
1. The precautionary principle in conflicts law perspectives*

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I. INTRODUCTION

In this contribution, we pursue two objectives. The first is to explore a new potential of the conflicts law approach which has first been developed at the European University Institute in Florence¹ and in the context of two interdisciplinary projects² and proffered as the appropriate constitutional form for transnational law.³ The second is to discuss in an exemplary way instances of a conflicts law approach or a lack thereof in the jurisprudence

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¹ The first systematic presentation of the idea was in Joerges, C. (2005), *Rethinking European Law's Supremacy*, with Comments by D. Chalmers, R. Nickel, F. Rödl and R. Wai, EUI Working Paper Law 2/2005, San Domenico di Fiesole: European University Institute, <http://cadmus.eui.eu/bitstream/handle/1814/3332/?sequence=1>.

² Namely the Bremen project on 'Transformations of the State' in which Alexia Herwig was involved until 2008 (see for a description <http://www.sfb597.uni-bremen.de>) and the European Project on 'Reconstituting Democracy in Europe' which was organised by ARENA, University of Oslo (see for a description <http://www.reconproject.eu/>), both accessed 1 December 2011.

³ For detailed recent presentations of the argument see Joerges, C. (2010), 'Integration through Conflicts Law: On the Defence of the European Project by means of alternative conceptualisation of legal constitutionalisation', in R. Nickel (ed.), *Conflict of Laws and Laws of Conflict in Europe and Beyond – Patterns of Supranational and Transnational Juridification*, Antwerp: Intersentia, 377–400; Joerges, C., and F. Rödl (2011), 'Reconceptualising the Constitution of Europe's Post-national Constellation – by Dint of Conflict of Laws', in I. Lianos and O. Odudu (eds), *Regulating Trade in Services in the EU and the WTO. Trust, Distrust and Economic Integration*, Cambridge: Cambridge University Press, 762–780. For a critical discussion see Joerges, C., P.F. Kjaer and T. Ralli (eds) (2011), *Transnational Legal Theory*, Special Issue on 'Conflicts Law as Constitutional Form in the Postnational Constellation', 2, 153–165.

of World Trade Organization (WTO) dispute settlement bodies and in European law dealing with the precautionary principle or with legal norms reflective of precautionary thinking. We do not aim to give an exhaustive overview of how the relevant laws and tribunals deal or have dealt with the precautionary principle or norms based on it. This, however, does not mean that the cases were selected at random. The cases we discuss are of exemplary systemic relevance for how the balance between trade and non-trade (health and environmental) concerns was struck in the legal texts under consideration.

Our contribution proceeds as follows: we first develop the main tenets of the conflicts law approach and demarcate it from rivalling approaches. We believe that this critical contrast will not only help to illuminate the specifics of our approach but also shed new light on the competing projects. We argue that ‘global legal pluralism’ as defended by Nico Krisch has affinities with conflicts law but remains amorphous and fails to realise that precisely the discrepancies between different types of orders can be reconstructed in conflicts law perspectives. Supranational decision-making as advocated in the work of Giandomenico Majone⁴ overlaps with our thinking in important respects and can even – certainly to Majone’s surprise – be reconstructed in conflicts law terms; we argue, however, that Majone’s distinction between a supranational commitment to efficiency and regulatory policies which require democratic legitimacy cannot be upheld.⁵ This leads us to propose conflicts law as a ‘third way’ in which law addresses the political at all, and between all, levels of governance. Our approach is not, however, meant to offer ready-made answers to the broad variety of European and WTO conflict constellations. It presupposes instead a procedural notion of law which seeks to promote a deliberative mode of conflict resolution.

Next, we submit that the precautionary principle can be understood as a conflicts law device and we show the emergence of the principle in European law as a way to manage diversity. In the final part of this chapter, we turn to the examination of pertinent, exemplary jurisprudence. We discuss the WTO Panel report in *EC – Biotech*, the *Continued*

⁴ See his seminal *Regulating Europe* (1996), London, New York: Routledge.

⁵ The notion of ‘technocracy’ is widely used in the characterisation of Giandomenico Majone’s work on Europe. That is not wrong as long as one remains aware of what he explained on p. 1 of his seminal *Regulating Europe*: ‘At the end of the period of reconstruction of the national economies shattered by the war income redistribution and discretionary macroeconomic management emerged as the top policy priorities of most Western European governments . . .’

Suspension reports and the *Temelin* judgment of the European Court of Justice (ECJ).

II. CONFLICTS LAW AS CONSTITUTIONAL FORM

Conflicts law has a reconstructive and a prescriptive dimension. We claim that legal controversies over the justification of regulatory limitations on free movement rights and Community prerogatives can be understood in conflicts law perspectives, namely as conflicts over diverging policies which are claiming recognition. Contrary to the typical constellation of private international law cases, however, jurisdictional authority in the EU is not located within a single territorial framework. Contradictory policies and interests collide within a 'multi-level' framework; they are often not resolved by prioritising one legal system but by compromise solutions which reconcile national concerns with European commitments. We suggest that legal conflicts over the justification of regulatory policies under WTO law can be interpreted in the same manner.

In EU law, the principle of mutual recognition provides an illustration of one type of these conflicts. According to the principle of mutual recognition, products lawfully marketed in one EU Member State are entitled to free circulation in other Member States into which they are imported unless restrictions can be justified under one of the exceptions from the free trade principle explicitly named in Article 36 TFEU (the Treaty on the Functioning of the European Union) or for overriding reasons related to the public interest as they have been recognised since *Cassis de Dijon*.⁶ In that case, Germany sought to prohibit the sale of the French liqueur *Cassis de Dijon* as 'Likör' in Germany since its alcohol content was lower than that which German regulations prescribed for beverages of the type 'Likör'. Germany argued on grounds of consumer protection (legitimate consumer expectations) that the French product should not bear the name 'Likör' as this could confuse consumers. Now, this legal conflict can be

⁶ Case 120/78, ECR [1979] 649 – *Cassis de Dijon*. The provision in Article 36 is an exception to the prohibition on quantitative restrictions on exports and imports and measures having equivalent effect in Articles 34 and 35 TFEU. It is similar to GATT Article XX in that it contains a limited list of policy objectives, namely public morals, public policy or public security; the protection of health and life of humans, animals or plants; the protection of national treasures possessing artistic, historic or archaeological value; or the protection of industrial and commercial property and includes some form of proportionality review.

understood as a horizontal conflict between two EU Member States over differing regulatory policies and over which one of the two should be allowed to exercise its jurisdiction to prescribe in respect of the naming of an imported product. In its judgment the ECJ did not question in principle Germany's concern with consumer protection but insisted on a mode of protection which was in line with Community concerns. In WTO law, a dispute over whether or not a Member's regulation falling under Articles III or XI of the GATT (General Agreement on Tariffs and Trade)⁷ can be justified under Article XX of the GATT⁸ can likewise be understood as such a horizontal conflict over regulatory policies between im- and exporting WTO Members.

Diagonal conflicts exist where there are divergent EU and national political orientations that span two different levels of governance.⁹ Typical examples of this in EU law are conflicts over EU secondary legislation pursuing the economic aim of harmonisation and diverging national regulations adopted on grounds such as consumer or environmental protection. Vertical conflicts are conflicts over the supremacy of EU law.¹⁰

Three arguments militate for conflicts law mechanisms as an appropriate constitutional model for supra- and transnational governance.

The first is an argument from the perspective of democracy. Under conditions of globalisation and Europeanisation, nation states are increasingly unable to guarantee the inclusion of all those affected by their poli-

⁷ Articles XI and III of the GATT cover market access through the elimination of quantitative restrictions and non-discriminatory treatment behind the border respectively. Quantitative restrictions on import and export are prohibited, subject to some listed exceptions. Article III applies to internal taxes and charges and to laws, regulations and requirements affecting the internal sale, offering for sale, purchase, transportation, distribution or use applied to products that are like or in a relationship of direct competition and substitution. Very generally, changes in the competitive relationship between these products through the measures mentioned must be avoided.

⁸ Article XX ('General Exceptions') describes and delimits the measure which the contracting parties may adopt.

⁹ See Joerges, C. (1997), 'The Impact of European Integration on Private Law: Reductionist Perceptions, True Conflicts and a New Constitutional Perspective', *European Law Journal*, 3, 378; Schmid, C. (2008), 'Diagonal Competence Conflicts between European Competition Law and National Law. The Example of Book Price Fixing', *European Review of Private Law*, 8, 155.

