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Revisiting the precautionary principle under the light of 2002-2003 French and international events[1]

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Résumé: Sur la base d'une relecture d'événements nationaux (la Charte de l'environnement en France) et internationaux (la guerre préventive des Etats-Unis en l'Irak) des années 2002-2003, ce papier rappelle la confusion entretenue entre principe de précaution et règle d'abstention. Il montre ensuite qu'il n'y a guère de fondement à postuler un antagonisme radical entre les Etats-Unis et l'Europe dans la manière d'aborder la gestion des risques en pratique. Cependant, des deux côtés de l'Atlantique, on peut observer une opposition entre deux usages de ce principe, soit comme vecteur d'un progrès de la coordination internationale, soit comme justification d'initiatives unilatérales dérogeant à des règles communes précédemment acceptées.

Abstract: Revisiting a selection of national (the Charter of the Environment in France) and international (the preventive war launched by the United States against Iraq) 2002-2003 events, the paper reminds the sustained confusion between two concepts: the Precautionary Principle and the Abstention Rule. It then supports the idea that there is no basic antagonism in practical rationalities of risk management across the Atlantic Ocean. But there is a fundamental opposition in each region between two basic usages of the Principle either to promote a progress in settling coordinated action for common concerns or to justify unilateral actions departing from an existing agreed common regime.

Mots clés : Principe de précaution, guerre préventive, souveraineté, gouvernance

Key Words : Precautionary principle, preventive war, sovereignty, governance

Classification JEL: D81, K33, O19

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More than fifteen years after its introduction and progressive acknowledgment in parts of environmental international, European and domestic law, for instance in France, there is still a huge debate about the conceptual structure of the precautionary principle (PP) and the conditions and means to put it into practice. Many countries still refuse to give it a legal status. Meanwhile, sound elements of doctrine have been elaborated in academic and public administration circles, and legitimized by official statements in Europe such as the Communication of the Commission in February 2000 and the Resolution of the European Council which was held in Nice in December 2000. Moreover the SPS agreement, as interpreted by panels and the body of dispute resolution within the WTO setting, gives a substantial credit to several conceptual ingredients of the PP (Noiville, 2000). At this point it is necessary to clarify the main issues under the light of recent national and international events that may have significant impacts for the future of the governance of environmental and health risks.

Among events, let us consider the Plan of Implementation adopted by the World Summit on sustainable development in Johannesburg in the Summer 2002, the arguments given by the US government to justify the 2003 war launched against Iraq, since some observers suggested it was a typical adoption of the PP advocated by Europeans, and the social debate triggered by the project of President Chirac to insert a Charter of Environment into the French Constitution.

I wish to offer three main points to discussion:

(1) There is a sustained confusion between two concepts: the Precautionary Principle and the Abstention rule.

(2) There is no basic general opposition in practical rationalities for approaching risk management in the USA and in Europe.

(3) There is a fundamental opposition in each region between two basic forms to dress the precautionary principle either as a progress in settling coordinated action for common concerns or a justification for unilateral actions departing from an existing agreed common regime. Fundamentally the PP is caught in the tension between sovereignty and collective rules.

1. The Precautionary Principle and the Abstention Rule

There is often confusion between two concepts. Firstly, there is the PP that requires taking an early, but proportionate, account of potential risks or hazards; hence the typical form of definitions of the principle: “lack of scientific certainty should not be used as a reason for

postponing effective and proportionate preventive actions…" In the search of appropriate measures, this principle calls for the consideration of a whole range of actions, from scientific watch and research to provisional forbidding of the risk-generating technology or products. This concept is explicitly supported by the European doctrine (Commission, 2000; European Council, 2000). Secondly there is what I call the Abstention Rule. This apparently attractive rule demands to refuse any new activity, product or technology that could generate potential risks as long as they have not been scientifically proven to be quite safe. It is linked to the wrong but current idea that the main characteristic of the PP is to reverse the burden of proof (O'Riordan & Jordan, 1995) and that proof of no-risk should be given (Conseil d'Etat, 1998). The point is that the Abstention Rule is the limit of a lay conception driven by the idea that public action should eradicate sources of potential hazards as much as possible; for the latter the PP just means being much more cautious than previously justified by usual prevention. Next figure clearly shows the basic difference between both concepts.

