content available online at <http://igitur-archive.library.uu.nl/dissertations/2006-0629-204021/full.pdf>); European Environment Agency, ‘Late Lessons from Early Warnings: The Precautionary Principle 1896-2000 – Environmental Issue Report, no. 22’ (Copenhagen: EEA, 2001); N. de Sadeleer, ‘The Precautionary Principle in EC Health and Environmental Law’, *European Law Journal*, 12 (2006): 139-72; M.B.A. van Asselt & E. Vos, ‘The Precautionary Principle and the Uncertainty Paradox’, *The Journal of Risk Research* 9 (2009): 313-36; E. Vos & G. van Calster (eds.), *Risico en Voorzorg in de Rechtsmaatschappij* (Groningen/Antwerpen: Intersentia, 2004); WRR, *Onzekere Veiligheid – Verantwoordelijkheden rond Fysieke Veiligheid* (Amsterdam: Amsterdam University Press, 2008); R.

idea that we live in a society of risks, but also suggests a society consisting of global interdependencies on all levels of social action.¹⁰ The central problem of the risk society gave - initially in Germany - rise to the development and application of *prudentia*, in the shape of the precautionary principle in respect of environmental protection. The ensuing legal debate has focused on (the application of) the principle, underexposing to a certain extent this central problem, as it fails to address and analyse the structural features of the problem. For us, a proper understanding of these structural features is essential, as they determine the relationship between the precautionary principle and the rule of law.¹¹ It demands first and foremost an analysis of the central problem: uncertainty, in particular uncertainty in terms of risk.¹²

2.1 The processes of modernisation: uncertainty and scarcity

Ulrich Beck argues that the central problem of contemporary society is constituted by risks. Risks have existed in all ages, but Beck targets a new type of risks. These risks are distinguished from so-called traditional risks such as adverse consequences that are the result of meteorological conditions, for example, crop failures. The potato-crop failure in Ireland in the nineteenth century is a striking example, leading to the dissemination of the population and mass emigration to the United States.¹³ Traditional risks were perceived as risks of an exogenous character that we cannot control. This lack of control suggests that this kind of risks is not man-made but perceived as an Act of God or a manifestation of Mother Nature.

This man-made aspect is a central feature of modern risks. Beck presents modern risks as side-effects of the processes of modernisation. In doing so, Beck distinguishes between first and second modernity. First modernity is constituted by the fundamental belief in the notion of progress through reason. The belief in progress fuelled the twin processes of industrialisation and democratisation, addressing the twin problems of scarcity and tradition, and culminating - at least in Western Europe - in the industrial society and the Welfare state.¹⁴ These processes were both situated in, and circumscribed by, the State. The process of industrialisation can be characterised as being concerned with the production of wealth through the technological application of science

Pieterman & T. Arnoldussen, 'Het Voorzorgsbeginsel: over Ideologie en Onzekerheid', *Rechtsfilosofie en Rechtstheorie* 37 (2008): 230-251; F.B. Cross, 'Paradoxical Perils of the Precautionary Principle', *Wash. and Lee L. Rev.* 53 (1996): 851-925; C.F. Cranor, 'Learning from the Law to Address Uncertainty in the Precautionary Principle', *Science and Engineering Ethics* 7 (2002): 313-327; Per Sandin, 'Dimensions of the Precautionary Principle', *Human and Ecological Risk Assessment* 5 (1999): 889-907; E. Fisher, 'Is the Precautionary Principle Justifiable', *Journal of Environmental Law* 13 (2001): 315-334.

¹⁰ U. Beck, *Cosmopolitan Vision* (London: Polity, 2006) 22 et seq.

¹¹ Indeed; a reflexive understanding of law, demands a proper understanding of its environment, i.e. society. See also: L. Francot & U. de Vries, 'Legal Education Re-enchaned', *European Journal of Legal Education* 3 (2006): 3-20.

¹² We present risk as a feature of uncertainty. For a deeper understanding of the notion of uncertainty and how it pertains to modern risks, see also: L.M.A. Francot-Timmermans and U.R.M.T. de Vries, "Normativity in the Second Modernity" *Rechtstheorie* 39 (2008): 477-494.

¹³ P. Gray, *The Irish Famine* (Paris: Gallimard, 1995) and Ch. Kinealy *This Great Calamity: The Irish Famine 1845-52* (London: Gill & Macmillan: 1995).

¹⁴ Cf. U. Beck, *The Reinvention of Politics* (London: Polity Press, 1997), 13 and U. Beck, *Risk Society - Towards a New Modernity*, trans. M. Ritter (London: Sage, 1992), 19 et seq.

and scientific discoveries. The process of democratisation served, among many other things, the just distribution of this wealth, as well as the emancipation of humans as autonomous individuals, freeing them from tradition and political subordination.

Law made important contributions in respect of the efficient production and distribution of wealth. It regulated production and distribution through rules based on concepts such as the freedom to contract, ownership and possession, legal personality and liability. Law reflects and gives voice to the developing liberal theory of the time. This can also be observed in the role of the State. This role was, initially, a restricted one, and was concerned with allowing the market to function and with rights (to life, liberty and property) to be protected from internal and external threats. Indeed, law served to improve the position and power of the autonomous individual to which the recognition of civil and political rights attest, but it did so merely in a formal way. Like the market, the State too was subject to regulation, encapsulated in the notions of the rule of law and democracy. The sharp distinction between the private and the public resonates in the two main bodies of modern law, particularly so in continental Europe: private and public law. The concept of State sovereignty was the guiding force behind the development of modern international law.¹⁵

The distinction between the public and the private became blurred as a result of what is termed in the Netherlands, the '*Sociale Quaestie*'.¹⁶ It denotes the extreme poverty and social immobility of the working classes across Europe during the late era of first modernity. This situation eventually gave rise to social democracy and culminated in the Welfare State.¹⁷ Law, here, did not merely codify important concepts of first modernity into manageable rules, but was employed as a tool to give shape to society as prescribed by the State. It saw the rise of socio-economic rights, allowing an effective use of civil and political rights. It saw an extensive system of social security based on law, as well as the introduction of many legal measures that sought to protect the weaker party in all kinds of contractual agreements, i.e. rental agreements, labour agreements, consumer and credit contacts, *etc.*. In more abstract terms, one saw the juridification of an ever-increasing variety of social interaction, aiming to mould social interaction into a 'designed society' based upon, and subordinated by, rules. The early developments in respect of European integration can also be understood in terms of 'design', while at the same time contributing to the erosion of the concept of State sovereignty.

2.2 Second modernity: uncertainty and risks

Second modernity can be characterised by the radicalisation and transformation of the processes of industrialisation and democratisation. Beck characterises this radicalisation of contemporary society in the second modernity by reference to the processes of 'forced individualisation' and

¹⁵ See also: D. Held, 'Law of States, Law of Peoples: Three Models of Sovereignty', *Legal Theory* 8 (2002): 3-4.

¹⁶ On the 'sociale kwestie', see, amongst others, A. de Swaan, *In Care of the State – Health Care, Education and Welfare in Europe, and the USA in the Modern Era* (Oxford: Oxford University Press, 1988).

¹⁷ This phase is deemed a phase of the first modernity because the production and distribution of wealth remained the central feature.

‘multidimensional globalisation’.¹⁸ The former refers to the perception that individualisation is no longer or not only a matter of an individual choice, but is caused by developments and decisions that are not under the control of the individual. Multidimensional globalisation refers to the idea that structural societal developments and the side effects they produce are global in nature. If, for instance, global free trade refers to the free movement of goods and services, it implies by necessity the free movement of its adverse side effects, for example, the spread of diseases such as bird flu or BSE. Globalisation is not restricted to the economic dimension but also includes political, cultural and moral dimensions.