¹⁰ See for a recent particularly controversial example on the impact of the Posted Workers Directive (Directive 96/71/EC, OJ L18/1996, 1) in Sweden Case C-341/05, *Laval un Partneri Ltd v Svenska Byggnadsarbetareförbundet*, [2007] ECR I-11767.

cies in decision-making.¹¹ Their policies produce extraterritorial impacts, yet foreign affected interests are typically not represented in national legislative processes. However, the notion of self-legislation postulates that the addressees of a law must at the same time be their authors and would thus demand the inclusion of the other.¹² It should be noted that such transboundary impacts are on the cards twice: on the one hand, there is the importing state which seeks to regulate production of the imported product that occurred in another state. On the other hand, there is the exporting state which seeks to introduce its products with its risk into the importing state. The conflicts law approach should hence not be misread as some reactionary effort to 'bring the nation state back in'. Quite to the contrary, our approach departs from nation states failures and seeks to legitimate EU and also WTO law through their potential to compensate for these deficits by obliging states to be accountable to outside affected interests and to move towards cooperative problem-solving where one-sided national problem-solving has become inconceivable. In this way, EU and WTO law can strengthen democracy without having to establish themselves as democratic federal states.¹³

The second argument is an argument from the viewpoint of diversity. Supra- and transnational law cannot replace national legal systems.

¹¹ This argument gets, albeit in different versions, increasing recognition; see, e.g., Howse, R., and K. Nicolaïdis (2008), 'Democracy without Sovereignty: The Global Vocation of Political Ethics', in T. Broude and Y. Shany (eds), *The Shifting Allocation of Authority in International Law. Considering Sovereignty, Supremacy and Subsidiarity*, Oxford: Hart Publishing, 163; they state at 167: '[Our] horizontal reading of subsidiarity and supremacy follows directly from the limits of the notion of sovereignty in a world where laws and actions within a polity increasingly have external effects. Supremacy and subsidiarity therefore can be defined in a dialectic way as complementary principles to deal with the fundamental conundrum of transnational democracy. Supremacy serves as a meta-norm of conflict of laws between Member States such as to enhance the representation of foreigners inside the jurisdiction of every Member State, and to ask when and to what extent these interests should trump the domestic social contract.'

¹² Jürgen Habermas deserves to be cited literally: 'Nation-states . . . encumber each other with the external effects of decisions that impinge on third parties who had no say in the decision-making process. Hence, states cannot escape the need for regulation and coordination in the expanding horizon of a world society that is increasingly self-programming, even at the cultural level. . . .'; such in his 'Does the Constitutionalization of International Law Still Have a Chance?' (translated by Cirian Cronin), in Habermas, J. (2007), *The Divided West*, Cambridge: Polity Press, 113, 176.

¹³ For a recent elaboration of this dimension see Roedel, F. (2011), 'Democratic Juridification Without Statisation: Law of Conflict of Laws Instead of a World State', *Transnational Legal Theory*, 2, 215.

Competences are limited and shared with states, with the latter disposing of far greater administrative resources than the EU or WTO. This is why the institutionalisation of supra- and transnational regimes remains dependent upon the cooperation of states and intra-state institutions for the implementation of their prescriptions. In addition to this empirical argument, there are normative reasons for the respect of regulatory diversity. For instance, in some political systems social conditions allow for participatory legislative processes, which confer legitimacy qua procedure on legislative acts. In others, such as Belgium, significant counter-majoritarian elements are necessary to legitimate legislative acts. In a conflict between two such states over a regulatory policy, supra- and transnational law could not pronounce itself – even indirectly – on which political system is right and must accordingly content itself with managing this diversity in a manner both states can accept, albeit possibly on different grounds. With the deepening socio-economic diversity in the EU especially after enlargement this argument seems ever more irrefutable: ‘one size does *not* fit all’ simply because political preferences and priorities are not formed in a vacuum.

The third argument is an institutional and constitutional one. It builds upon the highly contested leader of the American ‘conflict of laws revolution’ of the 1960s.¹⁴ Currie has suggested that controversies over the application of foreign law need to be traced back to the policies underlying the rules at issue and reconstructed as controversies over the ‘governmental interests’ of the concerned jurisdictions. Often such conflicts are ‘false’ or can be avoided through moderate and restrained constructions of legal provisions; where this is not the case (in ‘true conflicts’), Currie insisted that the forum state applied its own law. True conflicts are of a political nature, he argued, which courts are not legitimated to resolve in favour of a foreign sovereign.¹⁵ We disagree – precisely because we advocate transnational compensation of nation state failures. In particular in the European Union with its commitment to open economies and a rich institutional machinery of conflicts resolution Currie’s suggestion is simply inadequate. His *monitum* as to the ‘political’ dimensions of conflicts,

¹⁴ Currie’s work is collected in Currie, B. (1963), *Selected Essays on the Conflict of Laws*, Durham, NC: Duke University Press.

¹⁵ Currie, B. (1963), ‘The Constitution and the Choice of Law: Governmental Interests and the Judicial Function’ in Currie, note 14, 188, at 272: ‘[T]he choice between the competing interests of co-ordinated states is a political function of a high order, which ought not, in a democracy, to be committed to the judiciary: . . . the court is not equipped to perform such a function; and the Constitution specifically confers that function upon Congress.’

however, needs to be taken seriously. This *monitum* does not justify parochialism, but prudence and eventually judicial restraint. Such caution is all the more required in the case of WTO panels and the Appellate Body. The weighing and balancing approach to the necessity analysis first articulated in *Korea – Beef* and used in *Brazil – Tyres* in a way that allowed the panel to evaluate the importance of social regulatory objectives itself in a proactive manner reveals that the interpretation and application of Article XX GATT *can* lead to the second-guessing of national regulatory policies.¹⁶ According to our conflicts law approach, these bodies should rather seek to identify norms and principles that mediate the conflicts but give due recognition to the political nature of regulatory concerns.

Premises 1–3 together lead to the conclusion that supra- and transnational law must find a way to organise and manage diversity and pay genuine respect to the reasons for diversity, notably by finding rules that deserve recognition in the respective Member States or WTO members.¹⁷ We have already indicated in our remarks on the principle of mutual recognition that the conflicts law approach does not, like private international law, insist on the application of the law of one concerned jurisdiction. The kind of conflicts solution we advocate seeks to ensure accountability beyond the national borders to outside affected interests – without thereby negating the political nature of social regulation of economic activities. It is often more adequate to develop a ‘substantive’ response which both of the involved jurisdictions can accept. To take up the example of *Cassis de Dijon*¹⁸ again: The ECJ’s holding allowed Cassis de Dijon to be sold as ‘Likör’ in Germany but with an indication of its – surprisingly low – alcohol percentage; the ECJ’s labelling requirement provided sufficient protection of consumer expectations in Germany while allowing for the free circulation of Cassis as marketed and regulated in France. *Cassis* is an

¹⁶ Appellate Body Report, *Measures Affecting Imports of Fresh, Chilled and Frozen Beef*, WT/DS/AB161, 169/R, adopted 10 January 2001, para. 162. *Brazil – Tyres* concerned environmental protection objectives. This report provides the first clear evidence that panels actually assess the importance of the interest concerned because the environmental protection objectives at issue were classified as merely ‘important’ whereas in all previous cases, the panel or Appellate Body classified the interests at stake as ‘very important’. See Panel Report, *Brazil – Measures Affecting Imports of Retreaded Tyres*, WT/DS332/R, adopted 17 December 2007, para. 7.112, Appellate Body Report, *Brazil – Measures Affecting Imports of Retreaded Tyres*, WT/DS332/AB/R, adopted 17 December 2007, para. 179.

¹⁷ Premises 1–3 make up the prescriptive dimension of conflicts law, while the distinctions between different types of conflict constellations are a reconstructive exercise.

¹⁸ See note 6 above and accompanying text.

easy case which legal systems are well equipped to deal with ('first order conflicts', in our parlance).¹⁹ Contemporary regulatory techniques are typically more demanding, in particular in the field of social regulation. They tend to require cooperative regulatory policy-making ('second order

