

Introducing the Precautionary Principle into Administrative Law:^{*}

Facing the Challenges to the Rule of Law

Jin Zining^{**}

Abstract

With risk being one of the most prominent characteristics of modern society, risk regulation has become one of the most important functions of government. The precautionary principle has appeared in the statutes of many countries, showing effort by legislators to integrate risk regulation into administrative law. However, many issues that have emerged in the application of the precautionary principle show that risk precaution creates serious challenges to the traditional ideas of the rule of law. Ideas from “soft law” and the “participatory model of public administration” suggest new institutional mechanics which could reconcile to certain extent the practical need for risk regulation with the normative requirements of the rule of law. In this perspective, more importance should be assigned to “risk communication” when structuring the precautionary principle.

KEYWORDS: precautionary principle, precaution, rule of law, participatory model of public administration, soft law.

* Submission Date: May 21, 2015; Acceptance Date: January 13, 2016. [Line Editor: Hui-Chi Wang].

** Associate Professor, School of Transnational Law, Peking University.
Online: <http://publication.ias.sinica.edu.tw/92805161.pdf>.



Contents

Introduction

1. The Rise of the Precautionary Principle
2. The Precautionary Principle Is Challenging the Rule of Law
 - (1) The Precautionary Principle and Regulators' Discretion
 - (2) The Precautionary Principle and the Burden of Proof
 - (3) The Unavoidable But Not Necessarily Accusable Regulatory "Errors"
3. The Potential of Traditional Mechanisms for Meeting the Challenges
 - (1) Rules and Standards
 - (2) Examination and Supervision
4. Emerging Mechanisms to Reconcile Precaution with the Rule of Law
 - (1) Soft Law
 - (2) Participatory Model of Administration
 - (3) Further Discussion: To Democratize Risk Regulation?
5. Structuring the Precautionary Principle under the Rule of Law
6. Conclusion

Introduction

Risk regulation has become an essential governmental function as risk associated with modern science and technology has increased over time. In the meantime, the question of how to warrant the practice of risk regulation under the rule of law has become a prominent issue that legislators, judges, lawyers and researchers now face. As an attempt to respond to this problem, the precautionary principle has appeared widely in both international law and domestic law.¹ And there remains an on-

¹ Center for the Study of Law Science and Technology, Arizona State University College of Law, *From General Policy to Legal Rule*, 111(14) ENVTL. HEALTH PERSP.

going debate² over its legal implications and when/how it is supposed to be applied.

Many critics and advocates of the precautionary principle have disagreed on the technical details of its application or focused on the differences in how the precautionary principle is specifically interpreted and applied across areas and jurisdictions.³ These bodies of scholarship provide valuable insight into the practical implementation of the precautionary principle, but there remains a gap in the literature that this article aims to fill. That is, to theoretically understand the change itself that risk precaution has been widely accepted as government function and that the precautionary principle has been introduced into the normative system of administrative law. The lack of integrated understanding of this change from the big picture perspective makes it seem very easy for the specific “counter-measures” to fall into paradoxical situations.⁴ Considering this danger, this article is designed to explore the change itself from a wider theoretical perspective, focusing on the tensions between the precautionary principle and the rule of law, which underpin all the on-going debates over the application of the precautionary principle. While the ways in which the tensions have been perceived and addressed vary significantly across jurisdictions, the

1799, 1799-802 (2003).

2 See, e.g., Cass R. Sunstein, *Beyond the Precautionary Principle*, 151 U. PA. L. REV. 1003 (2003); David A. Dana, *A Behavioral Economic Defense of the Precautionary Principle*, 97 NW. U. L. REV. 1315 (2003); Gregory N. Mandel & James Thuo Gathii, *Cost Benefit Analysis Versus the Precautionary Principle: Beyond Cass Sunstein's Laws of Fear*, 5 U. ILL. L. REV. 1037 (2006).

3 See JONATHAN B. WIENER, MICHAEL D. ROGERS, JAMES K. HAMITT & PETER H. SAND, *THE REALITY OF PRECAUTION: COMPARING RISK REGULATION IN THE UNITED STATES AND EUROPE* (2011).

4 See Frank B. Cross, *Paradoxical Perils of the Precautionary Principle*, 53 WASH. & LEE L. REV. 851, 859 (1996).

substantive issues arising from these tensions are fairly universal.

In this article, I analyze the transformation that risk regulation has undergone during the incorporation of precautionary principle into administrative law, then discuss how the issues' emergence through the adoption and application of the precautionary principle actually reflect challenges to traditional ideas of the rule of law in the context of risk society.⁵ In this part, I argue there is a “crisis of legitimacy” due to the tension between the practice of precaution in risk regulation and the basic ideas of the rule of law. I then explore legal mechanisms which could deal with the tensions between precaution in risk regulation and the rule of law. I also show that “soft law” can help address both the rule of law and precaution in risk regulation; the general public is able to make a difference in reconciling the rule of law with risk regulation through their participation in public administration; and the reason these two mechanisms do better than traditional mechanisms in dealing with uncertainty is the fact that both of them have disrupted the information monopoly that regulators possess. Based on the analyses and findings, I also take the Communication from the European Commission on the Precautionary Principle (2000) as an example to show how the theoretical analysis in the former sections could help us better structure the precautionary principle.

5 See ULRICH BECK, *RISK SOCIETY: TOWARDS A NEW MODERNITY* (1992) (hereinafter BECK, *RISK SOCIETY*); ULRICH BECK, *WORLD RISK SOCIETY* (1999) (hereinafter BECK, *WORLD RISK SOCIETY*).

1. The Rise of the Precautionary Principle

Risk is everywhere and has always been. We can imagine our distant ancestors walking through jungles carefully, knowing there were leopards, tigers or wolves nearby; or they could be resting in caves worrying about drought, flood and epidemics. However, the concept of risk exists only in the modern world. Traditional cultures didn't have the concept of risk because "they didn't need one." They instead "perceived things as fate, luck or the wills of the gods where we now tend to substitute risk."⁶ The difference is that we do not think we can control "fate/luck/god's will," but we do believe we are able to manage "risk". This shift has been found to be related to the modern notion of human beings' ability to control or strongly influence the future, which can arguably be seen as viewing the future as a man-made product.⁷ Therefore, it is not surprising that we couldn't find the precautionary principle dealing with risks in ancient Roman law.

Emerging in European environmental law in the late 1970s, the precautionary principle has rapidly become enshrined within numerous international treaties and declarations. Now the application of the precautionary principle has grown beyond the area of environmental risks regulation⁸ and international law.⁹ Application of the precautionary principle has now expanded to labor protection, food

6 ANTHONY GIDDENS, *RUNAWAY WORLD: HOW GLOBALIZATION IS RESHAPING OUR LIVES* 22-23 (2d ed. 2003).

7 For the historic evolution of the conception of risk in western Europe, *see generally* DEBORAH LUPTON, *RISK* (1999).

8 PHILIPPE SANDS, *PRINCIPLES OF INTERNATIONAL ENVIRONMENTAL LAW* 266 (2d ed. 2003).

9 Owen McIntyre & Thomas Mosedale, *The Precautionary Principle as a Norm of Customary International Law*, 9 J. ENVTL. L. 221, 235 (1997).

safety and information technology regulation, etc.¹⁰ The precautionary principle has also appeared frequently in the statutes and case laws of many nations while the idea of precaution serves as a basis for some provisions of legislation and regulations without referring directly to the term, “precautionary principle.” An example of this is Article 21 of China’s Regulation on Environmental Impact Assessment of Planning of 2009, stipulating that: the reviewing group should give “disapproval” advice “if they cannot make a scientific judgment on the scope and degree of possible adverse environmental effects in the light of the existing knowledge.” It is the first time for China to incorporate the precautionary principle into national legislation and regulations.¹¹

Interpretations of the precautionary principle vary from “where potential adverse effects are not fully understood or the activities should not proceed”¹² to “where there are threats of serious or irreversible damage, or where the lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental

¹⁰ See, e.g., Article 7 of General Food Law, Regulation (EC) No.178/2002: “In specific circumstances where, following an assessment of available information, the possibility of harmful effects on health is identified but scientific uncertainty persists, provisional risk management measures necessary to ensure the high level of health protection chosen in the Community may be adopted, pending further scientific information for a more comprehensive risk assessment”. See also Claudia Som et al., *The Precautionary Principle as a Framework for a Sustainable Information Society*, 85(3) J. BUS. ETHICS 493 (2009).