What this radicalisation discloses is society’s confrontation with self-produced side effects.¹⁹ The nature of these side effects, which, in respect of industrialisation Beck conceptualised in the notion of ‘risk’, causes him to speak of society as a ‘world risk society’.²⁰ It confronts society in the second modernity with an additional fundamental problem. While first modernity was characterised by the problem of producing and distributing wealth, delineated by the borders of modern States, second modernity has to deal with the production and distribution of the side effects of wealth production and distribution that transcend the nation-state. Beck formulates this as follows:²¹

How can the risks and hazards systematically produced as part of modernization be prevented, minimized, dramatized, or channelled? When do they finally see the light of day in the shape of ‘latent side effects’, how can they be limited and distributed away so that they neither hamper the modernization process nor exceed the limits of that which is ‘tolerable’ – ecologically, medically, psychologically and socially?

2.3 The nature of modern risks

In Beck’s view ‘risks’ have become or will constitute the new fundamental distribution problem, complementing the distribution problem of first modernity. The latter problem is resolved, at least in the affluent West, within the State by means of the economic notion of the free market and the political notions of rule of law and democracy, as was shown above. Societies are now transforming from industrial societies of States towards an integrated and interdependent world risk society. The nature or characteristics Beck ascribes to modern risks illustrate this transformation.

¹⁸ U. Beck & E. Grande, *Das Kosmopolitische Europa* (Frankfurt am Main: Suhrkamp, 2004), 50.

¹⁹ Indeed, as Francot (one of the authors of this article) observes, the second paradigm shift in social systems theory introduced the concept of ‘self-referentiality’ into societal theory. This introduction demarcates a break with the occidental tradition in which the ability of reflection was a privilege of human beings or ‘subjects’. This strand of thought also attributes the ability of reflection to complex, non-living systems, such as society. In Francot-Timmermans, *Normativity’s Re-Entry* 29, below note 72.

²⁰ Beck, *Cosmopolitan Vision*, 22 and 34. See also: U. Beck, *World Risk Society* (Cambridge; Polity Press, 1999).

²¹ Beck, *Risk Society*, 19.

2.3.1 Characteristics

Risks are self-produced and self-inflicted systematically, exactly because they are side effects of industrialised activity, i.e. systemised wealth production. This suggests, in terms of responsibility, that modern (Western) society itself is responsible for the production of modern risks. The effects are not so limited. Risks lie in the future – often in the present of next generations – and are immanently global. The second feature of modern risks is their ‘glocal’ character. It may well be that risks are produced locally (and thus everywhere), but their effects are global as well as local.²² The third feature is the existence of unequal social risk positions. People are affected by risks in different ways. Some can protect themselves against risks or at least be able to minimise their effects, whilst others are at the mercy of risks. This seems to mirror the division of traditional class society, but as risks are global, the differentiation of social positions is global too, taking place among, within and across States.²³ The ‘globality’ of risks implies, furthermore, that in terms of the distribution problem, distribution cannot be achieved within the borders of a State alone, but must also be global. The distribution of risks is a global problem foretelling a new and global ‘*Verelendung*’. A fourth feature of modern risks is their invisibility. Risks cannot be seen, heard, felt, tasted or smelled. Modern risks are constructions of scientific knowledge and exist in chemical and mathematical formulae or simply in ideas and suppositions. It implies that those in scientific and political key positions can determine what the risks are. Consequently, if something is not defined as such, it is not deemed to be a risk. It also remains problematic to determine when and how the effects of risks materialise, if ever, and to what extent. It merely exists in probabilities and estimations – in uncertainty. In the end, risks bind the future to the present without us being able to determine, but in vague terms, cause and effect. Indeed, a final feature Beck attributes to risks refers to the problem of causality and, hence, the problem of responsibility, as causality is always considered to be a key aspect of responsibility. The problem is that it becomes increasingly more difficult to determine what actions of which actors cause which effects; it becomes increasingly more difficult to determine causality in the production of risks (and their effects) and, hence, to determine who is to be held responsible and why. Although one may conclude that the whole of Western society is responsible, it is of no use in respect of the distribution problem. In the end, risks are the result of organised irresponsibility. Or:²⁴

Corresponding to the highly differentiated division of labor [*sic*], there is a general complicity, and the complicity is matched by a general lack of responsibility. Everyone is cause and effect, and thus non-cause. [...] This reveals in exemplary fashion the ethical significance of the system concept: one can do something and continue doing it without having to take personal responsibility for it.

²² If globalisation refers to the free transfer of goods throughout the world, it implies also the global transfer of risks. Illustrative in this respect are the recent crises in food products, such as the BSE crisis and the bird flu crises. The effect of risks though – their materialisation – may be local again: the individual who gets infected somewhere, say in the South-East of Turkey. Thus, risks exist in global threats and local manifestations.

²³ Contrary to Beck, we suggest that risks exacerbate this differentiation rather than having an equalising effect, see: Francot & de Vries ‘No Way Out’, 205.

²⁴ Beck, *Risk Society*, 31 (emphasis in the original).

To sum up: modern risks, which are, by their nature systematically man-made and self-inflicted, are global in their reach and invisible sensorily, leading to unequal social risk positions and resulting both in and from organised irresponsibility due to weak causality. One final characteristic of risks is the magnitude of their manifestation in the shape of disasters, catastrophes and calamities as shown, for example, by the Chernobyl-disaster, the catastrophe in Bhopal and the BSE crisis in the UK.

2.3.2 *The problem of risks*

Second modernity is faced with the question of how to deal with risks. Contrary to wealth, risks as such cannot be distributed because they are invisible aside from existing as scientific formulae. Part of the solution is found in the attribution of responsibility for risks and for the consequences of risks when they materialise in the shape of a disaster, for example. Law is immanently able to attribute responsibility – this is what it does. Another part of the solution lies in the attempt to prevent or minimise the production of risks. Considering the characteristics of modern risks, this is a difficult task. The precautionary principle can be understood, however, as providing the framework for legal responses to this problem, attempting to distribute modern risks through minimising their production by means of a normative judgement in the absence of conclusive scientific evidence about their acceptance. This is how the legal system may deal with the ‘scientific deficit’ in respect of modern risks. As the legal system has to act within the framework of an informational void, it puts legality under strain because power can only be exercised on the basis of rules, and the formulation and application of rules require information for them to be effective and legitimate. To understand the nature of this strain, a closer analysis of the precautionary principle is demanded.

3. THE PRECAUTIONARY PRINCIPLE

The precautionary principle can be regarded as a modern interpretation of the notion of *prudentia*, which, in its essence, means that when acting or making decisions, caution should be exercised. One of the first modern interpretations can be found in Germany as a way of dealing with industrial threats to the environment. In particular, Germany endorsed the principle in respect of clean air as early as 1974.²⁵ In other national jurisdictions explicit reference to the principle is also made. In Belgian law, the precautionary principle has been adopted in respect of the protection of the maritime environment in the seas within the Belgian jurisdiction.²⁶ In the UK, the principle is found in policy documents on sustainable development.²⁷ In France,

²⁵ ‘Clean Air Act, 1974’ (original: Bundes-Immissionsschutz-Gesetz (BIMSchG) 1974).

²⁶ B.S. 12 maart 1997. *Wet van 20 januari 1999 ter bescherming van het maritieme leefmilieu in de zeegebieden onder de rechtsbevoegdheid van België* (Art. 4).

²⁷ *UK Strategy on Sustainable Development* (London: HMSO, 1990) and *Better Quality of Life: A Strategy for Sustainable Development* (London: HMSO, 1994).

legislation invokes the precautionary principle quite explicitly in order to protect the natural environment.²⁸ In the US, the precautionary principle has been applied in legislation banning, for example, animal carcinogens in foodstuffs and the use of chlorofluorocarbons.^{29 30}

3.1 Global and European context

In this article we seek to concentrate on the adoption of the principle on the global and European stage, in respect of environmental protection and preservation, and (also by implication) public health and safety. We do so as we are, amongst other things, concerned with the impact of globalisation on legality that is traditionally a State-bound principle. As risks constitute a global phenomenon they demand a global response. There are numerous examples of international treaties endorsing the principle.³¹ Perhaps the ones that resonate most are the Rio Declaration and, in Europe, the EC Treaty. They illustrate this global response and illustrate what could be termed the ‘globalisation of law’. Principle 15 of the Rio Declaration states:³²

In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. 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.