¹⁹ In the WTO, naming and labelling requirements have been challenged in several disputes, notably the recent *US – Tuna II* report. We cannot enter into a detailed discussion of this report. We do wish to point out, however, that the WTO panel report in *US – Tuna* may have required a more careful solution than the one the panel adopted. This TBT dispute concerned US measures allowing only the DPCIA dolphin-friendly label with stricter requirements of protection measures than the rivalling AIDCP dolphin label. In essence, the panel found the US restriction to one label unnecessary because both types of labels could be allowed on the market without compromising the US's protection objective. Neither of the two labels protected dolphins perfectly against mortality, which led the panel to consider them to be alternatives. Notwithstanding the burden of proof being on the complainant, the panel assumed that the imperfections were equivalent. If they are not equivalent, however, allowing both labels on the market misinforms consumers as they are unlikely to be aware of and unable to understand the differing dolphin protection requirements and their effectiveness. The comparison with the issue of alcohol content in *Cassis de Dijon* teaches one thing: labels are a conflicts law solution only if the information conveyed by a naming or labelling scheme is not too complex. In *Cassis de Dijon* the relevant information was readily ascertainable on the bottle and easily understandable, in *US – Tuna* it is not. The Appellate Body reversed the panel's findings on the ground that it had improperly compared dolphin protection requirements outside the Eastern Tropical Pacific with those inside it for the two labels. See Appellate Report, *US – Measures Concerning the Importation, Marketing and Sale of Tuna and Tuna Products*, WT/DS381/AB/R, adopted 13 June 2012, paras 330–331 and Panel Report, *US – Tuna*, WT/DS/381/R, paras 7.571–7.574, 7.599, 7.620–7.621. Alessandra Arcuri also questions the panel's assumption of equal effectiveness. See Arcuri, A. (2012), 'Back to the Future: *US – Tuna II* and the New Environment-Trade Debate', *European Journal of Risk Regulation* 3 (2), 177–189. The report is also interesting from the perspective of precaution. As Arcuri mentions, the panel acknowledged that data on the impact of fishing techniques was imperfect but notwithstanding the complainant's burden of proof concluded that Mexico had been successful in showing that a less restrictive alternative was reasonably available. We would make the case that formal rules on the allocation of the burden of proof are not satisfactory for resolving controversies over social regulatory policies. For an conflicts law analysis of the Appellate Body's jurisprudence on the term 'international standards' see Glinksi, C. (2012), 'Private Norms as International Standards? – Regime Collisions in *Tuna-Dolphin II*', *European Journal of Risk Regulation*, 3 (4), 545–560 and *idem* (2011), *General Clauses and Private Regulation – Regime Collisions in *Tuna-Dolphin III**, paper presented at the workshop 'The Conflicts-Law Approach on Trial, Seminar at the Evangelische Akademie Loccum, Germany, October 2011 (on file with authors) and a case note on the *US – Tuna* Appellate Body decision, see Gruszczynski, L. (2012), 'Retuning Tuna? Appellate Body Report in *US – Tuna II*', *European Journal of Risk Regulation*, 3 (3), 430–436.

conflicts'). In the EU, the paradigm example of such efforts is comitology. 'Cooperative problem solving' is a functional necessity here. What is functionally necessary should not be declared to be legitimate without further ado. The conflicts law approach strives for a 'constitutionalisation' of transnational regulatory politics – an issue which we cannot take up here.²⁰ Last but not least, the law must be expected to acknowledge the involvement of non-governmental actors in regulatory policy-making – but also supervise the ensuing governance arrangements and para-legal norms generated by self-regulatory organisations so as to ensure that such practices 'deserve recognition' ('third order conflicts').²¹

We would like to underline that we understand the conflicts law approach as a reconstructive exercise, an effort to re-conceptualise the law's operation within the framework of the existing systems of multilevel governance and social regulation.²² These existing systems, we suggest, are proto-legitimate inasmuch as they have the potential to become transnational accountability mechanisms of nation states and their regulatory policies so as to mediate between regulatory concerns and commitments to trade liberalisation. Conflicts law deals with discrete problems of fine-tuning, which, we argue, have political dimensions which the law cannot substitute; what law can and should instead accomplish is to provide norms for the accountability of political decision-makers. In this sense, conflicts law is concerned with 'Recht-fertigung' – a notion whose literal and non-literal meaning translate into law-making *and* justification in English. Conflicts law is not concerned with the development of a comprehensive constitutional project for the international order. This should also make clear that our defence of respect for diversity in multilevel governance systems of liberalised trade is not a call for unprincipled pluralism.

²⁰ See Joerges, C., and J. Neyer (1997), 'From Intergovernmental Bargaining to Deliberative Political Processes: The Constitutionalisation of Comitology', *European Law Journal*, 3, 273, and the contribution in Joerges, C. and E. Vos (1999), *EU Committees: Social Regulation, Law and Politics*, Oxford: Hart Publishing.

²¹ For an early exemplary discussion see Joerges, C., H. Schepel and E. Vos (1999), *The Law's Problems with the Involvement of Non-Governmental Actors in Europe's Legislative Processes: The Case of Standardisation under the "New Approach"*, EUI Working Paper LAW No. 99/9, San Domenico di Fiesole: European University Institute.

²² According to Krisch, N. (2010), *Beyond Constitutionalism: The Pluralist Structure of Postnational Law*, Oxford: OUP, 76, 77, this is a key difference with his pluralist account. Conflict law seeks *legal* responses where pluralists give up; these responses are generated within existing institutional frameworks and respect the commitments to European integration and post-national cooperation.

III. PRECAUTION AS CONFLICTS LAW IN THE REALMS OF RISK REGULATION

The precautionary principle has been called ‘one of the most significant principles of the contemporary era’.²³ Its success is indeed remarkable.²⁴ In the EU, the principle has gained quasi-constitutional status in Article 191 TFEU with defined contours and broad application to the field of risk regulation. It is nevertheless by no means uniformly understood and far from being universally accepted.²⁵ We are interested here in the principle’s career as a response to the insights into the limits of science and its way to deal with uncertainty where scientific certainty ends. The resort to science as a meta-rule for the adjudication of conflicts was the precursor of precaution in the EU. We review the European development briefly before turning to WTO law.

A. Science in the Light of Conflicts Law

1. The turn to science in EU law

Once the ECJ had expanded the reach of the free movement provisions in what was then Article 30 EC Treaty (now 34 TFEU) through its *Dassonville* decision,²⁶ it was faced with a large number of disputes over EU Member States’ regulatory policies and forced to decide whether or not to give priority to the free circulation of products or to the protection objectives of the importing Member States. Initially, in the *Cassis de*

²³ Thus the preface to Fisher, E., J.S. Jones and R. von Schomberg (eds), (2006), *Implementing the Precautionary Principle*, Cheltenham: Edward Elgar Publishing, 11.

²⁴ For condensed summaries of an abundant multidisciplinary and transnational discussion see Herwig, A. (2006), ‘The Precautionary Principle in Support of Practical Reason: an Argument Against Formalistic Interpretations of the Precautionary Principle’, in C. Joerges and E.-U. Petersmann (eds), *Constitutionalism, Multilevel Trade Governance and Social Regulation*, Oxford: Hart Publishing, 301; Weimer, M. (2010), ‘Applying Precaution in Community Authorisation of Genetically Modified Products – Challenges and Suggestions for Reform’, *European Law Journal*, 16 (5), 624–657.

²⁵ Various multilateral environmental agreements make references to the precautionary principle as well but the principle has not been much developed through further legislation or adjudication nor has it found comprehensive application to the field of risk regulation.

²⁶ According to *Dassonville*, facially-neutral measures could nevertheless be considered as measures having an equivalent effect to a restriction if they hindered or impeded market access of products from other Member States. Case C-8/74 *Procureur du Roi v. Benoît and Gustave Dassonville* [1974] ECR 837at 852, para. 5.

Dijon decision, Member States were in principle entitled to pursue their regulatory concerns (in casu with consumer protection) without interference from the European Community as to the goal to be pursued. Alas, such elegant solutions to conflicts were not always at hand and it became clear that giving free reign to the regulatory concerns of the EU Member States could endanger the creation of the common market. In this situation, the ECJ turned to science in order to manage conflicts of jurisdiction in the Community. EU Member States had to be able to muster scientific evidence in support of their regulatory concerns if they wished to justify risk regulations that impeded the free circulation of intra-Community trade.²⁷ Similarly, in disputes over the legal treaty base for EU secondary legislation and legislation delegated to the Commission, the ECJ examined scientific arguments.²⁸

This turn to science was as promising as it was problematic. Through linking up with science, Community law was able to acquire a new basis for validity and avoid political disputes over its competences. Science, by virtue of being a language with a universal grammar (there is no such thing as ‘German physics’ or ‘European mathematics’) helps national legal systems to overcome their parochialism and particularism and become accountable to outside affected interests. Moreover, where Member States seek to regulate on the grounds of an empirically existing or potential danger, a requirement to substantiate their concerns with evidence is a reasonable corollary. Science, in other words, furnished supranational criteria for differentiating between the legitimate and illegitimate regulatory concerns of Member States.

Nevertheless, with a turn to science, there is also the danger of camouflaging the political nature of decisions on risk regulation through scientific empiricism. For instance, the ECJ restricted the regulatory discretion of Member States by requiring them to respect the findings of the international and European scientific research community.²⁹ It still left some

²⁷ See, for instance, Case C-17/93 *Van der Veldt* [1994] ECR 1227 at 1274.

²⁸ See the case law discussed in Joerges, C. (1997), ‘Scientific Expertise in Social Regulation and the European Court of Justice: Legal Frameworks for Denationalized Governance Structures’, in C. Joerges, K-H. Ladeur and E. Vos (eds), *Integrating Scientific Expertise into Regulatory Decision-Making. National Traditions and European Innovations*, Baden-Baden: Nomos, 306; Joerges, C., and C. Godt (2005), ‘Free Trade with Hazardous Products? The Erosion of National and the Birth of Transnational Governance’, in S. Leibfried and M. Zürn (eds), *Transformation of the State*, Cambridge: Cambridge University Press, 93. The following remarks draw on these articles.