On the vertical axis Oy is the scientific time, i.e. the axis of the development of scientific knowledge of the background of a given hazard; on top are "known risks" y_9; at the origin is "ignorance" y_1; between them, top-down, are various degrees of emerging knowledge of potential risks, from very plausible but not proven hazard hypotheses to just scientific speculations. On the horizontal axis Ox, are set all the possible preventive actions that can be considered; they are ranked according to decreasing severity (x_1 is forbidding; x_7 is scientific watch). So an action justified by the PP can be defined both by its timing (y_i) and its content (x_i) as $A(x_i,y_j)$.

The PP for the EU and French doctrine implies mainly a vertical translation downwards, i.e. from y_9 to y_3: hazards have to be taken into account at an early stage, without waiting for certain knowledge of their existence and probability. Meanwhile, if it is the case that there is complete ignorance on the existence of an unveiled hazard, the PP is of no use: to trigger the PP, potential hazards have to be identified on the basis of existing scientific work or empirical observations; the PP can only embrace those potential hazards for which there is a minimum threshold of scientific content and consistency, y_3 by convention.

The PP for lay people, especially in crisis period, is understood as a horizontal translation towards the origin, for instance from x_7 to x_2. It means taking more severe measures than previously felt as justified under standard prevention policies, and mainly forbidding or eradicating sources of risks.