The principle is also endorsed by the European Commission as an ‘essential policy instrument.’³³ Furthermore, it has been codified in the TFEU Treaty in Article 191, paragraph 2:

Community policy on the environment shall aim at a high level of protection taking into account the diversity of situations in the various regions of the Community. It shall be based on the precautionary principle and on the principles that preventive action should be taken, that environmental damage should as a priority be rectified at source and that the polluter should pay.

In Article 191 the precautionary principle is explicitly named as an instrument to deal with risks that pose a threat to the environment. Paragraph 1 provides that Union policy in respect of the environment must contribute to pursuing at least four objectives: preserving, protecting and

²⁸ See, for example, Loi no. 95-101, 2 Février 1995, relating to the reinforcement of the protection of the environment (Loi Barnier). In 2005, the French Parliament passed the *Chartre de l’environnement*, in which the precautionary principle is laid down in Art. 5.

²⁹ See for an overview, EEA ‘Late Lessons from Early Warnings’, 11-12.

³⁰ In the Netherlands the precautionary principle does not feature explicitly in Dutch environmental law. It is introduced through European legislation; see: N. Teesing, R. Uylenburg & C. T. Nijenhuis, *Toegang tot het Milieurecht* (Den Haag: Kluwer, 2009, 5th edition), 15. However, policy is informed by the principle, for example, in respect of electromagnetic fields in mobile phone transmitters; see: TK 2008-2009, 27.562, nr. 37 (parliamentary report). Furthermore, the principle has been subject to a governmental study: WRR, *Onzekere Veiligheid*.

³¹ EEA, *Late Lessons from Early Warnings*, 14.

³² ‘Rio Declaration on Environment and Development’, (New York: UN, 1992):

<<http://www.un.org/documents/ga/conf151/aconf15126-1annex1.htm>>, 18 November 2009.

³³ More generally, the precautionary principle is understood as a policy instrument or guideline. See for example: K. von Moltke, ‘The Relationship between Policy, Science, Technology, Economics and Law in the Implementation of the Precautionary Principle’, in Freestone & Hey, *The Precautionary Principle and International Law*, 106.

improving the quality of the environment, protecting human health, prudent and rational utilisation of natural resources, and promoting measures at international level to deal with regional or worldwide environmental problems. The principle can be traced elsewhere too, albeit implicitly, for example in the area of public health and consumer safety.³⁴

Article 192 suggests that the precautionary principle is a guiding principle for the Council in its legislative capacity rather than being a directing principle for Member States when developing and drafting environmental policy and legislation.³⁵ Nevertheless, any legislation emanating from the Council overrides national legislation,³⁶ effectively imposing the precautionary principle at the national level across the European Union. To be more precise, directing principles of the EC Treaty do not apply directly to Member States, or so it is said. Nevertheless, according to De Sadeleer, this must be nuanced, taking into account whether areas are subject to secondary legislation and/or whether these areas are harmonised.³⁷ He sums it up stating that, ‘*as a general principle, the precautionary principle binds the member states in so far as they act within the scope of EU law*’.³⁸

3.2 The precautionary principle in the literature

The above descriptions of the precautionary principle are definitions that present the principle as a guideline for policymakers and law makers on how to deal with developments in the field of environmental pollution, food safety, nanotechnology, *etc.* Indeed, the Rio Declaration refers to it as an ‘approach’.³⁹ The essential feature is the scientific uncertainty about risk – the presence of a scientific deficit of full certainty. A more general description of the precautionary principle, stressing this point, is found in the academic literature.⁴⁰ A concise description is the one given by Fisher, stating that it is:⁴¹

³⁴ See Art. 168 and 169 TFEU.

³⁵ See also: S. Lierman, ‘Het Voorzorgsbeginnsel en Gezondheidsbescherming, Oude Wijn in Nieuwe Zakken?’ in *Risico en Voorzorg in de Rechtsmaatschappij*, ed. E. Vos & G. van Calster (Groningen/ Antwerpen: Intersentia, 2004), 53.

³⁶ Cf. *Costa/ENEL* (1964) ECR 585.

³⁷ N. de Sadeleer, *Implementing the Precautionary Principle – Approaches from the Nordic Countries, the EU and the USA* (London: Earthscan, 2007), 14.

³⁸ *Ibid.* citing J. Scott ‘The precautionary principle before the European courts’, in *Principles of European Environmental Law*, ed. R. Macrory (Groningen: Europa Law Pub.) 54. A recent paper suggests that the principle is evolving towards a rule; see: E.C. Fisher, ‘Opening Pandora’s Box: Contextualising the Precautionary Principle in the European Union’, in *Uncertain Risks Regulated: National, EU and International Regulatory Models Compared*, eds. E. Vos, M. Everson & J. Scott, (London: Cavendish, 2009) 21-46.

³⁹ Some suggest that there is a difference between the precautionary principle and the precautionary approach and that this difference lies in a more flexible application when referred to as ‘approach’; see: S. Marr, *The Precautionary Principle in the Law of The Sea – Modern Decision Making in International Law* (The Hague: Kluwer, 2003) 17 et seq.

⁴⁰ For a more extensive overview, see: O. Renn, *Risk Governance. Coping with Uncertainty in a Complex World*, (London: Earthscan, 2008) 78 et seq.

⁴¹ Fisher, ‘Is the Precautionary Principle Justiciable’, 316

A principle that in cases where there are threats to human health or the environment the fact that there is scientific uncertainty over those threats should not be used as the reason for not taking action to prevent harm.⁴²

Indeed, the literature stresses scientific uncertainty as an important feature, if not the distinguishing feature of the principle. Freestone, for example, refers to the precautionary principle as an innovative principle because it changes the role of scientific data. He repeats the adage that taking regulatory measures should not be obstructed by the absence of scientific evidence about the effects of such activities if there is a threat of environmental damage.⁴³ Another feature that is stressed by Freestone is that the principle allows the use and application of a wide variety of measures, rather than dictating a particular measure. Indeed, he makes the point that the principle can be characterised as ‘*addressing the manner in which policy makers for purposes of protecting the environment, apply science, technology and economics*’.⁴⁴ To this end, the principle is goal-oriented: preventing harm, either to the environment, as Freestone states, or otherwise, such as with public health or food safety. It suggests the principle to be understood as a duty to take precautionary action, avoiding risk from occurring or, alternatively, to prevent risks from materialising in real damage. Similarly, Tinker suggests that in practice the principle can be regarded as implying ‘*a substantive duty of care which requires undertaking environmental impact assessments or other regulatory investigations prior to permitting given actions*’.⁴⁵

It is the ‘vagueness’ of what the principle demands that causes the literature to also be concerned with how strong or weak the precautionary principle is in official formulations, such as treaties and other legislative instruments. Whether the principle is formulated weakly or strongly has an impact upon what precisely it expects regulators to do and in which areas the principle could or should apply. There seems to be some form of consensus in the literature that considers the precautionary principle to be a weak principle,⁴⁶ a guiding principle.⁴⁷ This weak-strong axis is important in the context of this article as it suggests a parallel with legality. The manner in which the principle is formulated (strong-weak) suggests the extent to which it can, in its application, meet the demands of legality, or, indeed, can undermine these demands, creating more room for arbitrary State intervention. In this sense, Nollkaemper suggests that in the application of the principle a balance must always be found between, for example, as he does, ecological and economic interests.⁴⁸

⁴² An even more general definition would merely speak of threats: ‘A principle that in cases where there is a threat the fact that there is scientific uncertainty over the threat and its consequences should not be used as a reason for not taking action to prevent possible harm.’