²⁹ E.g. Case 178/84 *Commission v. Germany* [1987] ECR 1227 at 1274 – *Reinheitsgebot* (purity of beer).

space for the political to influence decision-making on risk by recognizing the concept of *per se* dangerous substances. Although the Court recognised in principle that Member States were free to decide how to react to uncertainties in the absence of harmonisation,³⁰ it also limited Member States' discretion on this matter through some qualifiers:³¹ Member States were entitled to react to uncertainties if these were also encountered by other countries or international organisations and were required to give mutual recognition to scientific tests carried out in other Member States if these were the same as those they would have required.³² In one case, the ECJ left Member States with the discretion to pursue their own regulatory philosophy, in another case it forced upon Germany a horizontal rather than product-compositional approach to food additives.³³ In a preliminary reference, the Court classified a product as a cosmetic rather than a medicinal product³⁴ – and then restricted the discretion of Member States stating that it is required by 'the nature of things and apart from any provision laid down to that effect' to seek the assistance of 'experts on scientific and technical issues'.³⁵

2. The turn to science in WTO law

With the entry into force of the Agreement on Sanitary and Phytosanitary Measures (SPS Agreement) in 1995 WTO law had in place a set of rules that called on WTO Members to justify their regulation of SPS risks with scientific evidence.³⁶ Article 2.2 of the SPS Agreement provides that SPS measures have to be maintained with sufficient scientific evidence and be based on scientific principles. The obligation pertaining to sufficient scientific evidence is concretised by Articles 5.1 and 5.2, which call on Members

³⁰ Case 174/82 *Officier van Justitie v. Sandoz* [1983] ECR 2445.

³¹ These do not require authorities to establish a 'danger' but they must review their levels of protection in light of new scientific findings; see Case 94/83 *Criminal Proceedings against Albert Heijn BV* [1984] ECR 3263.

³² Case 53/80 *Kaasfabriek Eyssen (Nisin)* [1981] ECR 409 at 422.

³³ See for the former Case 188/84 *Woodworking Machines* [1986] ECR 419 and for the latter Case 178/84 (note 26 above) at 1274.

³⁴ Case C-212/91 *Angelopharm GmbH v. Freie und Hansestadt Hamburg* [1994] ECR I-171.

³⁵ At I-211 (para. 33).

³⁶ The types of risks and measures to which the SPS Agreement applies are listed in Annex A1. These include certain food- and feedstuff risks and risks to animal, plant and human life and health from pests and zoonoses. According to the Panel in *EC – Biotech*, measures regulating indirect sources of these risks also fall under the SPS Agreement. The Panel also adopted an expansive interpretation of some of the enumerated risks, for instance the term 'pests' which it defined as anything that is unwarranted or a nuisance.

to base their SPS measures on risk assessments in accordance with internationally recognised methods. For pest and disease risks, an evaluation of the likelihood of the materialisation of the hazard has to be performed while for food- and feedstuff hazards risk assessments need only evaluate the potential of the materialisation of the hazard.³⁷ According to the Appellate Body, likelihood denotes probability while potential denotes possibility and implies a lower threshold of probability.³⁸ The Appellate Body has also characterised risk assessment as a rigorous, objective process of inquiry.³⁹

As in EU law, panels and the Appellate Body have sometimes used the evidentiary requirements of the SPS Agreement carefully and have recognized the political nature of decisions about risk and at other times have interfered with the regulatory approaches of the Members. In its first SPS decision in *EC – Hormones*, the Appellate Body explained that the right of WTO Members to set their appropriate level of protection (ALOP) different from that of an international standard as set out in Article 3.3 was an autonomous right whose exercise would not automatically place the burden of proof on the regulating Member.⁴⁰ In that same case, the Appellate Body also rejected the notion that a risk assessment had to establish a minimum magnitude of risk or be only quantitative and it allowed Members to base themselves on minority scientific opinion from respected and qualified sources.⁴¹ The Appellate Body also preserved regulatory discretion by accepting in principle politically motivated distinctions for the purpose of an Article 5.5 analysis which, as interpreted, requires Members to avoid arbitrary and unjustifiable differences between ALOPs in different yet comparable situations: In *EC – Hormones*, it found that there was a fundamental difference between naturally-occurring and added hormones and that the massive governmental intervention required to regulate the former rendered the comparison absurd.⁴² Admittedly, this was not a difficult issue to decide. What is important to retain is that the Appellate Body accepted that the probability or possibility of the harm defined by Annex A1 of the SPS Agreement is not the only permissible ground upon which distinctions in ALOPs between different situations

³⁷ SPS Agreement, Annex A4.

³⁸ Appellate Body Report, *European Communities – Measures Concerning Meat and Meat Products (Hormones)* ('*EC – Hormones*'), WT/DS26/AB/R and WT/DS48/AB/R, adopted 13 February 1998, para. 184.

³⁹ Appellate Body Report, *EC – Hormones*, para. 187.

⁴⁰ Appellate Body Report, *EC – Hormones*, paras 104 and 172.

⁴¹ WTO Appellate Body Report, *EC – Hormones*, paras. 186 and 194.

⁴² *Ibid.*, at 221.

can be drawn. Indeed, the only way to understand the significance of natural as opposed to artificial exposures, we would like to suggest, is to see it as a political appreciation of qualitative differences between risks.

On the other hand, the Appellate Body has interpreted the concept of 'based on' in Article 5.1 as a requirement that the scientific evidence be specific to the actual exposure targeted by the measure and likened this to a causation analysis.⁴³ Prior to *Continued Suspension*, panels and the Appellate Body have also adopted an intrusive standard of review of the factual evidence presented by Members with a view to determining whether or not this evidence constitutes a risk assessment.⁴⁴ In another case, a Panel restricted the right of Members to determine their levels of protection autonomously by holding that there was a requirement of proportionality between the risk established and the risk management measure chosen. In this case, the Panel and experts had concluded that there was a negligible (but not non-existent) risk of fire blight transmission through contaminated apples but considered the risk management meas-

⁴³ Appellate Body Report, *EC – Hormones*, para. 200. See also Panel Report, *EC – Hormones (USA)*, WT/DS26/R, adopted 13 February 1998, para. 8.257; Panel Report, *EC – Hormones (Canada)*, WT/DS48/R, adopted 13 February 1998, para. 8.260; Panel Report, *Australia – Measures Affecting Importation of Salmon ('Australia – Salmon')*, WT/DS18/R, adopted 6 November 1998, para. 8.74; Appellate Body Report, *Japan – Measures Affecting the Importation of Apples ('Japan – Apples')*, WT/DS245/AB/R, adopted 26 November 2003, para. 202; Panel Report, *Japan – Apples*, WT/DS245/R, adopted 26 November 2003, para. 8.271; Panel Report, *European Communities – Measures Affecting the Approval and Marketing of Biotech Products ('EC-Biotech')*, WT/DS291/R, WT/DS292/R, WT/DS293/R, paras 7.3099, 7.3147–7.3148; Panel Report, *United States – Certain Measures Affecting Imports of Poultry from China ('US – Poultry')*, WT/DS392/R, adopted 25 October 2010, para. 7.202; Panel Report, *Australia – Measures Affecting the Importation of Apples from New Zealand*, WT/DS367/R, adopted 17 December 2010, paras 7.537–7.542; 7.544–7.545, 7.564, 7.687. In *US/Canada – Continued Suspension*, the Appellate Body confirmed that a risk assessment must show a causal connection between the agent and the hazard but rejected the idea that the causal contribution of the agent had to be isolated from that of other exposures. Appellate Body Report, *United States – Continued Suspension of Obligations in the EC – Hormones Dispute ('US/Canada – Continued Suspension')*, WT/DS320/AB/R, adopted 10 November 2008, para. 562; Appellate Body Report, *Canada – Continued Suspension of Obligations in the EC – Hormones Dispute ('US/Canada – Continued Suspension')*, WT/DS321/AB/R, adopted 10 November 2008, para. 562.

⁴⁴ Ming Du, M. (2010), 'Standard of Review under the SPS Agreement after *EC – Hormones II*', *International and Comparative Law Quarterly*, **59**, 441, at 448–449, 450–451; Epps, T. (2008), 'Reconciling Public Opinion and WTO Rules under the SPS Agreement', *World Trade Review*, **7**, 359–383.

ures to be out of proportion to the magnitude of risk.⁴⁵ Finally, as regards the obligation in Article 5.5 a recent Panel considered that differences between comparable situations would not be arbitrary or unjustifiable only if there were differences in risk – thereby denying that the decision on the level of risk tolerance must always look at all the characteristics of the risk, such as the manner of its imposition, the benefits from taking the risk and others and conflicting with what was implied in *EC – Hormones*.⁴⁶

3. The limits of the authority of science

Above, we suggested that requirements related to the provision of validated scientific evidence for risk regulation can in principle function as a conflicts law mechanism but this potential erodes where science is invoked to operate as the final arbiter and yardstick in the assessment and delimitation of legitimate and illegitimate regulation.