¹¹ In 1979, the Environmental Protection Law of PRC (for Trial Implementation) established the principle of “prevention dominating, integrating pollution prevention in advance and pollution control afterwards”, which is literally close to precautionary principle while according to the words of the provision and the generally accepted interpretation, it is equivalent to the prevention principle (not the precautionary principle) in international environmental law.

¹² General Assembly Resolution on the World Charter of Nature, U.N. Doc. A/37/51 (1982), at 17.

degradation,”¹³ and so on. Nevertheless, from the perspective of administrative law, when we focus solely on the administrative power, no matter how diverse or even contradictory in specifics, one prominent and widely accepted form of incorporating the precautionary principle into positive law is legislators authorizing regulators to take precautionary measures when there are threats of harm to human health or the environment, even if certain scientific uncertainty persists. Granting of such authorization is dependent on several clearly definable factors. A close look at these factors will show that the rise of risk regulation as a governmental function is inevitable.

The most notable factor may be the perception of risk in modern society that relates risks to our decisions and actions. Prior to industrialization, pre-modern societies tended to view natural disasters as “strokes of fate” and accusations were directed against the “gods” or “God.” In contrast, modern societies tend to view natural disasters as “nature’s vengeance,” which suggests that these disasters are the unwelcome results of human decisions and actions. In this case, the ones who made the decisions and executed the actions should take blame; hence “the problem of social accountability and responsibility irrevocably arises.”¹⁴

There are still other relevant factors worth noting. First, the public awareness of risk itself can incite feelings of distress and insecurity. With the reflexive characteristic of modern society, such feelings could

¹³ Bergen Conference, Bergen Ministerial Declaration on Sustainable Development in the ECE Region (May 16, 1990). U.N.Doc. A/CONF.151/PC/10 (1990), Annex I at 19.

¹⁴ Ulrich Beck, *From Industrial Society to the Risk Society: Questions of Survival, Social Structure and Ecological Enlightenment*, 9(1) THEORY CULTURE SOC. 97, 98 (1992).

prompt the general public to call for risk management. And for the good of social order, it might be reasonable for governments to take actions when there is panic, even though the public's worries were probably shaped by "intuitive toxicology" along with "misconceptions."¹⁵

Second, modern governments are no longer small governments. After the welfare state began providing care from womb to tomb, the role of government has transformed significantly.¹⁶ Although the continuing trend of worldwide public administration reform that began in the 1970s and the 1980s is to downsize government, the state's basic duties to safeguard its nationals are not removed.¹⁷ When scientific uncertainties are found to threaten public health and well-being, government is naturally expected to take measures against them.

Third, the image of the person in legal systems has changed. In the liberal legal system, the "person" is presumed to be a reasonable, free-willed, "strong and wise" actor. As negative impacts of this presumption were discovered, characteristics of the typical individual found in the real world began to be taken into consideration. The image of the "weak and unwise" individual has been recognized in the legal system.¹⁸ This image legitimizes the choice of individuals apprehensive of risks to turn toward government for help.

15 CASS R. SUNSTEIN, *RISK AND REASON: SAFETY, LAW AND THE ENVIRONMENT* 1, 35-36 (2002).

16 See DWIGHT WALDO, *THE ADMINISTRATIVE STATE* (1948).

17 Jin Zining, *Reflection on the Privatization of Public Law: Against the Background of the Worldwide Public Administration Reform*, 5 *ZHEJIANG ACADEMIC JOURNAL* 143, 143-50 (2007) (金自宁, "公法私法化"诸观念反思——以公共行政改革运动为背景, 浙江学刊, 5期, 页143-150 (2007年)).

18 See EIICHI HOSHINO, *PERSON IN PRIVATE LAW* (2004) (星野英一著, 王闯译, 私法中的人 (2004年)).

2. The Precautionary Principle Is Challenging the Rule of Law

The rule of law is the core of the massively broad and complex system of administrative law. From a historical perspective, taking traditionally accepted ideas regarding the rule of law, administrative action intruding into private liberty could be legitimized under the premise that the administrative power given to agencies controlling private conduct must be authorized by the legislature. Agencies must then exercise the powers delegated to them in accordance to legislative requirements. On this premise, the agency plays the role of merely a “transmission belt”¹⁹ to implement legislative directives. When the discretionary power of an agency expands too broadly and rapidly, a large amount of administrative activities cannot be legitimized under the “transmission belt” theory. It is here where arose a new notion arguing that such discretionary power could be justified by the idea of “expertise”²⁰—specialized professional knowledge and skill needed for achieving an agency’s goals for the public good—which the legislature does not have.

Regardless of whether it’s clearly stated or not, the ongoing discussion over the precautionary principle in legal academia continues to take place in the background and is to some extent based on the normative requirements of the rule of law.

However, there is evidence showing that the practices of the

¹⁹ Richard B. Stewart, *The Reformation of American Administrative Law*, 88 HARV. L. REV. 1667, 1675 (1975).

²⁰ *Id.* at 1678.

precautionary principle in risk regulation present severe challenges to the long-standing ideas of the rule of law. In this section, it will be argued that: Precaution in risk regulation can acquire its legitimacy neither through implementing delegating statutes set by the legislature, nor relying on the scientific data provided by experts. Therefore, there is a “crisis of legitimacy” due to this tension between the practice of risk regulation and the basic ideas of the rule of law. It becomes more evident when we look at the specific issues brought forth in the following regarding the ongoing debate between critics and advocates of the precautionary principle.

(1) The Precautionary Principle and Regulators’ Discretion

The precautionary principle has been accused of being “vague” or “too broad.”²¹ According to this kind of criticism, “because the precautionary principle can be of any meaning, so it actually means nothing at all.”²² However, advocates of the precautionary principle have argued that such criticism is exaggerated. As an example, we examine two of the most widely recognized forms of the precautionary principle.

The Rio Declaration on Environment and Development (June 14, 1992)²³ provides: “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

21 See Sunstein, *supra* note 2, at 1003.

22 Dana, *supra* note 2, at 1315.

23 Principle 15, U.N. Doc. A/CONF.151/5 (1992).

degradation.”

The Wingspread Statement on the precautionary principle (Jan. 26, 1998)²⁴ defines the precautionary principle as: “When an activity raises threats of harm to human health or the environment, precautionary measures should be taken even if some cause and effect relationships are not fully established scientifically. In this context the proponent of an activity, rather than the public, should bear the burden of proof.”

These two statements have been respectively termed the weak and strong versions of precautionary principle.²⁵ Other statements of the precautionary principle, by and large, can be located somewhere between these two extremes. Although there are significant differences between these two versions at each extreme, it would be very difficult to prove either one of them as so “vague” that they “can be of any meaning.” At a glance, we can easily tell that according to the former one, only when there are threats of serious or irreversible damage, precautionary measures should be taken. In addition, government should also weigh the costs and benefits of the measures taken. However, according to the latter strong version, these two prerequisites are not required.

Of course, legal principles are usually far from being as specific as rules, and the precautionary principle is not exceptional. It might not tell the regulators what to do exactly in specific cases. However, this does not mean it cannot play a role as a legal principle. In this sense,

24 Wingspread Conference on the Precautionary Principle (Jan. 26, 1998), <http://www.sehn.org/wing.html>.

25 Per Sandin, *Dimensions of the Precautionary Principle*, 5(5) HUMAN ECOLOGICAL RISK ASSESSMENT 889, 889-907 (1999).

vagueness itself should not be a problem.

However, there are some justifiable concerns behind the accusations of over vagueness found in the precautionary principle. For example, the idea that “the more open the meaning, the larger the room for contentious and self-serving interpretations”²⁶ is worthy of concern. Since adopting the precautionary principle into positive law means that legislators would grant agencies the power to take precautionary measures, the uses of indeterminate terms in the precautionary principle, such as “threat” (strong version), “irreversible” damage (weak version), “full scientific certainty” (weak version) or “fully established scientifically” (strong version), leave great room for discretion and thus are points of concern. Under such light, responses to the criticism of “vagueness” of the precautionary principle, which seek to specify the implications of the precautionary principle, including clarifying the premises and the procedures of its application,²⁷ are actually trying to limit the discretionary power delegated to risk regulators.