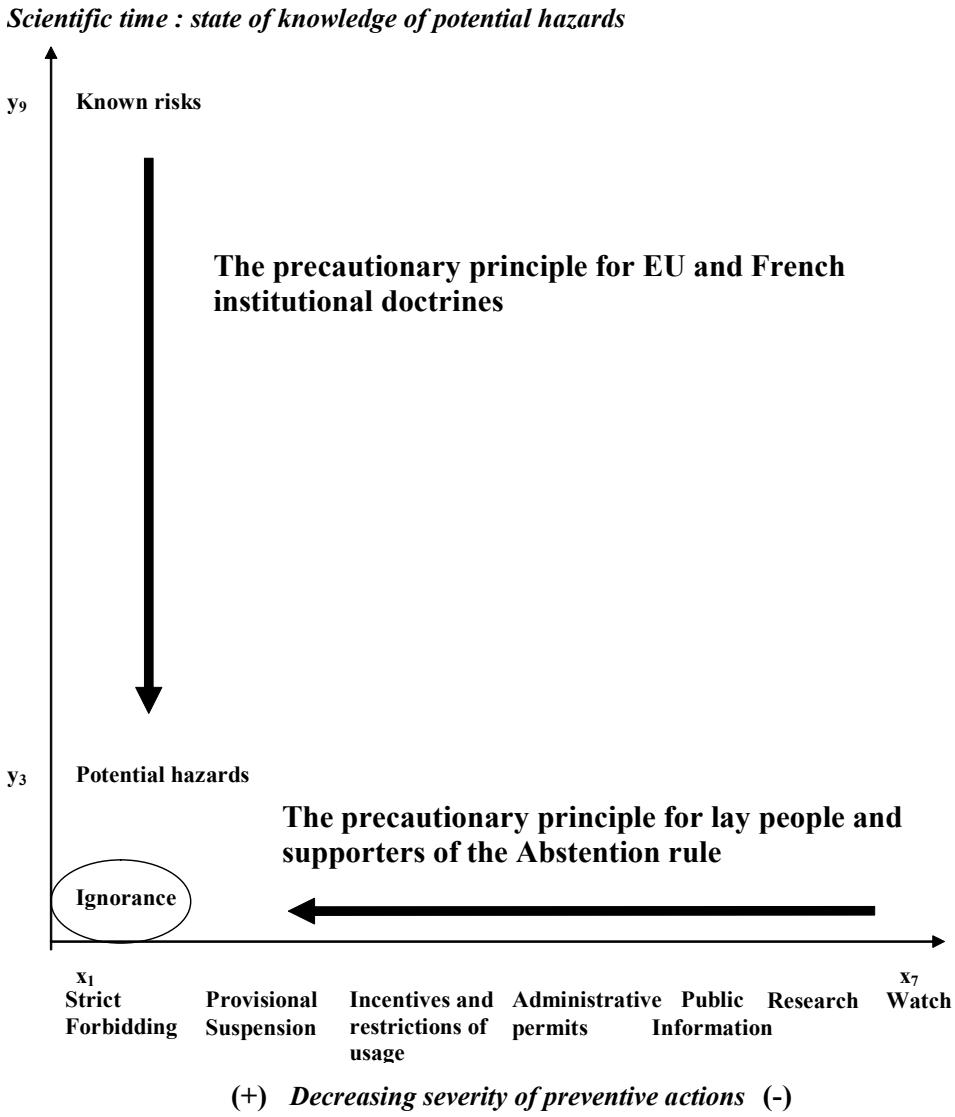

Figure 1 : *Two concepts for the PP : early account of potential hazards versus more severe precautionary measures*

For the eradicative approach, it seems that precautionary actions should be all the more severe because scientific uncertainty is high, which is the case when actions are decided early in the scientific time[1]. On the contrary, for the EU and French doctrine, low scientific

[1] This was the view supported by Hermitte and Dormont (2000) after having revisited in 1999 the story of the development of the BSE health crisis in Europe: if they are to be efficient, precautionary actions should be all the more broad since scientific uncertainty is high. As a matter of fact Gollier, Julien & Treich (2000) developed an economic model that seemingly brings a rational ground for this rule: their model identifies what they call a "precautionary effect" linking increased savings to the prospect of increased uncertainty of future earnings. But this outcome depends on too specific conditions (specific preferences function of prudent agents, a cumulative environmental hazard, precautionary actions that transfer income to the future without imposing additional immediate costs, certainty of the future resolution of uncertainty) to offer a general framework for thinking out

plausibility could not lead to severe restrictive measures (Kourilsky & Viney, 2000) but, if relevant, to scientific watch and research. The higher scientific consistency and plausibility, the stronger precautionary actions have to be for a same level of seriousness of expected damage.

The lay eradicative conception ultimately leads to the Abstention rule: public authorities should forbid anything that has not yet been proven to be certainly safe. That rule is a dead-end for two main reasons (Godard, 1997; Godard & al. 2002): first, due to the fact that scientific knowledge is in progress and there are always unresolved uncertainties at a given time, it is logically impossible to proof that something new will never bring damages in the future; in an imperfectly known world, it is not possible to prove a negative (Popper's argument about refutability); second, it poses a general norm of no-damage that cannot belong to our world, due to scarcity of means and the fact that main policy issues in the field of risk management come to a trade-off of one risk against another risk.

This debate has direct implications for practical issues. For instance, when the Bush administration asked Iraq to prove its disarmament regarding massive destruction weapons, it provided a good illustration of such demands of proof of no-risk and of the impossibility to bring it: any negative empirical test was not enough to prove the absence of threat. It has been widely noticed how remarkable it was that several weeks after the coalition occupied the whole territory of Iraq, nothing was found to this regard, although this threat was the official justification of the war. Unless accepting to judge the moral value actions on the ground not of their expected consequences but their actual consequences that reveal themselves afterwards in full light, by itself this absence[2] does not ruin the justification of the war, but invites to scrutinize the ex ante justification of this action.