⁴³ David Freestone cited in P. Birnie, A. Boyle & C. Redgwell, *International Law and the Environment* (Oxford: Oxford University Press, 2008, 3rd edition) 155.

⁴⁴ D. Freestone & E. Hey ‘Origins and Development of the Precautionary Principle’ in Freestone & Hey, *The Precautionary Principle*, 12.

⁴⁵ C. Tinker, ‘State Responsibility and the Precaution Principle’, in Freestone & Hey, *The Precautionary Principle*, 55.

⁴⁶ *Ibid.*, 57.

⁴⁷ See also Sunstein, *Laws of Fear*, 23 et seq.

⁴⁸ A. Nollkaemper, ‘“What you risk reveals what you value”, and Other Dilemmas Encountered in the Legal Assaults on Risks’, in Freestone & Hey, *The Precautionary Principle*, 73.

The absolute objective of the precautionary principle should not be pursued blindly and unconditionally. At times, risks that threaten environmental interests may be a price worth paying to serve other environmental or societal interests.

It is this balancing act which is our focus: how can, in the application of the precautionary principle, a balance be struck between meeting environmental and other such concerns and meeting the demands of legality? It suggests first, that a further analysis into the legal status of the precautionary principle is needed.

3.3 The legal status of the precautionary principle

The discussion about the principle being weak or strong relates to the legal status of the principle. How should we interpret the principle in legislative terms? It implies a variety of questions. One is, in respect of Article 15 of the Rio Declaration, the extent to which States are bound to use and apply the precautionary principle. Some suggest that the precautionary principle, at least under the Rio Declaration, enjoys the status of a rule of customary international law. It is formulated in obligatory terms and is widely endorsed by States around the world and is applied or adopted by many (other) international organisations as a matter of policy as well as a matter of law, considering the adaptation of the principle in treaties and other such texts.⁴⁹

In the absence of a wide consensus about what exactly the principle demands, though, the precautionary principle cannot be understood as a hard-and-fast legally binding rule. Indeed, Birnie *et al.* suggest that it is ‘*far from evident that the precautionary approach [...] has or could have the normative character of the rule of law*’.⁵⁰ They give a number of plausible reasons. One is that it is far from certain what the meaning of the principle is, or its application and consequences in order to consider it as rule of international law. Furthermore, it has not been endorsed as such by major courts, such as the International Court of Justice or the Court of Justice of the European Community. Indeed, the latter refers to it as a legal principle. This is, Birnie *et al.* continue,⁵¹ also reflected in the very general terms in which the principle is formulated, only stating that scientific uncertainty is not an excuse for complacency. More is needed to turn a general rule of conduct into a legal rule. Others agree, arguing that State practice makes it evident that the precautionary principle is a principle of customary international law.⁵² Yet others consider the principle rather to be a matter of soft law and not even a principle of international law.⁵³

Is it merely a matter of semantics or is the distinction important? We consider the distinction and representation of the principle as either a rule of law, a principle of law or a matter of soft law important. As a principle, it allows States and other legal actors to justify policy decisions that may go against, for example, traditional economic interests. Indeed, the principle, in this way,

⁴⁹ Birnie, *International Law and the Environment*, 159-160.

⁵⁰ *Ibid.*, 160-161

⁵¹ *Ibid.*

⁵² See: J. Cameron and J. Abouchar, ‘The Status of the Precautionary Principle in International Law’, in Freestone & Hey, *The Precautionary Principle*, 30.

⁵³ See: Tinker, ‘State Responsibility’, in Freestone & Hey, *The Precautionary Principle*, 53.

echoes how actors use - strategically or otherwise - other global principles such as the principle of sustainable development.⁵⁴ The principle, so used as an expression of an aspiration, cannot be but a principle one ought to agree with. In this context the precautionary principle ‘*does have a legally important core on which there is international consensus.*’⁵⁵ The precautionary principle forms the basis for action, both politically and legally. To this end, it may be relied upon by decision makers and courts as an imperative for action (to protect/prevent/remedy). When we consider the precautionary principle in this way, surely it has consequences that impact upon legality.

One consequence is, as noted by Birnie *et al.*, that the principle allows for the redefining of existing rules of law for them to play a different role. One example is that the principle allows that there is no longer a need to prove causality – there is no need to prove that real damage would otherwise occur – in order to take preventive action. The mere possibility (rather than probability) of damage suffices to demand action. Hence, the identification of a risk is enough to demand action or, to formulate it differently, allows States and other international legal organisations to take action.⁵⁶ And the more politically explosive these risks are, the more discretion States assume to deal with such risks. Indeed, Tinker goes as far as to suggest that a reactive model (after a damage occurring event) of distributing responsibility no longer suffices to sufficiently safeguard global environmental interests, and that a preventative model is necessary, of which the precautionary principle forms an important cornerstone.⁵⁷ The suggestion that the precautionary principle puts legality under strain will be the subject of a more detailed analysis below. Before doing so, the article sketches what the authors assume legality to mean and how the concept fits in within the general or overriding concept of the rule of law.

4. LIBERTY AND THE RULE OF LAW

Beck, as was described above, distinguishes between two phases within the process of modernisation: first and second modernity. First modernity formulated answers to the problem of scarcity and (political) subordination and saw in the twin-processes of industrialisation and democratisation the solutions to these problems. Liberty and the rule of law can be regarded as two of the organising principles that underscore the process of democratisation. Indeed, our understanding of the rule of law pertains to our understanding of liberty.⁵⁸ Liberty qualifies State power.⁵⁹

The modern concept of liberty suggests, as a point of departure, that the State is not to meddle in the private affairs of citizens unless their actions cause harm, i.e. real (physical) damage to life,

⁵⁴ Birnie, *International Law and the Environment*, 163.

⁵⁵ *Ibid.*

⁵⁶ See also: Freestone & Hay, ‘Origins and Developments’, in Freestone & Hey, *The Precautionary Principle*, 13.

⁵⁷ See: Tinker, ‘State Responsibility’, in Freestone & Hey, *The Precautionary Principle*, 54.

⁵⁸ See also R. Unger, *Law in Modern Society* (Washington: Free Press, 1976), referring to society as a voluntary association.

⁵⁹ The harm principle may be regarded as an expression of this qualification as expounded by its main proponent John Stuart Mill; see: J.S. Mill *On Liberty*, (London: Parker & Son, 1859), 22. See also: K.K. Jensen, ‘The Moral Foundation of the Precautionary Principle’, *Journal of Agriculture and Environmental Ethics*, 15 (2002): 39-55.

liberty and possessions. Indeed, the harm principle, as perhaps the expression of liberal thought, qualifies the rule of law as a *functional* principle. The rule of law is not merely an expression of the idea that (State) power cannot be exercised arbitrarily, but the subordination of power to rules is functional:⁶⁰ it allows individual liberty as the fundamental organising principle of early modern society. Legality is, in our view, the pivotal element of the rule of law and is embedded within this concept together with three other fundamental elements of modern society: democracy, separation of powers and respect for human rights. Hence, we employ a so-called ‘*thick*’ description of the rule of law.⁶¹

The principle of legality suggests that State power can only be legally exercised on the basis of rules (legislation) that themselves have been formulated on the basis of a known procedure laid down in rules. Furthermore, legality demands that legislation is general, clear and precise, promulgated, prospective, practicable and stable in that it lasts, altogether serving the notion of legal certainty.⁶² Thus, legality, according to us, implies a procedural aspect as well as formal characteristics. The former establishes a legal basis to the exercise of power. The latter refers to certain qualitative criteria that legislation must possess. These ‘Fuller-criteria’, so to speak, encapsulate this aspect, in particular with regard to legislation that pertains to regulate the relationship between citizen and State.