Traditionally, agency action preventing various hazards is based on past experience and existing knowledge. Usually, administrators are able to not only know the sources of the hazard and the severity of its impacts but also how to prevent or remedy it. So legislators could authorize agencies the power to take actions within a clear operating structure under particular conditions.

However, this certainty no longer exists in the risks faced by

²⁶ Christopher D. Stone, *Is There a Precautionary Principle?*, 31(7) ENVTL. L. REP. NEWS & ANALYSIS 10790, 10797 (2001).

²⁷ See, e.g., Center for the Study of Law Science and Technology, Arizona State University College of Law, *supra* note 1; Noah M. Sachs, *Rescuing the Strong Precautionary Principle from Its Critics*, 4 U. ILL. L. REV. 1285 (2011).

modern society. What the precautionary principle must confront are threats that involve largely unknown potential damage that is likely irreversible and very remote in time and space. Hence legislators are unable to make detailed contingency plans in advance when they authorize agencies the power to take various precautionary actions. Legislators must authorize agencies the power to take precautionary actions without specific standards. The consequence is that regulators may make their own judgments and decisions when faced with uncertainty, and this also formally allows a wide range of legal actions that may be taken. In such a case, it is highly possible that risk regulators could abuse the discretionary power delegated to them by legislators, resulting in a serious threat to fundamental ideas of the rule of law.

Given that precautionary measures to be taken in the real world usually involve some kind of restrictions on individuals' rights and liberties and prohibitions on certain risky activities. For example, a chlorine ban would force many chemical industries to make major changes in the productions or even shut down.²⁸ Due to the fact that the risk regulator's legal power is not authorized with specific standards, the restrictions as precautionary measures imposed on the regulated will become "open-ended," thereby the precaution can be the start of a slippery slope towards a terrifying end where individual rights and liberty may be totally stripped away. In this situation, the regulators are put entirely at the mercy of the regulatory agencies. That could be everything but the rule of law.

²⁸ See Alana M. Fuierer, *The Anti-Chlorine Campaign in the Great Lakes: Should Chlorinated Compounds Be Guilty Until Proven Innocent?*, 43 BUFF. L. REV. 181 (1995).

(2) The Precautionary Principle and the Burden of Proof

One well-known idea of the traditional understanding of the rule of law is: there should be no restrictions on individual's freedom unless hazards are proven. This means that the agency should bear the burden of proof for taking restricting action. U.S. Administrative Procedure Act of U.S. (1946) provides: "Except as otherwise provided by statute, the proponent of a rule or order has the burden of proof No sanction shall be imposed or rule or order be issued except upon consideration of the whole record or such portions thereof as may be cited by any party and as supported by and in accordance with the reliable, probative, and substantial evidence."²⁹ The Administrative Litigation Law of PRC (中华人民共和国行政诉讼法) even provides that, the agency (defendant) shall bear the burden of proof for all kinds of administrative action taken,³⁰ and provide evidence and regulatory documents based on which administrative action was taken. In other words, the agency is supposed to base all of their actions on ample proof.

However, as noted above, precautionary actions are aimed not at things that have already happened, but things that will possibly happen. What the risk regulator is supposed to prove is not that something happened in the past but that something might happen in the future. When the potential of a hazard occurrence or causal relationships is unknown, it's extremely difficult, sometimes impossible, for the agency to prove that some hazards exist or that some damage will occur. If we stick to the traditional idea of the rule of law, which requires agencies to wait until scientists find proof of causation or scientific proof that some

²⁹ Administrative Procedure Act of 1946, 5 U.S.C. §556 (d) (1946).

³⁰ XINGZHENG SUSONG FA (Administrative Litigation Act) art. 34 (2014) (China).

damage will occur, no precautionary actions would ever be justified under these requirements. In other words, risk regulation would be paralyzed with the burden of proof, and regulators might find themselves in a quandary over whether to take action to protect the public while violating the rules or sticking to the rule of taking no action without unquestionable proof and forsaking their duty to protect the public.

There are many formulations of the precautionary principle, and these different expressions take a “better safe than sorry” stance to lessen the regulatory agencies’ burden of proof, moving from a traditional position to a new one in which the agency may take reasonable or necessary measures even if scientific uncertainty persists. In the context of the *Wingspread Statement* (1998), mentioned above as the most well-known example of the “strong” version of the precautionary principle, “the proponent” of a risky activity “should bear the burden of proof” to prove the activity is safe, rather than the agency having to prove that its precautionary measures taken are necessary. In its strong formulations, the precautionary principle can be interpreted as calling for absolute proof of safety. For example, the World Charter for Nature states, “where potential adverse effects are not fully understood, the activities should not proceed.”³¹

However, the other side of the coin is that if we required the actors engaged in risky activities to prove the activities to be taken are safe, it takes a “guilty until proven innocent” stance, which is directly in conflict with the other stance of “innocent until proven guilty.”³² And

³¹ World Charter for Nature, U.N. GA Resolution 37/7 (1982).

³² Henk van den Belt, *Debating the Precautionary Principle: “Guilty until Proven Innocent” or “Innocent until Proven Guilty”?*, 132(3) *PLANT PHYSIOLOGY* 1122, 1124 (2003).

considering the fact that no one can predict all possible future effects of a certain activity, neither can anyone prove that certain action to be taken will be absolutely safe. The burden of proof in this theoretical context, if placed on the regulated, would result in a complete loss of individuals' freedom of action: because all actions to be taken could be risky in some way and it's impossible for an advocate to prove that they offer no possible harm.

It's impossible to decide a specific either-or distribution for burden of proof in this context. The right question is, as Elizabeth Fisher has pointed out,³³ whether the burden of proof is applicable in the area of risk regulation, considering our future is uncertain and the key element of precautionary action is that it is based on anticipation of the future in the absence of scientific certainty. When some activity is not yet appearing, nobody—neither the regulators nor the regulated—can bear the burden of proof to prove whether it is safe or not.

Nevertheless, distribution of the burden of proof is not the focus of this paper. This paper instead focuses on the dilemma found in such discussion over burden of proof that clearly shows the tension between risk regulation and the rule of law. Some supporters of the precautionary principle simply claim the necessity to reduce regulators' burden of proof and then quickly move on to technical questions, such as the suitable range for the regulators' burden of proof, the proper standards of proof, to what extent shall the review courts defer to the factual judgments made by the regulators, and so on. However, the tension between risk regulation and rule of law does not disappear in this

³³ ELIZABETH FISHER, RISK REGULATION AND ADMINISTRATIVE CONSTITUTIONALISM 44-46 (2007).

process, since the unpredictability of the future remains regardless of the answers given to these technical questions. Overall, the precautionary principle allows regulators to take actions based on their own prediction of the uncertain future, which itself is risky and contradictory to the traditional notion found in administrative law that administrative action shall be based on solid evidence.

(3) The Unavoidable But Not Necessarily Accusable Regulatory “Errors”

Moreover, since the future is unpredictable and full of uncertainty, there is always a possibility that precautionary actions taken by regulators may be later proved “erroneous” with the wisdom of hindsight. The “errors” may be “over-regulation” or “under-regulation.”³⁴ Over-regulation occurs when decision-makers anticipate greater harm than what actually occurs. Under-regulation occurs when decision-makers anticipate less harm than what actually occurs. These errors of over- and under-regulation are not literally beyond the realm of the authority that statutes have bestowed on the regulators, but they are, in substance, unreasonable or inappropriate. As such, these errors can still be deemed illegal if the regulator is unable to justify them on the basis of reasonableness or proportionality.

However, only in hindsight can we really see that the precautionary measures taken were not proportionate to the potential harms. In the given circumstance, these two kinds of “errors” might not be condemnable as long as they are not due to bad faith or negligence. Fundamentally, these “errors” could stem from “ignorance” associated

³⁴ See Richard B. Stewart, *Environmental Regulatory Decision-making under Uncertainty*, 20 RES. L. ECON. 71 (2002).

with risks. Ignorance may fall into two categories:³⁵ information asymmetry and unknowns. Information asymmetry occurs when not all stakeholders share the same knowledge or information as the others. Theoretically, perfect communication between all players involved, allowing them to learn from each other, could cure this kind of ignorance, but in the real world the costs are often too high to do so. Unknowns are what are now unknowable. Perhaps in the long run, nothing would be unknowable, but there are always numerous unknowns to human society at any particular time. Our future is uncertain because our future is unknowable in the sense that there are limits of human knowledge at a particular time. This kind of ignorance cannot be cured through communicating with or learning from others simply because there are no “others” who own the relevant knowledge or information.