In fact two lessons can be derived from this case. Firstly, it confirms that asking for a proof of no-risk regarding potential threats always belongs to a rhetorical exercise that hides a strategic purpose. The demands of the GMO opponents in Europe belong to the same deadly rhetoric when they ask for a proof of long run harmlessness of biotechnology before allowing them. Secondly, when it seems useful to them, the more radical opponents to the PP may easily adopt the unjustifiable caricature of this concept that they are ordinarily fighting. The same phenomenon has been observed in France: the physician circles that are hostile to the PP are also those who have contributed to disseminate the confusion between the PP and the Abstention rule.

So, in spite of the fact that a rather elaborated doctrine has been built about the very nature of the PP and its implementation, parts of society find profitable for promoting their

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the PP rationale. The Hermitte and Dormont's rule would lead to a paralysis if it should be applied to any potential hazard considered at an early stage (Godard et al, 2002).

[2] By the end of May 2003.

projects and causes in society to push another concept under the same name. As they gain some political audience in some specific, well-publicized cases, politicians and governments are sensitive to some extent to these demands, which sustain the initial conceptual confusion.

2. No basic difference in rationality of risk management between the USA and Europe

In spite of what is sometimes said[3], there is no basic general opposition of practical rationality in risk management between Europe and the United States. This situation originates in the fact the European doctrine has been developed by taking due account of international rules that were developed in the context of the WTO during the nineties. Nowadays opponents and defenders of the PP can be found in both regions and parallel groups across Atlantic share the same arguments. Let us give a few examples of this similarity. Look at the recent opinions of French Academy of Science (2003) and French Academy of Medicine (Pilet, 2003a & b; Tubiana, David & Sureau, 2003) against the acknowledgement of the precautionary principle in a Constitutional Charter of Environment in France. Such an opposition has pushed forward the very same types of arguments as used by the United States in international circles: the implementation of the principle could dangerously deviate from a science-based doctrine and then would become a threat for future progress of science, a source a paralysis of technological innovation and eventually a source of dramatic regression of society's welfare. Their fears are justified if they target the Abstention rule, but there is no reason why the PP should produce such results. As written by the UK Interdepartmental Liaison Group on Risk Assessment in their 2002 report on the PP: "In practice the position adopted should reflect the commitment to sustainable development that gives full weight to economic, social and environmental factors. The precautionary principle should not, therefore, be an obstacle to innovation. Properly applied it is a positive proportionate policy tool to encourage technological innovation and sustainable development by helping to engender stakeholder confidence that appropriate risk control measures are in place" (ILGRA, 2002, p.4).

Across the Atlantic Ocean, the recent (May 2003) US decision to stop beef meat imports from Canada because one unique case of mad cow was recently discovered in the latter country demonstrates the capacity of the United States to take early and radical, maybe quite excessive, measures for a potential risk. Certainly, such a measure is more radical than any of those taken in Europe in a similar case. In another field, the President Clinton's initiative, a few years ago, in 1996, to develop a concerted strategy between public authorities and private business to ensure critical infrastructure protection against large-scale risks and

[3] See the discussion by Vogel (2003). Beginning with the idea that, as a pioneer of risk management, the USA let the lead they had until the eighties to the EU ever since, as magnified by the disputes about the precautionary principle, Vogel concludes that the main sources of difference are not related to different approaches and concepts to risk management but are due to organisational differences in regulatory regimes, and mainly to a higher level of pressure of public opinion in Europe regarding safety issues.

threats is an example of an early collective action taking seriously into account potential threats without waiting for a certain knowledge of hazards. A programme of preparedness and several new institutions have been settled as a result of this initial partnership having experienced intense exchange of information (Michel-Kerjan, 2003). All this effort to reorganise and adapt institutions for dealing efficiently with large-scale potential threats is now more advanced in the United States than in any other country in Europe. Such an approach is still expected in France in order to seriously develop what I call a Precautionary State, which would be to some extent analogous for the XXIst century to the development of the Welfare State during the XXth century in France and Europe.