Legality, in respect of its formal or procedural aspect, ties in with the democratic element. This element suggests that the rule-making procedure is democratic and that those who make and/or apply the rules are democratically elected. Thus, legislation is subject to a parliamentary procedure through which the proposed piece of legislation is discussed, debated, and if necessary, amended, before it is voted upon by a majority. It provides legislation democratic legitimacy. Even more so because those who have decided upon the legislation are themselves democratically elected. Collectively, by deciding upon the legislation, they delegate, as it were, the executive the power to execute the law. They even may delegate law-making powers to the executive to enable it to execute the law – so-called secondary legislation. The distinction between primary and secondary legislation will be discussed below in more detail.

The third element refers to this delegation/distribution of this rule-based power among different institutions. Rule-makers delegate executive powers, formulated in the rules, to the executive, who they can hold to account for the manner in which they execute policy on the basis of that legislation. The judiciary can also be delegated this task under a system of judicial review, enabling individual complainants to seek redress if and when the executive function harms their interests. This institutional differentiation can be regarded as a strict separation of powers, as suggested by Montesquieu in his *L’Esprit de Lois* or, in a more contemporary understanding, it can be regarded as a system of checks and balances, allowing institutions to share power and/or to subject themselves to each others’ control and supervision. Indeed, such an elaborate system of controlling power may be of more benefit than simply relying on the democratic element alone.

⁶⁰ See also A.V. Dicey, *An Introduction to the Study of the Law of the Constitution*, (London: MacMillan, 1885).

⁶¹ See also: B.Z. Tamanaha, ‘A Concise Guide to the Rule of Law’, in: *Re-locating the Rule of Law*, eds. G. Palombella & N. Walker, (Oxford: Hart Publishers, 2008) 3-16. Indeed, within the literature there is an intense discussion about how to describe and characterise the rule of law. See, for example, the first issue of the newly established *Hague Journal on the Rule of Law*, in particular, R. Peerenboom, ‘The Future of Rule of Law: Challenges and Prospects for the Field’, *Hague Journal on the Rule of Law*, 1 (2009): 5-14.

⁶² Cf. L.L. Fuller, *The Morality of Law* (New Haven, NE: Yale University, 1969 (revised edition)), in particular Chapter 2.

Finally, the contents of the rules are based upon, or stem from, certain fundamental values or organising principles of the State society. These principles find expression in, among others things, human rights and emanate from the liberal spirit that the thicker version of the rule of law exudes. The principles suggest that States exercise their power with respect for, and in furtherance of, civil political and socio-economic rights respectively. It means that the exercise of State power is not only subjected to rules to prevent abuse, but that it is also instrumental/functional in that it should promote these human rights, both through non-interference and promotion.

5. BALANCING TWO PRINCIPLES

The above functional interpretation of the rule of law assumes that the rule of law served to address the problems of first modernity, as described by Beck. The question arises as to whether the rule of law can serve this function in respect of the responses, encapsulated in the precautionary principle, to the problems of contemporary society in second modernity (the problem of modern risks). We observe a tension between the precautionary principle as a response to the contemporary problem of modern risks, and the principle of legality that seeks to prevent the arbitrary use of State power (however functional/instrumental the exercise of that power may be). As a matter of extreme position, the question could be: what has priority? Is it legality or ecological survival? Or could the two be reconciled in one way or the other? A number of options present themselves. However, before addressing these options, we first seek to return to what, in our view, is the bottom line of the two principles at stake; what is the primary function of the principle of legality and precaution?

5.1 Regulating relations

The primary function of legality refers to the relationship it seeks to regulate. The relationship is the one that exists between the citizen and the State or, in more general terms, legality regulates the relationship between those in power and those subjected to that power. In modern Western States the principle of legality protects the citizen against the arbitrary use of power, or, more precisely, it demands a legal basis (which by itself must be of a certain standard) to legitimise State action. In this way, legality provides certainty for citizens as to, for example, the distinction between the public and the private sphere and the certainty that if power is exercised, it is legitimate or, at least, its legitimacy can be challenged, for example, through judicial review proceedings. Hence, legality transforms the uncertainty of arbitrariness into the certainty of legitimate power. This in itself does not curb the field of play of power. In this way, legality is what could be termed a procedural instrument to curb power; it does not, however, make clear what the contents of the rules ought to be, upon which power can be exercised. The contents of

these rules have, on the whole, liberal roots, of which the harm principle is exemplary when it comes to defining the relationship between State and citizen.⁶³

The harm principle, in its essence, suggests that man is free in his actions only insofar he does not harm others. At least this is the version as espoused by one of its main proponents, John Stuart Mill: ‘*that the only purpose for which power can be rightfully exercised over any member of a civilized community, against his will, is to prevent harm to others*’.⁶⁴ It is a liberal principle that allows the organisation, through law, of social relations, in particular there where damage ensues or could ensue; it allows the attribution of responsibility on the basis of linear causality *ex post facto*. Indeed, most civil liability regimes across Western societies use the harm principle as their point of departure. Furthermore, in addition to regulating private relations between citizens, the harm principle allows also States to interfere when damage ensues, or it is likely that damage will ensue when the State does not interfere. It coincides with the *raison d’être* of the State: to provide security and safety for its citizens. To this end, the harm principle is a negative duty on the part of the State: a duty not to interfere unless there is a real likelihood of damage, and this interference, by virtue of the principle of legality, must be based on law.⁶⁵

This description of the harm principle shows that the precautionary principle seems, in many ways, a pendant or reinterpretation of the harm principle.⁶⁶ It, too, demands action of the State to prevent real damage from occurring. The difference though, is, it is suggested, that the precautionary principle entails a positive duty in the absence of a real likelihood of damage. Indeed, it demands action in the absence of linear causality. Whereas the harm principle places an emphasis on liberty, the precautionary principle emphasises the need for (collective) security and protection against dangers that are not easily proven, but rather presumed. It may even be argued that, contrary to the harm principle, the precautionary principle is ill-equipped to prevent the exercise of arbitrary State power. Indeed, the literature, discussed above, seems to suggest that the precautionary principle applies without reference to the demands of legality. Would this imply that in the application of the precautionary principle legality has become an outdated concept?

5.2 An outdated concept?

Thus, one option is to conclude that the requirement of legality is an outdated one. This may seem an outrageous statement, but not if one considers the complexity of society with which law is confronted, both in qualitative and quantitative terms. There is an ever-increasing development to (super) specialisation and differentiated expertise in an attempt to foresee everything and make

⁶³ The harm principle justifies as well as limits State interference also in respect of interaction among citizens.

⁶⁴ Mill, *On Liberty*, 22.

⁶⁵ To note: we do not suggest that the harm principle remains the only guidance for legitimate state intervention. State intervention is rationalized on many other grounds, such as the offence principle (Feinberg), paternalism (Dworkin) or the maintenance of some public morality (Lord Devlin). An elaborate analysis of these positions is provided in F. Schauer & W. Sinnott-Armstrong, *Philosophy of Law - Classic and Contemporary Readings with Commentary*, (Oxford: Oxford University Press, 2002), chapter 4 in particular. The point here is that the harm principle serves as a counterpoint for the precautionary principle in order to illustrate its primary function.

⁶⁶ Linking harm with precaution, see also: Jensen, ‘The Moral Foundation of the Precautionary Principle’, 39-55

it subject to regulation. This is no longer a realistic option (if it ever was).⁶⁷ This is particularly the case in respect of ecological problems presented as risks: uncertain future events with uncertain consequences. However, considering the huge ecological problems contemporary society has generated, action is demanded, which cannot be stalled or prevented by considerations as to how power ought to be exercised. At least this could be the argument. Too much is at stake and the general welfare of all is served rather than the interests of a political elite. There seems to be an implicit understanding in the literature that attributes environmental interests (preventing environmental destruction and threats to public health and safety) a higher priority than the interests legality seeks to serve (preventing the abuse of power for the sake of individual liberty and freedom of choice). Perhaps this consensus of prioritisation is understandable, as it seems that we are confronted with a simple choice: liberty or ecological survival of the planet and its humanity. The choice is simple, as the first is useless without the second. Although this polarisation may enjoy some intuitive appeal, it carries with it the danger that it makes the problem of risk the sole problem of contemporary society or, alternatively, that it conveniently transforms all problems into problems of ecological risk, rather than accepting that there are many other different problems, including the problems constitutive of first modernity, such as the ongoing scarcity in different parts of the world, unjust distribution, and the misery of those who are subordinated by religious fanatics, totalitarianism and dictatorship.