Some scholars have proposed the use of cost-benefit analysis instead of the precautionary principle.³⁶ However, the only real mechanism cost-benefit analysis has for confronting the unknowns, when neither the cost nor benefits can be known, is acknowledging that they exist. Along these lines, action (including inaction) literally based

³⁵ Actually, there is no bright line between the unknown and the known. What is between the unknown and the known is not a sharply gap but a gradually changing continuum. Knight has drawn a line between risk and uncertainty, which is accordance with the distinction “some risks are insurable and others are not”. FRANK H. KNIGHT, RISK, UNCERTAINTY AND PROFIT 44-48 (1964). Shen Kui has differentiated three kinds of ignorance: unknown by individuals, wrongfully knowing, unknown by human-being as a whole. See Shen Kui, *Anti-Discrimination: The Faithful Choice between Knowing and Ignorance*, 5 TSINGHUA CHINA L. REV. 20, 20-32 (2008) (沈焯, 反歧视: 有知和无知之间的信念选择——从乙肝病毒携带者受教育歧视切入, 清华法学, 5期, 页20-32 (2008年)).

³⁶ For a criticism of this proposal, see Frank Ackerman & Lisa Heinzerling, *Pricing the Priceless: Cost-benefit Analysis of Environmental Protection*, 105 U. PA. L. REV. 1553 (2002).

on “scientific rationality” may be impossible when the available information is too limited to support scientific rational decision-making.

3. The Potential of Traditional Mechanisms for Meeting the Challenges

The undeniable and unavoidable reality is that our society has already become a risk society, and risk regulation has become one of governments’ most important functions. At the same time, the rule of law has and still holds precious value to our society. It would be unthinkable to abandon all the ideas of the rule of law just for the convenience of risk regulation. Thus the key problem to resolve is how to reconcile the practical needs of precaution against risks with the normative requirements of the rule of law. However, as shown above, challenges to the rule of law are rising due to the uncertainties facing risk regulation, including the delegation without specific standards (2.A), indecisive burden of proof (2.B) and regulatory errors beyond accusation (2.C). The common concern over the tensions between the precautionary principle and the rule of law is: the power authorized to agencies to take precautionary actions might be abused.

In the following part, I analyze the applicability of traditional mechanisms of administrative law in the area of risk regulation, discussing what they can do and what they cannot do with the challenges rising from the tensions between precautionary principle and the rule of law; in other words, I explore their potentials to control agencies’ power in the area of risk precaution. Those mechanisms may be grossly divided into two groups: rules and standards established in advance, and

subsequent examination and supervision. It is found in the following part that, as with facing the challenges, they can play an important but limited role to prevent the abuse of risk regulator's power.

(1) Rules and Standards

A simple, direct technique to prevent administrative abuse of power is the *ex ante* establishment of rules and standards.

In administrative law, it is important to set rules and standards in advance, and this can be taken as guarantees to the individual's liberty. As a modern advocate of the classical liberal theory, Fredrick Hayek announced in his book, *THE ROAD TO SERFDOM*, that the rule of law means that "government in all its actions is bound by rules fixed and announced beforehand — rules that make it possible to foresee with fair certainty how the authority will use its coercive powers in given circumstances and to plan one's individual affairs on the basis of this knowledge."³⁷

However, precaution in risk regulation has to deal with possible outcomes that cannot be confirmed in advance. In this sense, it's impossible to directly specify what regulators facing a particular risk should do using pre-established rules or standards. Nevertheless, it would be too soon to conclude that precaution in risk regulation is beyond the realm of given rules and standards. Given rules and standards could still be helpful to some extent.

First, the number of given rules and standards still applicable to traditional agency action and traditional governmental function does not

37 FRIEDRICH A. HAYEK, *THE ROAD TO SERFDOM* 72 (1944).

decline as the practice of precaution in risk regulation rises. Even in the area of risk regulation, traditional administrative activities could still exist. For example, various measures taken as response to emergencies caused by risks (such as fire burning down a forest) are mostly nothing “new” but typical measures of “command-and-control”; and it is possible to set standards and rules for these types of activities in advance. Only when precautionary issues are involved under scientific uncertainty (such as harm has never occurred before due to similar risks), would the agencies turn to the precautionary principle and “new” approach might be needed.

Second, the procedural rules and standards of administration might be applicable where no substantial rules and standards are available. It can be argued that transparency is “the natural enemy of arbitrariness and a natural ally against injustice.”³⁸ This point is still tenable in the area of risk precaution. Requiring the agency to provide reasons for its decision would also work in the areas of precaution, which push the agency to be more careful and increase the public’s trust in the reasoning of administrative decisions, hence helping with controlling the administrative power and preventing abuse.

Third, principles might be applicable when there are no specific rules available. Legal systems include not only legal rules but also legal principles.³⁹ The general principles such as the principle of proportionality, doctrine of legitimate expectation, natural justice, and so on, should also be binding in the area of risk regulation. What’s more, in comparison to specific and substantial rules, general principles leave

³⁸ KENNETH C. DAVIS, *DISCRETIONARY JUSTICE: A PRELIMINARY INQUIRY* 98 (1969).

³⁹ RONALD DWORKIN, *LAW’S EMPIRE* 211 (1986).

more space for the agency's discretion; hence risk regulation could be more efficient and effective in the light of the "contextual rationality."⁴⁰ The limitation is: all legal norms including rules and principles are "semi-finished products" before they are applied to specific cases,⁴¹ so compared to clear and definite rules in general, the application of abstract and sometimes equivocal principles depends heavily on the existence of developed and sophisticated legal interpretation technologies and tools.

(2) Examination and Supervision

The *ex post* examination and supervision mechanisms include investigation by various authorities, review and rectification of agency activities, such as administrative reconsideration in China, an internal monitoring of the administrative system, and inquiries and investigations by congress, which compose an outside monitoring of the administrative system. The most typical after-action checking mechanism is the judicial review of administrative actions, which has long served as the core of administrative law.

The *ex post* examination and supervision help control administrative power while depending on the supervisors' institutional roles and competence. The authorities and functions of different

40 David A. Dana, *The Contextual Rationality of the Precautionary Principle*, 35 QUEEN'S L.J. 67, 67-96 (2009).

41 As Cai Shuheng has pointed out, "The completed law requires putting general norms into particular cases with the consistency between the abstract and the specific. Therefore, a law that is completed as to legislation is not yet completed as to judicial practice." CAI SHUHENG, *THE SELF-CONSCIOUS DEVELOPMENT OF CHINA'S JURISPRUDENCE* 164-65 (2005) (「完全的法律，必須包容普通於特殊之中，要求抽象與具體之互相同一。……故在立法觀點已經完成之法律，在司法觀點均屬未完全。」蔡枢衡，中国法理自觉的发展，页164-165（2005年））。

governmental departments determine the limitations of these checking mechanisms. The obvious shortcoming of inside supervision is that the supervisor is not an independent party and the public tends to doubt its neutrality and fairness. In China, rarely does the congress hold an inquiry into administrative actions, and investigation by the People's Congress aimed at an individual case could be highly controversial.⁴² The scope of China's judicial review is limited to specific administrative decisions while rule-makings are excluded,⁴³ and the reviewing judges tend to focus on formalistic legality of administrative acts and only refer to the substantive legitimacy in very exceptional cases.⁴⁴

In general, it's very difficult in *ex post* examination to hold the risk regulators responsible for the unintended consequences of their decisions, because decisions in risk regulation are usually decisions made under uncertainty. In the absence of sufficient scientific evidence and inconsistencies in the available evidence, it seems harsh to hold risk regulators responsible for the unavoidable but non-culpable "errors" mentioned previously. Furthermore, in many cases the harmful results of those "errors" are so serious that no regulatory agency would be able to bear the full responsibility.