To use the law to substantiate the thresholds defining the epistemological validity of scientific evidence is to conflate two categorically different media. Science is not concerned with, and hence not able to resolve, the questions lawyers pose. This is because scientific research is in principle explorative. In legal perceptions, the scientific system generates paradoxes because the knowledge it produces is always a step towards further inquiries and amounts to the generation of new uncertainties.⁴⁷ Science only has a limited authority.⁴⁸ In cases where science is unable to provide the necessary specific and validated evidence in part or in whole, it is neither credible nor logical to reject regulations as being based on evidence that

⁴⁵ Appellate Body Report, *Japan – Apples*, paras 162–163; Panel Report, *Japan – Apples*, para. 8.102. See also Arcuri, A. (2010), ‘Food Safety at the WTO after “Continued Suspension”: A Paradigm Shift?’, Rotterdam Institute of Law and Economics (RILE) Working Paper Series www.rile.nl, No. 2010/04pls, accessed 26 January 2012, 13; also published in A. Antoniadis, R. Schütze and E. Spaventa (eds). (2010), *The European Union and Global Emergencies: A Law and Policy Analysis*, Oxford: Hart Publishing.

⁴⁶ Panel Report, *US – Poultry*, para. 7.263.

⁴⁷ See Luhmann, N. (1993), *Das Recht der Gesellschaft*, Frankfurt/M: Suhrkamp, 142. For more comprehensive discussion see Everson, M. ‘Three Intimate Tales of Law and Science: Hope, Despair and Transcendence’, in M. Everson and E. Vos (eds), *Uncertain Risks Regulated*, Oxford-New York: Routledge-Cavendish, 347–358; Wagner, M. (2011), ‘Law Talk v. Science Talk: The Languages of Law and Science in WTO Proceedings’, *Fordham International Law Journal*, 35 (1), 151–200.

⁴⁸ We do not deny that there are clear cases where an absence of sufficiently validated and specific evidence indicates that no risk is present. What we wish to suggest is that there are cases where science is significantly less clear, where there are competing paradigms or other important uncertainties.

is too general or insufficiently scientifically validated. According to Sheila Jasanoff, the need to rely on evidentiary inferences and extrapolations is such a pervasive feature in risk regulation that subjecting this type of scientific evidence to the same evidentiary standards as used for 'research science' means applying empirically inappropriate evidentiary standards.⁴⁹ This is echoed by other commentators who maintain that an absence of evidence should not be equated with an absence of risk.⁵⁰ There is another epistemological problem of importance: sometimes, competing scientific studies can be based on different paradigms of interpretation, analysis or method and have reached different stages of corroboration. However, because they depart from different paradigms, the one with greater corroboration does not negate the other study or studies and it would be illogical to prefer it simply because it reached higher stages of corroboration.

The other problematic aspects revolve around political legitimacy. Commentators have expressed the criticism that the requirement of specificity of a risk assessment may make the regulation of certain 'real world' risks difficult if not impossible.⁵¹ Because it can be difficult to provide adequate evidence for very low-dose, chronic exposures, exposures to complex risks or combined exposure, requirements of specificity disfavour the regulation of these types of risk. If the authority of science is limited in cases with elements of uncertainty, inferences or competing paradigms, as we suggest above, it becomes implausible to reject regulations exclusively on empirical or epistemological grounds in close-call cases where the evidence is of different epistemological validity. Science, we are told, cannot prove the absence of risk (the negative), it can only prove the positive (that a risk exists). As

⁴⁹ Jasanoff, S. (1990), *The Fifth Branch: Science Advisers as Policymakers*, Cambridge, Mass: Harvard University Press, 42, 77–9 (arguing that filling gaps in the knowledge base, knowledge synthesis, and prediction of uncertain events are key features of regulatory science that distinguish it from laboratory science and that the same evidentiary standards should not apply to both).

⁵⁰ Weimer, note 24, at 628, citing Fisher, E. (2007), 'Precaution, Precaution Everywhere: Developing a "Common Understanding" of Precautionary Principle in the European Community', *Maastricht Journal of European and Comparative Law*, 9 (1), 7–28.

⁵¹ Sykes, A.O. (2005), 'Domestic Regulation, Sovereignty, and Scientific Evidence Requirements: A Pessimistic View', in P.C. Mavroidis and A.O. Sykes (eds), *The WTO and International Trade Law/Dispute Settlement*, Cheltenham, UK and Northampton, MA: Edward Elgar, 178, at 189; Gruszczynski, L. (2006) *The Role of Science in Risk Regulation under the SPS Agreement*, EUI Working Paper Law No. 2006/03, 2006, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=891114, at 25–6 (with further references) at 17.

a result, science cannot and should not be the ultimate yardstick for the illegality of regulations in such difficult cases.⁵² To use it as such gives rise to an accountability problem because scientists would not and could not assume responsibility for the decision on whether or not to regulate yet the regulator refers to the expert evidence as the reason for (non-)regulation.⁵³ Instead, the quantum of proof has to be adjusted depending on the nature of the hazard, further ensuing consequences, the cost of hazard mitigation, modes of risk imposition and risk distribution, in short, a political appreciation of all relevant characteristics of the hazard.⁵⁴ In other words, we question the standard picture of risk assessment as providing the empirical facts that political risk management *must* work with. Instead, the regulator should have *some* freedom to select on political grounds among evidence with different degrees of validation rather than being constrained to use the one with the highest degree of validation. The question of the sufficiency of evidence is then always a question of a mixed normative-factual nature but this does not mean that the regulator has complete discretion. In clear cases, we can very well use empirical criteria as the basis for a reasonable decision; in cases with more uncertainty, we can also use criteria of threshold empirical reasonableness and of fairness and procedural legitimacy as such basis but these will inevitably be specified in a different manner in the involved states.⁵⁵

In the final analysis then, law and regulation being concerned with normative questions of what one ought to do cannot delegate decision-making

⁵² Peel, J. (2004), *Risk Regulation under the WTO/SPS Agreement: Science as an International Normative Yardstick*, New York University School of Law Jean Monnet Working Paper 02/04, New York NY: NYU School of Law, available at <http://www.jeanmonnetprogram.org/papers/04/040201.pdf>, accessed 26 January 2012, 95–97.

⁵³ Herwig, A. (2008), ‘Whither Science in WTO Dispute Settlement?’, *Leiden Journal of International Law*, **21** (4), 1–24, at 19, and Herwig, note 24, at 306.

⁵⁴ *Ibid.* See also Forster, C. (2008), ‘Public Opinion and the Interpretation of the World Trade Organisation’s Agreement on Sanitary and Phytosanitary Measures’, *Journal of International Economic Law*, **11** (2), 427–458.

⁵⁵ For a clarification of the reason for the mixed factual-normative nature of evidentiary questions for law-making purposes from the perspective of theories of equality see Herwig, A. (forthcoming), ‘How and Why does Expert Involvement Contribute to the Legitimacy of Policy-making? Some Reflections on Equality in the Context of WTO and CAC Policy on SPS Matters’, in M. Ambrus et al., *The Role of Experts in International Decision-making: Decision-makers, Advisors or Irrelevant*, Cambridge: CUP. For a more applied analysis reaching similar conclusions about the necessarily open, normative content of precaution, see von Schomberg, R. (2012), ‘The Precautionary Principle: Its Use within Hard and Soft Law’, *European Journal of Risk Regulation*, **3** (2), 147–156.

authority to science, which is concerned with the empirical side only and committed to the logic of scientific discourses. It therefore becomes important for supra- and transnational law to acknowledge the important element of political choice and responsibility in risk regulation. Note, however, that acceptance of the political through the law calls into question the legitimacy of law itself – at least if it occurs as an unqualified surrender to politics. Does the law have anything to offer to preserve politics without succumbing completely to it? We return to this point in section C below.

B. The Turn to Precaution

Precaution, we would like to suggest below, is an improvement over unrelenting scientific empiricism. It can be applied in a supra- or transnational fashion yet acknowledges the political–normative elements in regulatory decision-making. In other words, it can function as a conflicts law mechanism.

1. Precaution in EU law

The precautionary principle can be found in international legal instruments. However, the EU is the legal system in which the principle has been developed significantly further and it has been elevated to constitutional status in Article 191 TFEU which stipulates that Union policy on the environment shall aim at a high level of protection and be based on the precautionary principle. The ECJ extended the applicability of the precautionary principle to the field of human health in the BSE case.⁵⁶

The Commission also published a Communication on the Precautionary Principle that lays out further guidelines on the implementation of the precautionary principle in Union policy.⁵⁷ According to this Communication, there are empirical threshold criteria for the precautionary principle to become available (scientific evidence is insufficient or uncertain and there are reasonable grounds for concern) but the decision on whether or not to respond to these uncertainties and regulate based on precaution is identified as one of risk management and thus as belonging to politics.⁵⁸ The response

⁵⁶ Case C-180/96 *UK v. Commission* [1998] ECR I-2265, para. 99. See also Weimer, note 24, at 630ff. with further references to case law.