So it would be quite inappropriate to put ahead a general statement according to which, because of the PP, Europe and France are more advanced than the United States in risk management. The precautionary principle is not a key departure separating both regions in practice to this regard. Meanwhile, differences do exist. They concern the legal status given to the PP and mainly the focus of risk management. What is perceived as domains of critical hazards is not the same and those differences are linked to economic and political features. For example what is seen as a dangerous food is not defined the same way, as typified by attitudes regarding mineral water or cheese; confidence in safety is not derived from the same benchmarks.

The most important result of comparisons is that positions adopted by governments depend mainly on subjects, priorities and opportunities. Whereas the United States refuses to hear about the PP for managing the introduction of GMOs in open fields or in food, the Bush administration developed an overall argument in favour of a preventive war against Iraq on the basis of the idea that it would not be acceptable to wait for an actual confirmation of the existence of the threat before taking an initiative to destroy it at source. Different topics, different arguments… At least, governments should be recommended to look for coherence in the way they put forward their arguments for tackling different issues related to hazards and threats. Such a requirement of coherence in risk management has been often stressed, for instance in the SPS agreement and in the EU doctrine on the PP.

Let us take these two examples, GMOs and the war against Iraq, to develop the understanding we may have of the PP. I would suggest on a technical ground that in both cases, the arguments of the US administration do not fit the main requirements of the PP. Let us have a look!

(a) The PP tells that preventive measures have to be based not only on scientific proofs but on other relevant available scientific elements (assumptions, tests, models, theories, and data) that give a sufficient plausibility to an assumption of hazard. In the case of GMOs, many sources of uncertainty still remain that are not dismissed by the criterion of substantial equivalence between GMO and non-GMO food. Certainly the

proof of no-risk for health and the environment has not been brought by the US party, since it cannot be brought. But, EU scientists have rightly pointed out several types of potential risks that have to be better known, for instance regarding health impact of pesticides residues that may be found in higher concentrations in some GMOs, possibilities of genetic recombination, or genes dissemination able to impose damage on agricultural practice and ecosystems functions. Acknowledging these sources of hazards is quite legitimate under the PP, which does not necessarily imply that forbidding GMOs at the borders is the only appropriate answer.

(b) The PP asks a threat of potential risk to be scientifically assessed through an independent, transparent, pluralistic collective expertise as a first step; the responsibility of organising such an expertise belongs to public authorities, but the results of it should be accessible to anyone concerned; it is difficult to pretend that the US action regarding Iraq has been based on such an independent and transparent expertise! On the contrary it seems that efforts have been made by the coalition to achieve disinformation by forging proofs of a direct link between the regime of Saddam Hussein and the Al-Qaida network.

(c) The PP asks precautionary measures to be proportionate to the severity of potential damage but also to the plausibility of the threat and inversely to the costs of prevention, that include loss of benefits. This approach has several consequences: pure, not yet established, assumptions that do not reach a threshold of plausibility can certainly be considered, but may only justify measures as scientific watch, research and dissemination of information. That the national security of the United States was under a direct threat from Iraq has not been considered a plausible assumption worldwide and specifically by the Security Council of the United Nations. Under the PP concept, this assumption of threat was not plausible enough to justify a war. There is an additional point touching this very issue of proportionality. Most of time, the situation to tackle imposes a trade-off between one risk and another one: assuming that launching a war against Iraq was aiming at reducing a threat for US security, it would have been necessary to consider the new hazards generated by the choice of this means and test the balance between risks avoided and risks generated[4]. The new hazards were of concern not only for the USA but for the whole region and countries geographically nearer to Iraq. In such circumstances, distribution of risks among stakeholders and

[4] This case is also of value to stress the importance of the reference situation chosen to establish a comparison of risks. Defenders of the war against Iraq often pushed forward the huge number of persons murdered by the regime of Saddam Hussein with the implicit idea that, without this "liberation war", other thousands of people would get killed or condemned to starvation in the next decade. But when the war was triggered, the alternative scenario was not just a continuation of Saddam's regime for ever; it was a continuation of inspections by UN inspectors for six months or so to check that no visible massive destruction weapons were stocked somewhere. One way or another it would have brought a change of the political situation.

various types of population is a legitimate concern and should have been taken into account in an overall balance. Think for instance of Iraqi women now exposed to new dangers of Islamic fundamentalism.