Furthermore, it also opens up the possibility for the justification of *any* State action. This danger is not merely imaginary. Illustrative are the many measures taken to combat terrorism. An example is the US control over European bank transactions through ‘Swift.’⁶⁸ Similar to these anti-terrorism measures, the effectiveness of measures to protect the environment, based on the precautionary principle, is uncertain to say the least. Sunstein convincingly argues that in its strong version, the precautionary principle has a ‘*paralysing*’ effect.⁶⁹ We do not argue, then, that one should not act – this is the whole point of the precautionary principle – but that something must exist that is able to delimit action and to prevent States and other political actors from having a limitless playing field to exercise power. The precautionary principle allows States to exercise power to safeguard environmental, ecological or other such interests, and they can do so on the premise that an apparent risk exists about which there is scientific uncertainty in respect of its existence in the first place, as well as about the nature and extent of its consequences if and when it manifests itself in the shape of a disaster. It is not, however, a sufficient legal basis for the legitimate exercise of power.

5.3 Legality under siege

Legality is under siege and the precautionary principle illustrates or shows that legality is besieged from within and relates to the material and formal/procedural characteristic of legality.

⁶⁷ This observation echoes the argument of Zygmunt Bauman that “solid modernity” strived to establish a universal ethical code and was doomed to fail; see Z. Bauman, *Postmodern Ethics*, (Oxford: Blackwell, 1993), for example p. 14.

⁶⁸ E. Lichtblau & J. Risen, ‘Bank Data Is Sifted by U.S. in Secret to Block Terror’, *The New York Times*, 23 June 2006. <www.nytimes.com/2006/06/23/washington/23intel.html> (25 November 2009).

⁶⁹ Sunstein, *Laws of Fear*, 26.

5.3.1 'Internal' legislation

Legality is not an outdated concept when it comes to addressing the problems of contemporary society. Legality still serves its function, but in doing so, it demands reconsideration about its scope and application. Legality formulates a legal basis for State action and sets criteria for the evaluation of both the legal basis and State action. The precautionary principle urges the State to take action *without* specifying the particular course and scope of action. Considering the complexity of the problem the precautionary principle seeks to address, the legal basis for action (which legality demands) is also complex and this carries with it the danger that it escapes parliamentary and legal control. This can be illustrated by the shifting perspective of legislation, both in respect of the material and formal aspects.

Traditional legislation pertained to prescriptions regulating the relationship among citizens and the relationship between citizens and the State. This type of legislation must meet the so-called Fuller criteria to meet the material aspect of legality: to provide legal certainty for citizens in respect of how to regulate their conduct. The last decades have seen a huge shift in the subject of legislation and, hence, its object. Indeed, Kryger concludes that much legislation nowadays is 'internal, that is, concerned at least initially with administrative agencies'.⁷⁰ This type of legislation formulates a particular objective and, subsequently delegates to all kinds of administrative agencies the task of developing executive policy and translating this policy into action to address the objective. This changing objective of legislation implies that this type of legislation escapes the material aspects of legality.

In more abstract terms, legislation can be distinguished into legislation based on a conditional programme and legislation based on goal-directed programmes.⁷¹ The former has the logical structure of an implication, in terms of an 'if...then... statement'.⁷² Here, the 'if' refers to a fact, and if this fact occurs, 'then' the rule applies. It is, as a matter of tautology, a normative programme and can be precise and general, *etc.* Law always reacts '*ex post facto*'.⁷³ This does not mean it has no preventative function. If fact A occurs through action B, then rule X applies, and say the actor is liable, the actor can forgo doing B as he knows he will be held liable. As the precautionary principle refers to uncertain and future events (whether fact A occurs is uncertain), it cannot be captured in a conditional programme. The latter goal-directed programme or purpose-specific programme departs from the 'if...then...' logic and is legislation that formulates a particular objective for, for example, a government agency to achieve. It does not prescribe the actions that ought to be undertaken to meet the objective; that would be a matter of executive policy. Purpose-specific programmes bring about a (normative) evaluation of actions that may pertain to the objective. The purpose-specific programme regulates result-driven instrumental action. A legislatively described objective, according to Willke, is sought to be achieved by

⁷⁰ M. Krygier, 'The Rule of Law: Legality, Teleology, Sociology', in Palombella & Walker, *Re-locating the Rule of Law*, 45-70.

⁷¹ Cf. N. Luhmann, *Law as a Social System*, 196 et seq. See also: L. Francot-Timmermans, *Normativity's Re-entry – Niklas Luhmann's Social Systems Theory: Society and Law*, (Nijmegen: Wolf Publishers, 2008) 95 et seq.

⁷² The idea of legislation as conditional programmes has also been described in M. Weber, *Rechtssoziologie*, (München: Luchterhand, 1960, ed. J. Winckelmann).

⁷³ Luhmann, *Law as a Social System*, 198.

variable employable means.⁷⁴ Much legislation, pertaining to environmental protection and incorporating the precautionary principle is of this type. Another feature is that the details of such legislation are worked out in secondary legislation. This ‘procedural tinkering’ threatens legality.

5.3.2 Procedural ‘tinkering’

Legality does not merely denote the idea that political power can be exercised only on the basis of material criteria, but also that legislation comes into being on the basis of pre-prescribed rules (which themselves have been laid down in legislation, for example, a constitution). It suggests that all legislation comes into being through a similar procedure. The academic literature on the whole, it is suggested, focuses on what can be termed primary legislation or statute law, which comes into being through a democratic process of deliberation and decision-making. However, more and more, this type of legislation merely indicates but in vague terms the goal of the statute and the instruments by which this goal could be achieved. Indeed, it is purpose-specific legislation, delegating powers to the executive in order to effectively implement the statute. These types of statutes could be termed ‘skeleton statutes’ or framework legislation: statutes that lay down certain general rules pertaining to a particular goal or policy. These rules are worked out in detailed, practical rules through a myriad of secondary legislation.⁷⁵ Secondary legislation is legislation that comes into being as the result of an executive process. What we mean is that this type of legislation is formulated on the basis of primary legislation for the purpose of executing policy to meet the goals set out in the primary legislation, usually formulated in a vague and open way – for example, ‘to serve environmental protection’, ‘to promote public health’, *etc.*. We consider the connection between primary and secondary legislation to be problematic. The connection exists not only at State level (statute - ministerial regulation), but also at European level (directive/regulation - statute/ministerial regulation) and international level. This changing perspective of legislation and procedural tinkering ties in with the role and function of newly developed and new developing regulatory agencies which are better able to deal, as the argument goes, with regulatory and supervisory tasks that demand special expertise.⁷⁶

This development in legislation has also been observed in the Netherlands.⁷⁷ Reasons for this development are manifold. One is that what framework legislation seeks to regulate: themes addressed in European legislation, demanding implementation through national rules. In addition, framework legislation allows for flexibility. It allows the executive (to which law making powers have been delegated by statute) to take into account changing circumstances and new scientific

⁷⁴ H. Willke, *Ironie des Staates* (Frankfurt am Main: Suhrkamp, 1992) 179.

⁷⁵ There is some resemblance to those statutes in American law, referred to as ‘framework statutes’, constituting institutions and procedures for the sake of constitutional policies, in similar ways the (American) Constitution does; see: E. A. Young, ‘Toward a Framework Statute for Supranational Adjudication’, *Emory Law Journal*, 57 (2007): 98-99.