⁵⁷ Communication of the Commission on the Precautionary Principle ('Communication on the Precautionary Principle'), COM (2000) 1 of 02.02.2000, available at http://ec.europa.eu/dgs/health_consumer/library/pub/pub07_en.pdf, accessed 26 January 2012.

⁵⁸ Communication on the Precautionary Principle, note 57, at 3; Weimer, note 24, at 5–6.

is also subject to requirements of proportionality, non-discrimination and cost-benefit analysis.⁵⁹ As Weimer astutely observes, there is a tension between these standards of rationality and the requirement for broad-based participatory processes in precautionary governance.⁶⁰ The Communication considers the precautionary principle to be a general principle of law, applicable to environmental protection and human, animal and plant life or health.⁶¹ This has subsequently been confirmed by the General Court.⁶² The consequence of this legal status, Weimer notes, is that the precautionary principle is relevant for the interpretation of EU law, constitutes a benchmark for the assessment of the validity of secondary legislation and is binding on Community institutions when they take risk regulatory decisions.⁶³ The General Court has also endorsed some of the substantive provisions of the Communication by accepting the risk assessment/risk management divide and the requirement for empirical thresholds for the precautionary principle set forth in the Communication.⁶⁴ In the preliminary reference in *Gowan* the ECJ considered that the same findings justify recourse to the precautionary principle as identified in the Communication.⁶⁵ In particular, the ECJ found the absence of a scientific method for the analysis of endocrine disruptors coupled with some general evidence of the disrupting effects on the endocrine system of certain substances sufficient for the Commission to take precautionary action. However, its review of the other elements of precautionary policies as set forth in the Communication is rather cursory. Noting the wide discretion the Commission enjoys, the ECJ does not find that the proportionality principle has been infringed.⁶⁶ The reasons the Court gives are that the Commission attempted to balance conflicting interests, that renewal of the authorisation was possible after 18 months, that new uses could in principle be authorised and that the restrictions imposed on the use of fenarimol do not appear to be unsuitable for the protection of health given the concerns with disruption of the endocrine system of fenarimol and the

⁵⁹ Communication on the Precautionary Principle, note 57, at 10.

⁶⁰ Weimer, note 24, at 630.

⁶¹ Communication on the Precautionary Principle, note 57, at 10.

⁶² Case T-13/99 *Pfizer Animal Health SA v. Council* [2002] ECR II-3305, Case T-70/99 *Alpharma v. Council* [2002] ECR II-3495, Cases T-74, 76, 93-85, 132, 137 and 141/00 *Artedogan GmbH v. Commission* [2002] ECR II-4945.

⁶³ Weimer, note 24, at 632. See also Case C-236/01 *Monsanto v. Italy*, [2003] ECR I-8105.

⁶⁴ Weimer, note 24, at 632 with reference to the CFI decision in *Pfizer*.

⁶⁵ Case C-77/09 *Gowan Comércio Internacional e Serviços Lda*, Judgment of 22 December 2010, nyr, para. 76.

⁶⁶ *Ibid.*, at 86.

level of uncertainty.⁶⁷ There is no review of whether an adequate cost-benefit analysis was performed and the level of protection and restrictions imposed are consistent with those in similar situations.

2. Precaution in WTO law

There is no explicit legal principle of precaution in the SPS Agreement. The Appellate Body found it imprudent to take a decision on whether or not the precautionary principle had become customary international law or a general principle of law that should have been used in the interpretation of the SPS Agreement in accordance with Article 31.3(c) of the Vienna Convention on the Law of Treaties (VCLT).⁶⁸ Be that as it may, it noted that the precautionary principle could not relieve panels of the task of interpreting the provisions of the SPS Agreement pursuant to the normal rules of treaty interpretation and has not been written into the SPS Agreement as a separate ground of exception.⁶⁹ The *EC – Biotech* Panel took an even more restrictive approach. It *de facto* rejected any independent, interpretative weight of the precautionary principle enshrined in multilateral environmental agreements (MEAs) through its interpretation of Article 31.3(c) VCLT as requiring that membership of an MEA must at least encompass all WTO members before it can be used in a contextual interpretation of WTO law.⁷⁰

Even if there is no formal legal principle of precaution, the principle possibly exerts an indirect influence. It could in particular be enshrined in the international standards WTO members are called on to use as a basis for their municipal measures absent the required scientific justification and whose close transposition into national law entitles them to a presumption of SPS and GATT 1994 consistency.⁷¹ The international

⁶⁷ *Ibid.*, at 83–85.

⁶⁸ Appellate Body Report, *EC – Hormones*, para. 123.

⁶⁹ *Ibid.* Unless the Appellate Body implicitly took the same restrictive view as to the interpretation of the term ‘applicable in the relation between the parties’ in Article 31.3(c) VCLT as the Panel in *EC – Biotech*, one wonders how the AB could arrive at this conclusion without having first undertaken an interpretation of the SPS Agreement in accordance with Article 31.3(c) VCLT in which it accepted for the purposes of the interpretation that the precautionary principle had indeed become a relevant rule of law applicable in the relation between the parties.

⁷⁰ The Panel did concede, however, that formulations of the precautionary principle in MEAs could be used to confirm a textual interpretation of WTO law. Panel Report, *EC–Biotech*, note 43, at paras.7.68 and 7.92. For a critique of this finding, see Herwig, A. (2008), ‘Whither Science in WTO Dispute Settlement?’, note 53, at 18 *et seq.*

⁷¹ SPS Agreement, Articles 3.1, 3.2 and 3.3.

standardisation organisations have recognised that the precautionary principle matters in international standard-setting but have not been able to agree on substantive guidelines for its use.⁷² Second, the Appellate Body considered that the precautionary principle found reflection in provisions of the SPS Agreement: especially in Article 5.7, which deals with situations of insufficient scientific evidence but also in Article 5.1 where irreversible risks are concerned.⁷³ As we show below, some of the dispute settlement decisions on Articles 5.7, 2.2 and 5.1 can be understood to have applied precautionary thinking in the sense of conflicts law.

C. Precaution in Conflicts Law Perspectives

We would like to argue that the precautionary principle can be understood as a supranational conflicts law mechanism if it is interpreted in a way that keeps the principle open for empirical (scientific) and normative (political) elements. Although the formulation of the precautionary principle is not identical in all legal texts, the common denominator is that it allows for taking regulatory action when there are threats of a hazard but a lack of full scientific certainty.⁷⁴ At the same time, the precautionary principle leaves open which factors can justify a decision to take regulatory action.

In the case of many international formulations of the principle, the precautionary principle is a reason-blocking device that affirms that the lack of full scientific certainty shall not be used as a reason not to take regulatory action.⁷⁵ Note that this formulation makes it possible that other empirical (scientific) or political (normative) considerations can be used as a reason for or against the taking of regulatory action.

⁷² Codex Alimentarius Commission (2011), *Working Principles for Risk Analysis For Application in the Framework of the Codex Alimentarius Commission in Procedural Manual*, 20th ed., 105–111, at 106 para. 11.

⁷³ Appellate Body Report, *EC – Hormones*, para. 123.

⁷⁴ E.g. EC Communication on the Precautionary Principle, para. 4 preamble and para. 5.1; Principle 15 Rio Declaration on Environment and Development: ‘Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.’

⁷⁵ Principle 15 of the Rio Declaration on Environment and Development, available at <http://www.unep.org/Documents.multilingual/Default.asp?DocumentID=78&ArticleID=1163>, accessed 31 January 2012, states as follows: ‘In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.’

In contrast to this, the EU Commission's Communication on the Precautionary Principle is more detailed. It affirms repeatedly that the decision on whether or not to act in the face of suspected hazards is an 'eminently political decision' or an 'eminently political responsibility', and 'a function of the risk level that is "acceptable" to the society on which the risk is imposed'.⁷⁶ The Preamble of the Commission Communication then affirms that the unacceptability of risk, the scientific uncertainty and public concerns all have to be taken into account by decision-makers.⁷⁷ In addition, the Communication states that regulatory action based on the precautionary principle has to be proportionate, non-discriminatory, consistent with similar measures taken, subject to cost-benefit analysis of action and non-action, reviewable in light of new scientific data and capable of assigning responsibility for producing such data.⁷⁸

The Commission Communication therefore makes it clear that empirical and normative reasons and public concerns all have to be considered in decisions based on the precautionary principle. Through this guideline and the standards applicable to precautionary measures, a reasoning process is pre-structured through some supranational and legally verifiable elements (e.g. proportionality, non-discrimination, extent of uncertainty and quality of the preliminary evidence) but because of the imminently political and broad nature of some of these elements and the fact that their relative weights cannot be pre-defined in detail by the law, the law must confine itself to setting up robust procedures with reflexive elements, *inter alia* for assessing the acceptability of risk, carrying out and defining what the costs and benefits are, assessing public concerns and collecting new evidence.