(d) The PP asks precautionary measures to be conceived as provisional and easily reversible in order to be reconsidered on the basis of new scientific understanding and new data which are to be actively searched for; such an irreversible action as a war clearly does not fit this requirement.

On the basis of all these elements, launching the 2003 war against Iraq cannot be seen as a right, balanced and mature implementation of the PP, although it may respond to other strategic concepts. For opposite reasons, dismissing the relevance of the PP for GMOs cannot be seriously defended. These are important conclusions for a better common Transatlantic understanding of the requirements of the PP. It is just wrong to say that this principle can cover any demand and any action that would target threats and hazards. In coming to my third point, a last lesson may be gained.

3. Two basic forms of action to implement the precautionary principle

Throughout various national and international domains in which the PP has been at stake, we can observe two basic opposite forms to dress it: on the one hand the PP is the basis of progress of coordinated action and gives rise to new regimes; on the other hand the PP feeds exceptions to collective rules and support unilateral actions.

An extension of collective coordination and common rules

For the first form, the principle is the vector of building a new regime of coordinated action to enhance environmental protection or improve safety as a public good, either at the national or international level. It was the case of the two Conventions adopted in 1992 at the Rio Summit, and a flag example of such embodiment of the PP is the 1997 Kyoto protocol, which set-up a sound new regime for a first step of collective action to avoid a possible dramatic change of the global climate. To this regard, the Johannesburg summit was rather regressive in relation to the acknowledgement of the PP, even if the regression has been veiled by a plea for sustainable development and public-private partnership. In the plan of implementation resulting from the summit, the PP is only mentioned twice (item 23 and 109) in sentences insisting upon scientific methods to elaborate policies and specifically manage risks generated by chemicals. Clearly some influential delegations wanted to get rid of the PP. So, this principle 15 of the Rio Declaration is not mentioned at all in the Johannesburg Declaration and when the latter considers new technologies, it is only as positive tools to promote development. A strange picture for a summit devoted to the harmonization of

environmental protection and human development! These results of Johannesburg confirm that progress in the international governance of risks affecting global public goods and environmental security has been stopped.

Debates in France and Europe also demonstrate that we still need an improved collective and public organisation to address the requirements of management of potential hazards. To put an end to confusion and fears growing from business and physicians circles, we need to specify adequate procedures; we need definition of roles, obligations and rights; we need an identification of the type of actions to be taken according to circumstances. First elements have been provided in the field of food safety, thanks to various recent food crises, but the landscape remains rather vague in other fields. For instance, important steps have to be done in the field of hazards at work and professional diseases, if we put aside the nuclear industry who adopted the ALARA[5] principle several decades ago.

Exceptions and unilateral actions

With the second form, the PP is seen as a legitimate motive for members of a society (citizens in a state, states within the international community) to take unilateral measures and, quite generally, to depart from current rules and obligations defined by a given regime of coordination. At the international level, this view leads to see the PP mainly as the right of a state to block trade flows of some specific products at the border. Think of the typical case of the EU stopping GMO food. The war against Iraq was also typically a unilateral and illegal action regarding international law (Habermas, 2003). At the domestic level in France, José Bové and friends who destroy GMO experimental fields share in fact the same attitude with the Bush administration making war to Iraq. The moral argument put forward in both cases is that they take their own responsibility, even that they had a duty to do so! In the same general line, experts who advocate the direct implementation thesis, support the idea that the PP generates an obligation and a right of each person (individuals, physicians, business firms and states…) to take measures against potential hazards she may generate or he may have heard about, and also for those he may think to be exposed to, even if there is no public regulation or agreed collective framework defining what is expected from each of them and how it should be done.