⁷⁶ It is beyond the scope of this article to address this further. See, amongst others, G. Majone, ‘From the Positive to the regulatory State: Causes and Consequences of Changes in the Mode of Governance’, *Journal of Public Policy*, 17 (1997): 139-167 and F. Gilardi *Delegation in the Regulatory State: Independent Regulatory Agencies in Western Europe* (Cheltenham: Edwin Elgar, 2009). For a different perspective; see: H. Wilke *Supervision des Staates* (Frankfurt am Main: Suhrkamp, 1997).

⁷⁷ Reported upon in respect of animal welfare in B. de Vries & T. Hol *Idealia en Realia rond de Omgang met Productiedieren*, (Den Haag: Boom Juridische Uitgevers, 2006), 55 et seq.

developments when making the general rules concrete and fit for practical application. It allows the executive to anticipate and react to these circumstances and developments swiftly and adequately, or so the argument goes.

There are concerns about the growing use of this type of legislation. Of great concern is the lack of political or parliamentary control in the decision-making procedure as to how the delegated rules are formulated, what these rules are, and pertain to. The danger is that the lack of parliamentary control is exacerbated by the complicatedness of the subject matter dealt within these framework statutes. The lack of specialised expertise of members of parliament (and the lack of time) allows the executive to make rules that deeply affect society without proper parliamentary control. This becomes even more problematic in the area of environmental legislation for example, because expert findings are deemed highly provisional and are said to lack sufficient consensus in respect of the scientific findings.⁷⁸

As the legal system has to act within the framework of an informational void, it puts legality under strain because power can only be exercised on the basis of rules and the formulation and application of rules require information for them to be effective and legitimate. The danger, furthermore, is that too much reliance is placed on the knowledge of experts who seek to determine risks and their consequences, while knowing that their information is doubtful. Experts are said to be mistaken about *'the empirical accuracy of their implicit value premises, specifically, in their assumptions if what appears acceptable to the population'*.⁷⁹ The informational void that legislators suffer from allows, in the first place, experts to determine risks, and this determination need not to be scientifically inspired but can be also normatively inspired. It causes risks to *'develop an incredible political dynamic'*.⁸⁰

Finally, legislation no longer comes into being solely within the realm of the State. One could speak of a layered structure of legislative action, spread across global, regional (European) and local levels (which in themselves are further differentiated as shown above).⁸¹

If this were true, and much empirical research should be carried out here, it would truly mean an erosion of the modern concept of legality. We argue here that it is inevitable, considering the problem as described above, that the precautionary principle calls for this type of framework legislation. We fear that legality here, in the guise as we know it, does not sufficiently safeguard against the abuse of power, and that application of the precautionary principle could undermine the (legal) certainty legality seeks to provide for. Protection against the State could be in danger of being subordinated to protection against risk. What is demanded now is striking a balance between the two principles. It cannot be, at least according to these authors, that the principle of legality is subordinated to the precautionary principle, as this would create too much room for arbitrariness. It withdraws power from control and it becomes impossible to evaluate the extent to which the exercise of power contributes to resolving the problem for which it is exercised or used in the first place - addressing the problem of modern risks through the application of precaution. This balancing act must take place first within the confines of the modern State, but on the proviso that it takes into account the changing role of the State in the era of globalisation.

⁷⁸ The controversy about bio-fuel illustrates this point.

⁷⁹ Beck, *Risk Society*, 58.

⁸⁰ *Ibid.*, 77.

⁸¹ A more detailed example of this layered structure of legislation and its implications; see De Vries & Hol, *Idealia en Realia*, 73 et seq.

6. CONCLUSION

Contemporary society is confronted with the problem of our awareness of modern risks as the side effects of the successes of modernisation. These risks pose a threat to our natural environment and, by implication, to us. Something needs to be done and this something exists in finding ways of dealing with risks. The precautionary principle is a solution for dealing with modern risks. It suggests that political actors can exercise power (take action) to deal with risks in the absence of scientific certainty about these risks and their materialisation. The principle itself does not prescribe the type of action. Considering the perceived magnitude of the problem – ecological survival – the question arises as to what extent the principle allows the exercise of political power without adhering to the precepts of legality on the basis that it is an outdated concept merely serving the projects of first modernity. This would deny the essence of the rule of law, which lies in the prevention of the arbitrary use of political power for whatever reason. We must now realise that political power, at least in Western society, should not merely be geared towards wealth production and wealth distribution, but also towards the side effects of this production and distribution. Subordinating political power to certain rules ensures that while addressing the problem through the precautionary principle, the interests of all concerned – ultimately the whole of humanity – are taken into account rather than just the interests of certain elites. It demands a reconsideration of legality in respect of its material and formal aspects at all levels – global, European and national – where political actors, in an integrated way, employ the precautionary principle. More precisely, reconsidering legality demands taking issue with the uncertainty the processes of globalisation bring about. Following Beck, we have conceptualised uncertainty in terms of modern risk. Law is considered to be a mechanism to reduce uncertainty. Legality in its turn frames State power in respect of this reduction. Modern risk escapes linear causality and consequently, legal causality becomes problematic, as the distribution of responsibility for risk requires linear causality. The precautionary principle could be considered a way out of this dilemma. However, we have argued that although the principle seeks to reduce uncertainty in respect of risk, it increases uncertainty in respect of power, as it erodes legality in withdrawing rule-making from the requirements of legality and democratic control. This is what we have sought to highlight in this essay.

LITERATURE

- Asselt, M.B.A. van & E. Vos. 'The Precautionary Principle and the Uncertainty Paradox'. *The Journal of Risk Research* 9 (2009): 313-336
- Bauman, Z. *Postmodern Ethics*. Oxford: Blackwell, 1993.
- Beck, U. *Cosmopolitan Vision*. London: Polity Press, 2006.
- Beck, U. *The Reinvention of Politics*. London: Polity Press, 1997.
- Beck, U. *Risk Society - Towards a New Modernity*. Translated by M. Ritter. London: Sage, 1992.
- Beck, U. *Risikogesellschaft – Auf dem Weg in eine andere Moderne*. Frankfurt am Main: Suhrkamp, 1986.
- Beck, U. *World Risk Society*. London: Polity Press, 1999.
- Beck, U. & E. Grande, *Das Kosmopolitische Europa*. Frankfurt am Main: Suhrkamp, 2004.
- 'Better Quality of Life: A Strategy for Sustainable Development'. London: HMSO, 1994.
- Birnie, P., A. Boyle & C. Redgwell. *International Law and the Environment*. Oxford: Oxford University Press, 2008, 3rd edition.
- Cameron, J. and J. Abouchar, 'The Status of the Precautionary Principle in International Law'. In *The Precautionary Principle and International Law - The Challenge of Implementation*, edited by Freestone, D. & E. Hey. The Hague: Kluwer Law International, 1996.
- Cranor, C.F. 'Learning from the Law to Address Uncertainty in the Precautionary Principle'. *Science and Engineering Ethics* 7 (2002): 313-327.
- Cross, F.B. 'Paradoxical Perils of the Precautionary Principle'. *Wash. and Lee L. Rev.* 53 (1996): 851-925.
- Dicey, A.V. *An Introduction to the Study of the Law of the Constitution*. London: MacMillan, 1885.
- European Environment Agency. 'Late Lessons from Early Warnings: The Precautionary Principle 1896-2000 – Environmental Issue Report, no. 22'. Copenhagen: EEA, 2001.
- 'Even as Fears of Flu Ebb, Mexicans Feel Stigma', *The New York Times*, 4 May 2009, <<http://www.nytimes.com/2009/05/05/world/asia/05china.html>>, 17 November 2009.
- Fisher, E.C. 'Is the Precautionary Principle Justifiable'. *Journal of Environmental Law* 13 (2001): 315-334.
- Fisher, E.C. 'Opening Pandora's Box: Contextualising the Precautionary Principle in the European Union'. In *Uncertain Risks Regulated: National, EU and International Regulatory Models Compared*, edited by E. Vos, M. Everson & J. Scott. London: Cavendish. 2009.
- Francot-Timmermans, L. *Normativity's Re-entry – Niklas Luhmann's Social Systems Theory: Society and Law*. Nijmegen: Wolf Publishers, 2008.
- Francot. L. & U. de Vries. 'Legal Education Re-enchanted'. *European Journal of Legal Education* 3 (2006): 3-20