This, we would like to suggest, is consistent with the idea of conflicts law: the need for supra- and transnational law to set up structures of accountability that allow risk-averse and risk-tolerant societies to work out their differences in a space legally defined through meta-rules acceptable to both of them. Now, the need for some empirical corroboration of precautionary policies (albeit of lesser weight than 'full scientific certainty') requires the risk-averse state to explain its precautionary policy in terms of evidence that is scientific and thus acceptable as a regulatory 'grammar' for the more risk-tolerant state. Inasmuch as the risk-averse state claims to regulate on grounds of protection against danger, the requirement for some minimally

⁷⁶ Communication on the Precautionary Principle, note 57, at para. 5.2.1 and preamble para. 5.

⁷⁷ Communication on the Precautionary Principle, note 57, preamble para. 5.

⁷⁸ Communication on the Precautionary Principle, note 57, preamble para. 6 and para. 6.2.

objective empirical scientific support that the precautionary principle imposes is a requirement of consistency that is therefore acceptable also to the risk-averse state and one that the law can verify. The precautionary principle neither precludes nor requires explicitly that normative factors have a role to play in the decision on whether or not to take precautionary action. It confers freedom on the regulating state to evaluate whether the less corroborated empirical evidence creates sufficient concern to warrant regulatory action based on the nature of the suspected hazard. This should motivate the exporting state whose products are subject to the foreign regulation at issue to engage with the importing state's policy reasons for regulation, e.g. because these concerns can be addressed in different ways or the balance of benefits and costs is different than that which the importing state has determined. Here again are some supranational elements that the law can verify – albeit only at the margins. The law can verify whether a very rough relation of inverse proportionality is respected, such that suspected hazards that are qualitatively not very serious require evidence of a relatively higher degree of corroboration to warrant precautionary measures compared to more serious hazards where the evidentiary requirements can be further relaxed. Note that the precautionary principle does not necessarily define the respective weights of empirical and normative considerations beyond some minimal threshold. Precisely because of its relative indeterminacy, the precautionary principle opens up a space for a cooperative search for a politically sensitive and legally sensible solution to a complex conflict constellation. It encourages the importing and exporting state to give reasons in the light of the concerns of the respective other state. This is an excellent illustration of what a conflicts law perspective argues for: that European and transnational law derive their legitimacy from their ability to set up legal structures that require the inclusion of the other in the assessment of conflict constellations. This potential of the precautionary principle's indeterminacy comes close to the principle of *comitas* in private international law: the duty of the forum state to give sympathetic and genuine consideration to the possible application of foreign law out of concern for the equality of other states before the forum state's courts thereby instituting a civility of nations without, however, requiring them to apply foreign law if it is inconsistent with the public policy of the forum state.⁷⁹ As one of us has observed previously:

⁷⁹ Joel Paul traces the evolution of the *comitas* principle in private international law and describes how the principle aimed at fostering good foreign relations by giving equal treatment to foreign law in the forum state's courts but always leaving open the possibility of not applying foreign law. Paul, J.R. (2008),

Comitas would suggest a search for a middle ground between law and politics by advising the latter to take the expertise of the former seriously, and by advising the former to be aware of the limited legitimacy of law that did not originate in a democratic process. What we find worth remembering, however, is that *comitas* was used, and continues to be used, when courts have arrived at the borderlines of adjudication. Where they are not empowered with the assessment of policies and economic interests, they may still function as *fora* or as instigator of fair and workable compromises.⁸⁰

With this understanding of the precautionary principle, the principle respects the three prescriptive premises of conflicts law: it requires states to take seriously the extraterritorial effects they produce and to reconsider them in light of the concerns of the affected jurisdictions but it tolerates diversity and limits judicial review to a marginal one.

D. Rival Approaches: Global Legal Pluralism and Limited Supranationalism

In this section, we discuss two competing theories on the legitimacy of supra- and transnational regulation with the aim of substantiating the specifics of the conflicts law approach further. ‘Limited supranationalism’ is the notion we use to characterise the work of Giandomenico Majone on the EU. Majone does not advocate a transformation of the EU into a democratic polity. To him, the absence of democracy as we know it from the constitutional nation state is not a problem but an advantage when it comes to specific regulatory objectives in particular in the spheres of social regulation. He argues that Europe could ensure the acceptance of its involvement in problem-solving if carried out by non-majoritarian institutions in an objective and expertise-based fashion, subject to reason-giving requirements and judicial review and limited to the policy areas in which regulation is concerned with the establishment of markets and the correction of market failures.⁸¹ These are notably characterised by being about

‘The Transformation of International Comity’, *Law and Contemporary Problems*, 71 (3), 19–38, at 33.

⁸⁰ Joerges, C., and J. Neyer (2003), ‘Politics, Risk Management, WTO Governance and the Limits of Legalisation’, *Science and Public Policy*, 30 (3), 219–225, at 225.

⁸¹ This implies, however, that Europe should stay out of contested distributional and welfare state policies. For his earlier position, see Majone, G. (1989), ‘Regulating Europe: Problems and Prospects’, *Jahrbuch zur Staats- und Verwaltungswissenschaft*, 3, 159–177; *idem* (1994), ‘The European Community as a Regulatory State’, 1994-V/1 *Collected Course of the Academy of European Law*, Den Haag, Boston, MA, London: Martinus Nijhoff, 321–419; and more

aggregate efficiency gains or pareto-optimality and not redistribution.⁸² According to Majone, redistribution involves worsening the position of some for the benefit of others and requires majoritarian legitimation and a sufficient degree of homogeneity.⁸³ Efficiency-based policies allow for a net gain of everyone and are claimed to be capable of legitimation by non-majoritarian institutions.⁸⁴

Now, we agree that expertise sometimes possesses such normative authority in virtue of its clear epistemological authority and that it is useful for transnational accountability as a universal grammar. But often, science does not possess such clear authority: scientific findings will be contested, data missing, paradigms of inquiry will differ or methods be unavailable to assess complex problems. What is more, as soon as there is evidence of risk, science runs out: it can not tell us whether the risk is worth taking. Nor does an absence of evidence on risk imply that a product cannot be regulated on different grounds, such as consumer choice or a desire to maintain traditional forms of agriculture. In all these cases, an important political (or normative) element of decision-making remains: is the evidence sufficient or not for taking regulatory action, is it worthwhile taking a risk or possibly experiencing a hazard and are there other grounds for regulating or rejecting a product?

What the area of food safety risk regulation also shows is that relatively mundane risks, such as the use of hormones for growth promotion in beef or traditional but not perfectly safe ways of food-processing, can become politically contested and are not easily characterised as purely technical issues. The example of the politically highly contested nuclear energy and its potential cross-border effects viewed through the lens of conflicts laws also shows that Europe must address politically contentious matters and will need to find *sui generis* responses to generate legitimacy.

Our argument that the turn to science and with it to precaution can be understood as conflicts law is thus not an argument for using science to impose uniform regulatory solutions on countries or making national regulations perfectly rational. Rather, the argument is based on the recognition that scientific support for national regulations makes the state

recently his scepticism of European expansionism into contested policy areas *idem* (2010), *Europe as the Would-be World Power. The EU at Fifty*, Cambridge: CUP, 128 *et seq.*; *idem* (1998), 'Europe's Democracy Deficit: A Question of Standards', *European Law Journal*, 4 (1), 5–28.

⁸² See Majone, G. (1998), 'Europe's Democracy Deficit: A Question of Standards', *European Law Journal*, 4 (1), 5–28, at 13–14, 28.

⁸³ *Ibid.*

⁸⁴ *Ibid.*, at 28.

accountable to outside affected interests in a minimal fashion in the sense of making them understandable without imposing unity: as soon as evidence is accepted by the scientific community it becomes available as a justification for national regulatory measures but states may rely on very different scientific findings or take different decisions on whether or not the risk is worth taking. At a minimum, they must have demonstrated a real engagement with the scientific evidence even if they ultimately regulate based on other grounds. To explore the simile from language again: Science provides for a grammar that makes utterances intelligible even though the speakers disagree on content; it is about syntax, not semantics. It may at first sight be surprising, if not paradoxical, but it seems to us that Majone's thoughtful critique of the use European authorities make of the precautionary principle⁸⁵ militates in fact in favour of our re-interpretation of that principle as a conflicts law device. As Majone convincingly argues, the ambiguities and uncertainties cannot be 'resolved';⁸⁶ it is nevertheless possible, as Majone points out in his references to the ECJ,⁸⁷ to channel the use of the principle by procedural standards. Majone's second objection concerns the controversies between in particular the US and the EU which the European departure from 'sound science' in favour of precaution has caused. In both respects we submit that our conflicts law approach provides orientation in the handling of these difficulties. There is no way to get rid of scientific uncertainties and there is no 'higher law' available which would provide us with legitimated 'solutions' of the trade conflicts between the US, the EU and developing countries. The complexity of the conflict constellations to which European and WTO law have to respond can only be constructively handled with the help of procedural criteria which further deliberative problem-solving and arguing as we have outlined in section III.C.