42 For discussion on "individual case investigation" of People's Congress, see Bian Jianlin & Jiang Tao, *The Study of Individual Case Investigation*, 3 TRIB. POL. SCI. & L. 95, 95-104 (2002) (卞建林、姜涛，个案监督研究，政法论坛，3期，页95-104 (2002年))。

43 XINGZHENG SUSONG FA (Administrative Litigation Act) art. 12 & 13 (2015) (China).

44 XINGZHENG SUSONG FA (Administrative Litigation Act) art. 5 (1989) (China). This provisions have been revised to expend the application of standards as to substantial legitimacy, such as the article 70 of the Administrative Litigation Law of PRC provides that when administrative activity involves abuse of power or is obviously unfair, the people's court may render judgment to annul or partially annul the administrative act.

Additionally, *ex post* examination and supervision depend on established substantive and procedural norms. In the absence of such norms, there will be no basis for judging whether administrative activities were legal. Similarly, the limitation of rules and standards established in advance (as discussed earlier) would also influence the function of *ex post* monitoring mechanisms. Therefore, the seemingly more promising method is to apply newly developed procedural norms as standards in *ex post* monitoring, which includes requiring the agencies to rationalize their own decisions. In traditional administrative practice, the requirement to provide reasons has made the agencies more prudent in their decision making while increasing public acceptance and compliance as well. As for risk regulation, the reason-giving requirement can also have such an effect. In fact, since the practices of risk regulation unavoidably involve scientific uncertainties, it would be even more important for regulatory agencies to give good reasons for their decisions. Failure to do so would draw criticism of arbitrariness and result in loss of public trust.

4. Emerging Mechanisms to Reconcile Precaution with the Rule of Law

The typical kind of traditional administrative action is law enforcement. That is, to apply general norms to concrete facts and specific cases, where the norms are already given and the facts can be collected from a situation that has usually already happened or is currently happening. In contrast, there are usually no such given norms and facts in the area of precaution, which tries to regulate for something that may (or may not) happen in the future.

Matters of uncertainty in risk regulation are normally beyond legislators' area of expertise, and neither the competence of supervising authorities nor judicial review techniques can resolve this issue. Therefore, traditional mechanisms of administrative law —rules and standards set in advance and after examination and supervision— can only play limited roles in reconciling risk regulation with the rule of law, as found in the last part.

Therefore, it's important to develop new mechanisms of administrative law to deal with uncertainties involved in risk regulation. In this section, I argue that we could draw heavily from the experiences of soft law and participatory model of public administration by examining the following questions: (1) how might soft law help address both risk regulation and the rule of law? (2) Is the general public (the layman) able to make any difference in reconciling the rule of law with risk regulation through their participation in public administration? (3) How might these two mechanisms do better than traditional mechanisms in dealing with uncertainty?

(1) Soft Law

The term “soft law” refers to rules that set standards of conduct while are neither strictly binding nor directly enforceable, such as guidelines, policy declarations, codes of conduct, codes of practice etc. Unlike hard law, soft law's effectiveness doesn't directly depend on the force of state power. It is not enacted and carried out in a “top-down” approach. It is often characterized by self-regulation and self-governance, which usually make full use of people's wisdom at the “grassroots” level.

While soft law is not a new phenomenon, it has drawn increasing attention recently.⁴⁵ It has started to play an increasing role in areas of risk regulation such as pollution control, labor policies and consumer protection, etc. There are no generally accepted formulations of soft law at this moment, while some overlapping consensus, including that soft law is symmetrical to and as effective as hard law, is beginning to form.⁴⁶ Generally speaking, “soft law is also law.”⁴⁷

Taking soft law into consideration broadens the concept of traditional law, thereby widening the general understanding of the rule of law. From this standpoint, we can find that the tension between risk regulation and the rule of law is largely due to our traditional and narrow interpretation of the law. Once we discontinue viewing the rule of law as exclusively the rule of hard law and instead recognize that the rule of soft law is also an important part of the rule of law, we see that soft law can play an effective role in areas hard law could not. This means there are still possibilities to keep regulatory powers within the confines of law when the rule of “hard law” is not available. In this sense, the rule of “soft law” could reduce the tension between risk regulation and the rule of law.

Moreover, in practices, soft law provides new tools for risk regulators to achieve the regulatory objectives in an effective and legal manner. The Open Method of Coordination (OMC)⁴⁸ in which EU

45 See ULRIKA MORTH, *SOFT LAW IN GOVERNANCE AND REGULATION: AN INTERDISCIPLINARY ANALYSIS* (2004).

46 Kenneth W. Abbott & Duncan Snidal, *Hard and Soft Law in International Governance*, 54(3) INT'L ORG. 421, 421-22 (2000).

47 See LUO HAOCAI & SONG GONGDE, *SOFT LAW GOVERNANCE: TOWARDS AN INTEGRATED APPROACH* (2013).

48 Wang Xinyan, *On Open Method of Coordination*, in *SOFT LAW AND PUBLIC*

member states learn from each other by sharing information and initiatives is an inspiring example. This mechanism enables them to adopt best practices and coordinate their national policies. The Voluntary Agreement (VA)⁴⁹ is another inspiring example, in which the industry voluntarily exerts additional effort beyond (e.g. cut down more pollutants) what the legal standards require. VA's effectiveness depends on the incentives to participants, such as promotion of their public image to reduce community concern and/or to receive financial support, etc. Both OMC and VA have been widely used and proven helpful in reaching various regulatory objectives in several areas. One common characteristic of these new tools is that the effectiveness is not safeguarded by "command and control" regulations but instead relies on peer pressure, such as naming and shaming. Hence, on the one hand, regulatory objectives can be achieved while reducing enforcement costs; on the other hand, since no compulsory measures are taken by agencies, there will no longer be a "legitimacy crisis" in regards to administrative power delegated to agencies (as discussed earlier).

(2) Participatory Model of Administration

"Public participation has been the worldwide tendency" ever since 1970s, especially after the worldwide public administration reform, which has deeply changed the mode of traditional administration by "command and control."⁵⁰ In China, ideas on and practices of public

GOVERNANCE 312, 312-23 (Luo Haocai ed., 2006) (王新艳, 论开放协调机制, 收于: 罗豪才编, 软法与公共治理, 页312-323 (2006年)).

49 See Richard B. Stewart, *A New Generation of Environmental Regulation*, 29 CAP. U. L. REV. 21 (2001).

50 Jiang Bixin & Jiang Chunyan, *The Trend of Public Participation as Challenge to Administrative Law*, 6 CHINA LEGAL SCI. 50, 50-57 (2005) (江必新、江春燕, 公众参与趋势对行政法和行政法学的挑战, 中国法学, 6期, 页50-57 (2005年)).

participation have also been continued to develop.⁵¹ There are provisions on public participation appearing in the statutes on administrative penalty and administrative licensing. Some practices of public participation in administration, such as public hearing in administrative decision-making, participatory model of government achievements appraisal, etc., have drawn large amounts of attention through mass media.

The essence of participatory administration is widely accepted as non-government participants do play roles in the administrative process. Compared to traditional administrative processes controlled completely by the agencies, the participatory model of public administration has many advantages. These advantages include the promotion of transparency in administrative processes, an increase in the acceptance of the administrative decision, and enhancement of the accountability of non-elected officials. Also, since the act of participation itself inspires participatory will and action, the participatory model of public administration is inherently self-strengthening.

Aside from these advantages,⁵² there are even more benefits to dealing with the tension between risk regulation and the rule of law. On one end, involvement in public administration under the participatory model is open to experts, the general public and interested parties, especially the potentially affected parties. This allows for the possibility

51 See Jin Zining, *Participatory Model of Administration: American Theory and Chinese Practice*, in 20 REVIEW OF NEW POLITICAL ECONOMY 119, 119-29 (Wang Dingding ed., 2012) (金自宁, 参与式行政: 美国理论与中国实践, 收于: 汪丁丁编, 新政治经济学评论20, 页119-129 (2012年)).