- Francot-Timmermans, L.M.A. & U.R.M.T. de Vries, 'Normativity in the Second Modernity'. *Rechtstheorie* 39 (2008): 477-494.
- Francot, L. & B. de Vries. 'No Way Out? Contracting about Modern Risks'. *ARSP* 95 (2009): 199-215
- Freestone, D. & E. Hey, 'Origins and Development of the Precautionary Principle. In *The Precautionary Principle and International Law - The Challenge of Implementation*, edited by Freestone, D. & E. Hey. The Hague: Kluwer Law International, 1996.
- Freestone, D. & E. Hey. (ed.) *The Precautionary Principle and International Law - The Challenge of Implementation*. The Hague: Kluwer Law International, 1996.
- 'From Edgar, 5, Coughs Heard around the World'. *The New York Times*, 28 April, 2009 <www.nytimes.com/2009/04/29/world/americas/29mexico.html?_r=1>, 17 November 2009.
- Fuller, L.L. *The Morality of Law*. New Haven: Yale University, 1969 (revised edition).
- Gray, P. *The Irish Famine*. Paris: Gallimard, 1995.
- Gilardi, F. *Delegation in the Regulatory State: Independent Regulatory Agencies in Western Europe*. Cheltenham: Edwin Elgar, 2009.
- Held, D. 'Law of States, Law of Peoples: Three Models of Sovereignty'. *Legal Theory* 8 (2002): 3-4.
- Jensen, K.K. 'The Moral Foundation of the Precautionary Principle'. *Journal of Agriculture and Environmental Ethics* 15 (2002): 39-55
- Kinealy, Ch. *This Great Calamity: The Irish Famine 1845-52*. London: Gill & Macmillan: 1995.
- Krygier, M. 'The Rule of Law: Legality, Teleology, Sociology'. In *Re-locating the Rule of Law*, edited by G. Palombella & N. Walker. Oxford: Hart Publishers, 2008, 45-70.
- Lichtblau E. & J. Risen. 'Bank data Is Sifted by U.S. in Secret to Block Terror'. *The New York Times*, 23 June 2006 www.nytimes.com/2006/06/23/washington/23intel.html, 25 November 2009.
- Lierman. S. 'Het Voorzorgsbeginsel en Gezondheidsbescherming, Oude Wijn in Nieuwe Zakken?' In *Risico en Voorzorg in de Rechtsmaatschappij*, edited by E. Vos & G. van Calster. Groningen/ Antwerpen: Intersentia, 2004.
- Luhmann, N. *Law as a Social System*. Translated by K.A. Ziegert. Oxford: Oxford University Press, 2004.
- Majone, G. 'From the Positive to the regulatory State: Causes and Consequences of Changes in the Mode of Governance'. *Journal of Public Policy*, 17 (1997), pp, 139-167.
- Marr, S. *The Precautionary Principle in the Law of The Sea – Modern Decision Making in International Law*. The Hague: Kluwer, 2003.
- Mill, J.S. *On Liberty*. London: Parker & Son, 1859.
- Moltke, K. von. 'The Relationship between Policy, Science, Technology, Economics and Law in the Implementation of the Precautionary Principle'. In *The Precautionary Principle and International Law - The Challenge of Implementation*", edited by D. Freestone & E. Hey. The Hague: Kluwer Law International, 1996.

- Nollkaemper, A. “‘What you risk reveals what you value’”, and Other Dilemmas Encountered in the Legal Assaults on Risks’. In *The Precautionary Principle and International Law - The Challenge of Implementation*”, edited by D. Freestone & E. Hey. The Hague: Kluwer Law International, 1996.
- Peerenboom, R. ‘The Future of Rule of Law: Challenges and Prospects for the Field’. *Hague Journal on the Rule of Law* 1 (2009): 5-14.
- Pieterman, R. & T. Arnoldussen (2008) ‘Het Voorzorgsbeginsel: over Ideologie en Onzekerheid’, *Rechtsfilosofie en Rechtstheorie* 37 (2008): 230-251.
- Sadeleer, N. de. ‘The Precautionary Principle in EC Health and Environmental Law’. *European Law Journal* 12 (2006): 139-172.
- Sadeleer, N. de. *Implementing the Precautionary Principle – Approaches from the Nordic Countries, the EU and the USA*. London: Earthscan, 2007.
- Schauer, F. & W. Sinnott-Armstrong. *Philosophy of Law - Classic and Contemporary Readings with Commentary*. Oxford: Oxford University Press, 2002.
- Scott, J. ‘The precautionary principle before the European courts’. In *Principles of European Environmental Law*, edited by R. Macrory. Groningen: Europa Law Pub. 2004.
- Tamanaha, B.Z. ‘A Concise Guide to the Rule of Law’. In *Re-locating the Rule of Law*, edited by G. Palombella & N. Walker. Oxford: Hart Publishers, 2008, 3-16.
- Tinker, C. ‘State Responsibility and the Precaution Principle’. In *The Precautionary Principle and International Law - The Challenge of Implementation*, edited by Freestone, D. & E. Hey. The Hague: Kluwer Law International, 1996.
- Renn, O. *Risk Governance. Coping with Uncertainty in a Complex World*. London: Earthscan, 2008.
- ‘Rio Declaration on Environment and Development’. New York: UN, 1992. <<http://www.un.org/documents/ga/conf151/aconf15126-1annex1.htm>>, 18 November 2009.
- Sandin, P. ‘Dimensions of the Precautionary Principle’. *Human and Ecological Risk Assessment* 5 (1999): 889-907.
- Swaan, A. de. *In Care of the State – Health Care, Education and Welfare in Europe, and the USA in the Modern Era*. Oxford: Oxford University Press, 1988.
- Teesing, N., R. Uylenburg & C. T. Nijenhuis. *Toegang tot het Milieurecht*. Den Haag: Kluwer, 2009, 5th edition.
- Tinker, C. ‘State responsibility and the Precautionary Principle’. In *The Precautionary Principle and International Law - The Challenge of Implementation*”, edited by D. Freestone & E. Hey. The Hague: Kluwer Law International, 1996.
- Trouwborst, A. ‘Precautionary Rights and Duties of States’. In: *Nova et Vetera Iuris Gentium Series*, Vol. 25, Leiden/Boston: Martinus Nijhoff Publishers 2006.
- UK Strategy on Sustainable Development’. London: HMSO, 1990.
- Unger, R. *Law in Modern Society*. Washington: Free Press, 1976.

Vos, E. & G. van Calster (eds.) *Risico en Voorzorg in de Rechtsmaatschappij*. Groningen/Antwerpen: Intersentia, 2004.

Vries, B. de & T. Hol. *Idealia en Realia rond de Omgang met Productiedieren*. Den Haag: Boom Juridische Uitgevers, 2006.

Weber, M. *Rechtssoziologie*. München: Luchterhand, 1960 (ed. J. Winckelmann).

Willke, H. *Ironie des Staates*. Frankfurt am Main: Suhrkamp, 1992.

Wilke, H. *Supervision des Staates*. Frankfurt am Main: Suhrkamp, 1997.

WRR, *Onzekere Veiligheid – Verantwoordelijkheden rond Fysieke Veiligheid*. Amsterdam: Amsterdam University Press, 2008.

Young, E.A. 'Toward a Framework Statute for Supranational Adjudication'. *Emory Law Journal* 57 (2007): 94-114.