In France this alternative found an echo in the recent debate about the status of the PP within the project of Charter of Environment (Commission Coppens, 2003). Should it be a binding norm to be directly applied by each and everybody, without the mediation of a public organisation? Or is it a law concept that empowers public authorities and only them directly, to take organizational and preventive measures against a potential hazard? Behind this

[5] ALARA means : As Low As Reasonably Achievable. See the European ALARA network: http://ean.cepn.asso.fr/

alternative lie several opposite arguments. In favour of a direct implementation to all agents, there were three main arguments:

(a) the PP can only be efficient if all society is involved, which in fact is acknowledged by all parties, the question raised being related to how each agent should be concerned;

(b) the responsibility to take action should bear on those who are the most intimate with the generation of hazards in order to ensure an early action;

(c) public authorities and administration services have no more the human and material means to efficiently cover all emergent threats.

The opposite position was based on the following arguments (Godard, 2001b; 2003):

(a) collective hazards affecting the environment and public health are, in economic words, public goods or bads; it means their management cannot be let to decentralised initiatives and motives of private agents, unless society is ready to support huge inefficiencies due to lack of coordination and common benchmarks to proportion actions;

(b) most actions that should be considered under the PP typically are public prerogatives: organizing a scientific watch of ecosystems or large epidemiological studies, organizing an independent, collective scientific expertise, developing new research programmes on public interest issues, organizing public debates on acceptable levels of risks, setting-up new permitting systems, forbidding the use of some products, stopping imports and exports, and so on.

(c) risk management for collective hazards involves a political responsibility that has to be taken by political bodies and sanctioned by political means; as said by the Nice Resolution, defining acceptable levels of risks imply a political judgment on the balance of potential damages and benefits to society.

(d) being mainly procedural, the PP requirements are too vague to generate substantive obligations for private agents; direct implementation would open the door to a huge increase of suits, generating law insecurity, and expose each and everybody to a serious threat of somewhat arbitrary decisions by courts regarding imputation of liability; this threat would have a detrimental impact on behaviours of investors and managers preoccupied to protect themselves against suits; clearly the last fear fed the opinions of the two French Academies against giving the PP a constitutional value.

At this stage, the project of Charter chosen by the government in May 2003 specifies that public authorities have to take measures under the PP.

Ambiguous achievements

In several cases, as the protocol of Carthagena on biosafety under the Convention on biodiversity, both forms are entangled, since progress in coordination in a particular field takes the form of an agreement on the procedures and conditions in which unilateral measures can be taken as exceptions to current international rules. Such a way to proceed remains ambiguous: is it mainly about restoring sovereignty in the definition of acceptable risks against previously agreed common laws of trade defined within the WTO? Or is it an appropriate means to protect biodiversity worldwide against trade-related threats for the common good of mankind?

In fact through the PP, a new balance is searched between collective rules and sovereign initiatives. According to issues, countries change their positions. For instance, France is an advocate of multilateralism in the environmental field and at the same time has been the first country to disregard European law in the mad cow disease crisis (Godard, 2001a). The United States does not want to hear about multilateralism, except when an agreement was prepared in the OECD context to define rules protecting international investment against sovereign policies… Here lies the explanation why the implementation of the PP is still marked by such an ambiguity and huge disputes: according to issues, governments try to push one form against the other but do not share the same ideas on which form should be used for a given topic.

Who are the legitimate sovereign entities that can claim a right to take actions for its own safety or for collective issues, even at the expense of the safety of other entities having formally the same rank? Is the PP mainly a vector of regression in international coordination by giving strength and legitimacy to unilateral actions? Or is it a vector of progress towards an increased responsibility of citizens, business, NGOs regarding collective concerns? Should we accept this new trend to unilateral and sovereign action, or should we try to turn the PP into a vector of progress in collective governance of common concerns?

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