52 Public participation in the risk regulation "is both necessary and desirable". Thomas O. McGarity, *Public Participation in Risk Regulation*, 1 RISK 103, 103 (1990).

of breaking the knowledge-information monopoly regulators hold⁵³ and a cutting down of the uncertainty stemming from information asymmetry that has long plagued risk regulators. Therefore, the participatory model could help agencies achieve better results in risk regulation. On the other end, participation changes the process of administration by incorporating private actors into public administration, offering private actors the opportunities to express diverse interests and wishes by carefully arranging procedural rights and obligations. For example, the public's right to know and the agency's disclosure obligations are affected. The right of interested parties to participate and the agency's duty to provide explanations could have the so-called effect of "restricting power with the right." This kind of restriction inherent to the administrative process could substantially alleviate concern over risk regulatory power being abused, remarkably serving to mitigate the tension between risk regulation and the rule of law.

(3) Further Discussion: To Democratize Risk Regulation?

What both the participatory model of administration and soft law have in common is the incorporation of non-governmental actors into the administrative process traditionally dominated by agencies. This change coincides with the worldwide shift from regulation to governance of public affairs,⁵⁴ and this shift is also in line with the emphasis on democracy by some of the most influential scholars in the current risk

53 "To break the 'knowledge-power' monopoly (in administration), the key is to empower the public as participator." WANG XIXIN, PUBLIC PARTICIPATION AND ADMINISTRATIVE PROCESS 254-55 (2007) (王锡锌, 公众参与和行政过程, 页 254-255 (2007年)).

54 See generally, Orly Lobel, *The Renew Deal: The Fall of Regulation and the Rise of Governance in Contemporary Legal Thought*, 89 MINN. L. REV. 7 (2004).

society, including Ulrich Beck⁵⁵ and Anthony Giddens.⁵⁶ According to Beck and Giddens, it would be sensible to seek to democratize risk regulation, which the participatory model of administration and soft law governance suggest, and this is part of the big picture of risk society under democratic governance.

Two important traits of risks in modern society legitimize this transformation. First, the risk in modern society is both a physical reality and a socially constructed conception. Risk could cause material damages in the real world the moment the risk materializes. This is why we say risk is a physical reality. However, before that moment, the risk's existence is based on the community's subjective perception and judgment. This is why we argue risk is also a socially constructed conception. In the latter sense, extensive and active risk communication shall be a prerequisite for risk regulation.⁵⁷ Without this prerequisite, risk regulation tends to be doubted and challenged by the public.

Second, the most difficult and significant problems in risk regulation often are not problems that can be decided through scientific rationality. These problems tend to always involve the distribution of the risks and resources needed for dealing with risks. For example, risks are ubiquitous in modern society, but the resources to deal with them are limited. Zero-risk is impossible to achieve. Furthermore, the other side of risk is often opportunity, and people often choose to take risks for potential benefits because many of them regard zero-risk as undesirable.

⁵⁵ See BECK, *RISK SOCIETY*, *supra* note 5.

⁵⁶ ANTHONY GIDDENS, *THE CONSEQUENCES OF MODERNITY* (1990).

⁵⁷ Jin Zining, *The Risk Communication and Its Structure*, 5 J. BEIJING SCHOOL ADMIN. C. 83, 83-89 (2012) (金自宁, 风险规制中的信息交流及其制度建构, 北京行政学院学报, 5期, 页83-89 (2012年)).

In this case, the problem is, “What’s the acceptable level of risk?” Ultimately, this brings us back to the age-old political and ethical question⁵⁸ of “What’s the life we want to live?” Apparently, in a democratic community or a community currently in the process of transforming into a democratic one, extensive discussions and deliberations between citizens and regulators are necessary to reach an acceptable answer for this kind of question.

Of course, the transformation from risk regulation to democratic risk governance is not free of challenges. One of the most perplexing challenges is the question of whether “the general public, as layman, are able to make any difference through their participation in risk regulation? Isn’t there a possibility that the layman’s emotional reactions would turn ‘the reason free from passion (Aristotle)’ into the ‘law of fear’?”⁵⁹

In fact, in this specialized modern society, the general public lives in a world of unknowns, because they have to depend on the expertise of others. The general public usually doesn’t know anything about the special cognitive means used by experts, such as “measuring procedures,” “statistical survey,” “reflections on validity” and “consideration of tolerance thresholds.”⁶⁰ In areas beyond their specialized discipline, the experts are just like the general public—it is possible that the experts also know little about the world beyond their own special field of study. Even in their specific field of study, the experts might also live in a world of unknowns when taking into consideration the large amount of things beyond the limits of existing

58 BECK, RISK SOCIETY, *supra* note 5, at 28-29.

59 See CASS R. SUNSTEIN, LAW OF FEAR (2005).

60 BECK, RISK SOCIETY, *supra* note 5, at 54.

knowledge. Such unknowns undeniably exist, although people may look at and deal with them in very different ways.

One way to view and deal with these unknowns is to focus on the necessity of involving the general public in deciding how to assess and manage risk. Public participation would help remedy the first category of ignorance discussed earlier (in section 2), namely, information asymmetry amongst experts and also between the experts and the general public. Public participation would allow risk regulators to make full use of the scattered knowledge owned by these myriad different actors. In regard to the second category of ignorance, the unknowns, the general public's participation becomes even more necessary. Because in this case, there are no longer any experts, no one could claim that he or she "knows" how to deal with the particular risk. In other words, no one could claim his or her decision is "right" according to scientific rationality. Consequently, the focus no longer falls on how to make the "right" risk decision according to the scientific rationality, as this is impossible, but instead shift the emphasis to how to make the "fair" risk decision according to social justice. Ignorance is not necessarily a barrier to "fair" decisions,⁶¹ or at least, ignorance is not a due reason to exclude interested parties from the process of decision making.

From the view of fairness, all the affected parties should have the right to participate in risk decision making. This means, it's necessary to establish a general legal system that incorporates risk communication to provide the non-governmental actors opportunities to participate in risk regulation with decisions involving uncertainty, especially in the case of

⁶¹ In the light of John Rawls' "Veil of Ignorance", we could even say, ignorance might be the guarantee of fairness.

the second category pertaining to ignorance as noted above. When we are all living in a world of unknowns, we should collectively decide through deliberation and negotiation what kind of risk and what level of risk should be taken. By doing so, if the results of our decisions turn out to be good, we can thank ourselves; if the results of our decisions turn out to be bad, we'll have nobody to blame but ourselves. In other words, we the people, not the risk regulatory agencies would be responsible for our own future.

5. Structuring the Precautionary Principle under the Rule of Law

The fact that the precautionary principle is becoming increasingly accepted in positive law promotes communal efforts to keep precautionary actions against risks under the control of the existing legal system, which includes structuring the precautionary principle, although empirical studies have shown that the patterns of precaution⁶² and the risk regulation regimes⁶³ fluctuate significantly in different cases. In light of the above analysis and discussion regarding reconciling precaution in risk regulation and the rule of law, we can see there are important elements missing from existing proposals on how to structure the precautionary principle.

Take the influential Communication from the European

⁶² See Jonathan B. Wiener & Michael D. Rogers, *Comparing Precaution in the United States and Europe*, 5(4) J. RISK RES. 317 (2002).

⁶³ See Christopher Hood, Henry Rothstein, Robert Baldwin, Judith Rees & Michael Spackman, *Where Risk Society Meets the Regulatory State: Exploring Variations in Risk Regulation Regimes*, 1(1) RISK MGMT. 21, 21-34 (1999).

Commission on the Precautionary Principle (2000) (the Communication 2000)⁶⁴ as an example. It is not a compulsory regulation or directive but a non-binding general guidance on how to interpret and apply the precautionary principle. According to the CFC, the use of the precautionary principle can be divided into two steps. The first step is to decide whether to rely on the precautionary principle. This decision shall be made on the identification of potential adverse impacts and scientific assessment of the risk. When “potentially dangerous effects” have been identified and scientific evaluation “does not allow the risk to be determined with sufficient certainty,” it would be proper to turn to the precautionary principle. The second step is to decide the measures to be taken in consideration of the precautionary principle. Starting from the scientific assessment being “as objective and comprehensive as possible,” decision makers need to take into account all related factors such as the degree of uncertainty, “acceptable” level of risk, the potential benefits and costs of action or lack of action, and so on. In this process, “reliance on the precautionary principle is no excuse for derogating from the general principles of risk management,” including the principle of proportionality, non-discrimination, consistency, examining costs and benefits being subject to review in light of new scientific data. With the above context, the Communication 2000 has established a framework for structuring the precautionary principle.

The Communication 2000, on one hand, as a model of the efforts to structure the precautionary principle, explicitly states that the Community “has the right to establish the level of protection” that “it

⁶⁴ Communication From The Commission On the Precautionary Principle, COM/2000/0001, <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1426308516738&uri=CELEX:52000DC0001> (last visited Mar. 3, 2016).

deems appropriate,” including taking precautionary measures when scientific uncertainty exists; on the other hand, it conditions precautionary actions to be based on scientific assessment, the principle of proportionality and cost-benefit analysis, etc. In this sense, the Communication 2000 also tries to balance the practical needs for risk regulation and the normative requirements of the rule of law.

However, from the perspective of relieving the tension between risk regulation and rule of law, the implications of the following three sentences that appeared separately in the Communication have been overlooked to an extent; hence their value has been underestimated.

“Judging what is an ‘acceptable’ level of risk for society is an eminently political responsibility.”⁶⁵

“The decision-making procedure should be transparent and should involve as early as possible and to the extent reasonably possible all interested parties.”⁶⁶

“The precautionary principle should be considered within a structured approach to the analysis of risk which comprises three elements: risk assessment, risk management, risk communication.”⁶⁷

The connection between these three sentences emerges when we

⁶⁵ Communication From The Commission On the Precautionary Principle, COM/2000/0001, 5 of Summary, <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1426308516738&uri=CELEX:52000DC0001> (last visited Mar. 3, 2016).

⁶⁶ Communication From The Commission On the Precautionary Principle, COM/2000/0001, 5 of Summary, <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1426308516738&uri=CELEX:52000DC0001> (last visited Mar. 3, 2016).

⁶⁷ Communication From The Commission On the Precautionary Principle, COM/2000/0001, 4 of Summary, <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1426308516738&uri=CELEX:52000DC0001> (last visited Mar. 3, 2016).

place them together and interpret them as a whole. Namely, it's the communication of risk, which deserves further attention as discussed above. In turn, they explain respectively the necessity and feasibility of risk communication and its significant status in the structure of precautionary principle. The logic implied by those sentences could be that although the "acceptable" level of risk for society is supposed to be based on scientific data, it is not just a matter of science but also a "political" one, with the trickiest part being not scientific derivation but political judgment. In terms of the political judgment, it is the interested parties who are affected by the risk that should have a voice in defining the acceptable level of risk. Therefore, besides risk assessment and risk management, risk communication that engages all the interested parties should be a valuable and irreplaceable element in the structure of the precautionary principle.

We have already seen in the former part of this article that introducing multiple parties into the administrative processes, which were traditionally monopolized by agencies, and providing them the opportunity to exchange information, compete for diverse interest and arrive at compromise or "incompletely theorized agreement"⁶⁸ are features shared by both the participatory model of public administration and soft law. And these three undervalued sentences in the Communication have demonstrated a new way to incorporate this "democratizing risk regulation" element into structuring the precautionary principle, namely, establishing a risk communication system than can be applied generally.

⁶⁸ See Cass R. Sunstein, *Incompletely Theorized Agreements*, 108 HARV. L. REV. 1733 (1995).

As shown earlier, administrative action may be legitimized by following legislative directives or relying on expertise. But when we delve deeper into how or why legislative directive or expertise is able to justify administrative action, it turns out that, legitimacy of legislation stems from its democratic law-making process, and legitimacy of expertise comes from its duty to serve public interest. Through risk communication involving multiple parties, risk regulation could become an outcome of democratic decision-making process, allowing to better serve public interest. What needs to be clarified is that this kind of “democracy” is not the democracy conventionally taken as parliamentary democracy but a special form of direct democracy or participatory democracy.⁶⁹ In addition, this kind of “public interest” is not the public interest conventionally taken as the objective common interest of the society independent from individual interest, but rather a compromise between the different interests of multiple parties.⁷⁰

6. Conclusion

No legal system can exist as a closed, isolated system. Administrative law is also responsive to social changes. The incorporation of precautionary principle into positive law is a sign showing that administrative law has adjusted to the reality of risk society.

⁶⁹ See Jiang Ming'an, *Public Participation and Rule of Law*, 2 CHINA LEGAL SCI. 26, 26-37 (2004) (姜明安, 公众参与与行政法治, 中国法学, 2期, 页26-37 (2004年)).

⁷⁰ In Stewart's words: “there is no ascertainable, transcendent ‘public interest,’ but only the distinct interests of various individuals and groups in society”; “Under this assumption, legislation represents no more than compromises struck between competing interest groups”. Stewart, *supra* note 19, at 1667.

The most important characteristic of risk society is probably “introducing the future into the present.”⁷¹ Because humans are not able to foresee the future fully and clearly, one result of introducing the future to the present is that there would no longer exist absolute safety. Hence the need for safety is expected to increase, and the power of risk regulators tends to expand beyond the traditional realm of administrative law. Therefore, it’s necessary to develop new legal mechanisms to reconcile risk regulation with the rule of law. Namely, we can learn from the developing experience of “soft law” and “participatory model of public administration” and place more emphasis on risk communication.

In fact, the path for a shift from regulation to governance is cleared when not only rules but also principles have been allowed to govern, and the recognition of soft law governance, participatory model of public administration, and risk communication will speed this shift. Of course, both the participatory model of administration and soft law governance are still in the process of development. Some researchers have already identified their limitations.⁷² Nevertheless, their significance on administrative law should not be overlooked, and it makes sense to find ways to use them appropriately.

71 See NIKLAS LUHMANN, *RISK: A SOCIOLOGICAL THEORY* (Rhodes Barrett trans., Aldine de Gruyter 1993) (1991). Especially the second chapter: Risk as the Future.

72 In public governance, soft law plays a supplementary role comparing to hard law. See Luo Haocai & Song Gongde, *Taking Soft Law Seriously*, in *SOFT LAW AND PUBLIC GOVERNANCE 1* (Luo Haocai ed., 2006) (罗豪才、宋功德，认真对待软法，收于：罗豪才编，软法与公共治理，页1（2006年）). Adoption of participatory model of public administration does not mean to deny the rationality of the traditional agency-dominating model, because “in theory and practice, government is more capable of obtaining comprehensive information about both specific cases and general problem; in the meantime, government tend to have a systematic understanding on the matters within its domain while the public and experts do not.” See WANG, *supra* note 53, at 252.

Reference

- Abbott, Kenneth W., and Duncan Snidal. 2000. Hard and Soft Law in International Governance. *International Organization* 54(3):421-456.
- Ackerman, Frank, and Lisa Heinzerling. 2002. Pricing the Priceless: Cost-benefit Analysis of Environmental Protection. *University of Pennsylvania Law Review* 150:1553-1584.
- Beck, Ulrich. 1992. From Industrial Society to the Risk Society: Questions of Survival, Social Structure and Ecological Enlightenment. *Theory, Culture & Society* 9(1):97-123.
- . 1992. *Risk Society: Towards a New Modernity*. Thousand Oaks, CA: Sage Publications.
- . 1999. *World Risk Society*. Cambridge: Polity Press.
- Bian, Jianlin, and Jiang Tao. 2002. The Study of Individual Case Investigation. *Tribune of Political Science and Law* 3:95-104. (卞建林、姜涛(2002), 个案监督研究, 政法论坛, 3期, 页95-104。)
- Cai, Shuheng. 2005. *The Self-Conscious Development of China's Jurisprudence*. Beijing: Tsinghua University Press. (蔡枢衡(2005), 中国法理自觉的发展, 北京:清华大学出版社。)
- Center for the Study of Law Science and Technology, Arizona State University College of Law. 2003. From General Policy to Legal Rule. *Environmental Health Perspectives* 111(14):1799-1803.
- Cross, Frank B. 1996. Paradoxical Perils of the Precautionary Principle. *Washington and Lee Law Review* 53:851-925.
- Dana, David A. 2003. A Behavioral Economic Defense of the Precautionary Principle. *Northwestern University Law Review*

97:1315-1345.

———. 2009. The Contextual Rationality of the Precautionary Principle. *Queen's Law Journal* 35:67-96.

Davis, Kenneth C. 1969. *Discretionary Justice: A Preliminary Inquiry*. Baton Rouge, LA: Louisiana State University Press.

Dworkin, Ronald. 1986. *Law's Empire*. Cambridge, MA: Belknap Press.

Fisher, Elizabeth. 2007. *Risk Regulation and Administrative Constitutionalism*. Oxford: Hart.

Fuierer, Alana M. 1995. The Anti-Chlorine Campaign in the Great Lakes: Should Chlorinated Compounds Be Guilty Until Proven Innocent?. *Buffalo Law Review* 43:181-228.

Giddens, Anthony. 1990. *The Consequences of Modernity*. Stanford, CA: Stanford University Press.

———. 2003. *Runaway World: How Globalization Is Reshaping Our Lives*. 2d ed. New York, NY: Routledge.

Hayek, Friedrich. A. 1944. *The Road to Serfdom*. Chicago, IL: The University of Chicago Press.

Hood, Christopher, Henry Rothstein, Robert Baldwin, Judith Rees, and Michael Spackman. 1999. Where Risk Society Meets the Regulatory State: Exploring Variations in Risk Regulation Regimes. *Risk Management: An International Journal* 1(1):21-34.

Hoshino, Eiichi. 2004. *Person in Private Law*. Beijing: Chinese Legal Publishing House. (星野英一著，王闯译(2004)，私法中的人，北京：中国法制出版社。)

Jiang, Bixin, and Jiang Chunyan. 2005. The Trend of Public Participation as Challenge to Administrative Law. *China Legal Science* 6:50-57. (江必新、江春燕(2005)，公众参与趋势对行政法和行政法学的挑战，中国法学，6期，页50-57。)

Jiang, Ming'an. 2004. Public Participation and Rule of Law. *China*

Legal Science 2:26-37. (姜明安(2004), 公众参与与行政法治, 中国法学, 2期, 页26-37。)

Jin, Zining. 2007. Reflection on the Privatization of Public Law: Against the Background of the Worldwide Public Administration Reform. *Zhejiang Academic Journal* 5:143-150. (金自宁(2007), “公法私法化”诸观念反思——以公共行政改革运动为背景, 浙江学刊, 5期, 页143-150。)

———. 2012. Participatory Model of Administration: American Theory and Chinese Practice. Pp. 119-129 in vol. 20 of *Review of New Political Economy*, edited by Wang Dingding. Hangzhou: Zhejiang University Press. (金自宁(2012), 参与式行政: 美国理论与中国实践, 收于: 汪丁丁编, 新政治经济学评论20, 页119-129, 杭州: 浙江大学出版社。)

———. 2012. The Risk Communication and Its Structure. *Journal of Beijing Administrative College* 5:83-89. (金自宁(2012), 风险规制中的信息交流及其制度建构, 北京行政学院学报, 5期, 页83-89。)

Knight, Frank H. 1964. *Risk, Uncertainty and Profit*. New York, NY: Augustus M. Kelley.

Lobel, Orly. 2004. The Renew Deal: The Fall of Regulation and the Rise of Governance in Contemporary Legal Thought. *Minnesota Law Review* 89:7-27.

Luhmann, Niklas. 1993 (1991). *Risk: A Sociological Theory*, translated by Rhodes Barrett. New York, NY: de Gruyter.

Luo, Haocai, and Song Gongde. 2006. Taking Soft Law Seriously. Pp. 48-84 in *Soft Law and Public Governance*, edited by Luo Haocai. Beijing: Peking University Press. (罗豪才、宋功德(2006), 认真对待软法, 收于: 罗豪才编, 软法与公共治理, 页48-84, 北京: 北京大学出版社。)

- Luo, Haocai, and Song Gongde. 2013. *Soft Law Governance: Towards an Integrated Approach*. Buffalo, NY: William S. Hein & Co.
- Lupton, Deborah. 1999. *Risk*. New York, NY: Routledge.
- Mandel, Gregory N., and James Thuo Gathii. 2006. Cost Benefit Analysis Versus the Precautionary Principle: Beyond Cass Sunstein's Laws of Fear. *University of Illinois Law Review* 5:1037-1081.
- McGarity, Thomas O. 1990. Public Participation in Risk Regulation. *Risk* 1:103-115.
- McIntyre, Owen, and Thomas Mosedale. 1997. The Precautionary Principle as a Norm of Customary International Law. *Journal of Environmental Law* 9:221-241.
- Morth, Ulrika. 2004. *Soft Law in Governance and Regulation: An Interdisciplinary Analysis*. Northampton, MA: E. Elgar.
- Sachs, Noah M. 2011. Rescuing the Strong Precautionary Principle from Its Critics. *University of Illinois Law Review* 4:1285-1338.
- Sandin, Per. 1999. Dimensions of the Precautionary Principle. *Human and Ecological Risk Assessment: An International Journal* 5(5):889-907.
- Sands, Philippe. 2003. *Principles of International Environmental Law*. 2d ed. New York, NY: Cambridge University Press.
- Shen, Kui. 2008. Anti-Discrimination: The Faithful Choice between Knowing and Ignorance. *Tsinghua China Law Review* 5:20-32. (沈焜(2008), 反歧视: 有知和无知之间的信念选择——从乙肝病毒携带者受教育歧视切入, 清华法学, 5期, 页20-32。)
- Som, Claudia, L. M. Hilty, and A. R. Köhler. 2009. The Precautionary Principle as a Framework for a Sustainable Information Society. *Journal of Business Ethics* 85(3):493-505.
- Stewart, Richard B. 1975. The Reformation of American Administrative

- Law. *Harvard Law Review* 88:1667-1813.
- . 2001. A New Generation of Environmental Regulation. *Capital University Law Review* 29:21-182.
- . 2002. Environmental Regulatory Decision-making under Uncertainty. *Research in Law and Economics* 20:71-126.
- Stone, Christopher D. 2001. Is There a Precautionary Principle?. *Environmental Law Reporter News and Analysis* 31(7):10790-10799.
- Sunstein, Cass R. 1995. Incompletely Theorized Agreements. *Harvard Law Review* 108:1733-1772.
- . 2002. *Risk and Reason: Safety, Law and the Environment*. Cambridge: Cambridge University Press.
- . 2003. Beyond the Precautionary Principle. *University of Pennsylvania Law Review* 151:1003-1058.
- . 2005. *Law of Fear*. Cambridge: Cambridge University Press.
- Van den Belt, Henk. 2003. Debating the Precautionary Principle: “Guilty until Proven Innocent” or “Innocent until Proven Guilty”?. *Plant Physiology* 132(3):1122-1126.
- Waldo, Dwight. 1948. *The Administrative State*. New York, NY: Ronald Press.
- Wang, Xinyan. 2006. On Open Method of Coordination. Pp. 312-323 in *Soft Law and Public Governance*, edited by Luo Haocai. Beijing: Peking University Press. (王新艳 (2006), 论开放协调机制, 收于: 罗豪才编, 软法与公共治理, 页312-323, 北京: 北京大学出版社。)
- Wang, Xixin. 2007. *Public Participation and Administrative Process*. Beijing: China Democracy & Legal System Press. (王锡铎 (2007), 公众参与和行政过程, 北京: 中国民主法制出版社。)

Wiener, Jonathan B., and Michael D. Rogers. 2002. Comparing Precaution in the United States and Europe. *Journal of Risk Research* 5(4):317-349.

Wiener, Jonathan B., Michael D. Rogers, James K. Hamitt, and Peter H. Sand. 2011. *The Reality of Precaution: Comparing Risk Regulation in the United States and Europe*. New York, NY: RFF Press.

風險預防與行政法治 —— 挑戰及應對

金自寧*

摘 要

隨著風險成為現代社會的重要特徵，風險規制上升為現代政府的一項重要任務。風險預防原則在實證法上的出現，標誌著立法者將風險規制納入行政法規範體系之內的努力。但是，由於風險與無知相伴，規制者不得不決策於不確定性之中，風險規制實踐對傳統行政法治理念構成重大挑戰，甚至危及傳統行政法治理念的核心要求。平衡風險規制與行政法治的傳統技術力有不逮，有必要發展「軟法之治」、「參與型行政」和「風險交流」等新的制度技術，以求得風險規制與行政法治之間的平衡。

關鍵詞：風險預防原則、風險規制、行政法治、參與型行政、軟法之治。

* 北京大學國際法學院副教授。