With global legal pluralism, exemplified in the work of Nico Krisch, conflicts law shares the recognition that supra- and transnational law must avoid hierarchy and substantive unification of the legal orders. Both also see conflicts as inevitable. However, one important difference between conflicts law as we propose it here and Nico Krisch's account is that the

⁸⁵ Majone, G. (2002), 'What Price Safety? The Precautionary Principle and its Policy Implications', *Journal of Common Market Studies*, 40 (1), 89–109.

⁸⁶ As he very lucidly puts it: The 'distinction between situations where scientific information is sufficient to permit a formal risk assessment, and those where "scientific information is insufficient, inconclusive or uncertain" [is artificial]. In reality, these are two points on a knowledge-ignorance continuum rather than two qualitatively distinct situations.' *Ibid.* at 104.

⁸⁷ *Ibid.*, at 98.

latter allows a legal regime to define through its institutions 'the terms on which it interacts with others. Different polities may then come to conflicting terms'.⁸⁸ This allows for a multiplicity of responses, from constructive engagement, accommodation or compromise to greater withdrawal and isolation.⁸⁹ However, a regime is entitled to respect only inasmuch as its practices foster public autonomy.⁹⁰ Nico Krisch endorses a Habermasian concept of public autonomy in which the equal autonomy of all must be reciprocally respected.⁹¹ Thus, the deliberative pedigree, inclusiveness or the strength of arguments for furthering particular goals confer public autonomy credentials.⁹² But the demands of universality (at least potentially) are to be counterbalanced by the right to self-determination and particularism.⁹³ The latter could be seen as making concessions to voluntarism or facts because Krisch argues that people's felt allegiances also matter.⁹⁴ Although Krisch characterises respect for the equal autonomy of all as a moral duty, it can become positivised in legal interface

⁸⁸ Krisch, note 22, at 103.

⁸⁹ This is of course not what conflicts law endorses.

⁹⁰ Krisch, note 22, at 100–103, and for theoretical background see 91–96.

⁹¹ *Ibid.*, at 99–100.

⁹² *Ibid.*, at 101.

⁹³ *Ibid.*, at 100–101.

⁹⁴ *Ibid.*, at 87–88, 95, 102. Note, though, that Krisch does not explain fully and convincingly why the fact of allegiance matters. Is it because allegiances or associations are morally relevant because, as he suggests on p. 93, the question of public autonomy or democracy comprises the prior moral question of whom to associate with and whom not to associate with? But this criterion itself cannot settle the issue of whether one should opt for the larger, more-inclusive or the smaller, less-inclusive polity because it does not offer us any yardstick for deciding adverse claims of inclusion. Or does he work back towards principles of social justice from the fact of a pluralism of associations as pp. 96 and 98 would suggest? But why should the fact of felt allegiance (or of the good) be prior to the right? Indeed, on p. 97 he concedes as much. Or is he of the view that full democratic inclusion is contingent upon but regulative of certain facts as pp. 99–100 suggest, such as non-radical moral disagreement? It seems doubtful that the fragmentation of the global order into different spheres or law and governance reaches such radical levels of disagreement in most cases and across all issues. And even if one concedes that democracy is contingent upon a thicker sense of community and shared values as provided by nation states, towns, internet communities, professional associations or the like, there still is the question of why proxies for full democratic inclusion enshrined in public rules do not work for structuring the relationship between various communities. Or are our felt allegiances merely an empirical obstacle on the way to realising fully inclusive universal social practices? But this does not square with his fundamental critique of constitutionalism. And finally, is it always possible to balance universalism with particularism or are there sometimes hard conflicts? We return to this point below in the Epilogue.

norms.⁹⁵ These are the gateway of openness, closure, friendliness or hostility of the various legalities and are various ways of conditional recognition or taking account of other legal materials.⁹⁶

This is not the place to engage in an intensive discussion of Krisch's account, except to note that one is left puzzled. We agree with Lars Viellechner that Krisch's endorsement of public autonomy seems to recognise the central vantage point of a constitutionalist ordering.⁹⁷ But this raises the question of why autonomy-enhancing duties of reason-giving, transparency and conflicts law meta-norms cannot be inscribed in binding legal obligations. Moreover, if legal orders have to commit to the preservation of public autonomy, it seems their conflicts are shallow ones of misunderstanding or misinformation rather than deep ones, which a constitutionalist framework could handle easily by instituting norms of information exchange, reason-giving and other mechanisms that foster learning. Absent a legal commitment to autonomy preservation qua constitutionalisation, the problem with Krisch's interface norms is that they can remain just voluntaristic mechanisms of disengagement if used by the wrong kinds of regimes for the wrong kinds of reasons.

Nolens volens Krisch could therefore turn out to be an apologetic of closure, suppression of voices and power play.⁹⁸ And finally, while checks by neighbouring legal regimes can nudge the regimes being checked towards becoming more inclusive, absent a constitutional commitment to autonomy, these checks can only be as good as the surrounding legal regimes themselves are inclusive and representative of the broadest possible array of interests. With power and wealth asymmetries and fundamen-

⁹⁵ *Ibid.*, at 296.

⁹⁶ *Ibid.*, at 285–291.

⁹⁷ For an insightful critique of Krisch's book, see Viellechner, L. (2012), 'Beyond Constitutionalism. The Pluralist Structure of Postnational Law. By Nico Krisch. Oxford: OUP, 2010, xxiv + 358 pp. Hb. £50.00.' *European Law Journal*, **18** (4), 595–598. Lars Viellechner also argues that conflicts law and Krisch's pluralism are both approaches seeking to combine constitutionalism and pluralism. See *idem* (forthcoming), 'Constitutionalism as a Cipher: On the Convergence of Constitutionalist and Pluralist Approaches to the Globalization of Law', *Goettingen Journal of International Law*. The key difference, as we see it, is that conflicts law seeks a constitutional commitment to legal responses for managing legal and political conflicts, whereas Krisch's pluralism seeks political responses.

⁹⁸ As Koskeniemi has observed: 'The problem of legal pluralism is the way it ceases to pose demands on the world. Its theorists are so enchanted by the complex interplay of regimes and a positivist search for an all inclusive vocabulary that they lose the critical point of their exercise.' Koskeniemi, M. (2011), *The Politics of International Law*, Oxford: Hart Publishing, at 353.

tally undemocratic regimes one cannot be certain at all that the current global order reflects interests in a balanced way.⁹⁹

Law, and supranational conflicts law in particular, as we see it, however, require the inclusion of ‘the Other’ and therefore openness and a constructive engagement of the legal orders and regimes with each other according to justiciable legal norms. The notion of Howse and Nicolaïdis of horizontal subsidiarity echoes this.¹⁰⁰ What they envision as the right model for the EU – the generation of processes rather than outcomes conducive to dialogue across polities and a normative and institutional framework that reflects a commitment to democracy, the rule of law and peaceful settlement of disputes sensitive to diversity, is strikingly similar to conflicts law.¹⁰¹ Supra- and transnational law has to put in place procedures that enable reason-giving and accountability, procedures that one can specify and reason about. This, we hope to have shown, is different from Krisch’s call for pluralism.

IV. ILLUSTRATION THROUGH CASES OF EXEMPLARY IMPORTANCE

The two WTO dispute settlement decisions we contrast in this section mark the demise and revival of precautionary thinking in the SPS Agreement and help us to draw out, through one negative and one positive example, what solutions conflicts law can bring to transnational disputes over risk regulation.

A. Precaution is Dead . . .

The *EC – Biotech* Panel report is the most explicit in its refusal of precautionary thinking, even if it is not the only one that took a restrictive stance

⁹⁹ For this public choice problem and a discussion of global administrative law pluralism and other models, see Herwig, A. (2011), ‘The Contribution of Global Administrative Law to the Legitimacy of the Codex Alimentarius Commission’, in O. Dilling, M. Herberg and G. Winter (eds), *Transnational Administrative Rule-Making: Performance, Legal Effects, and Legitimacy*, Oxford: Hart, 171–212, at 200.

¹⁰⁰ Howse, R. and K. Nicolaïdis (2002), ‘This is my Eutopia . . . Narrative as Power’, *Journal of Common Market Studies*, 40 (4), 767–792, at 784.

¹⁰¹ *Ibid.*, at 771, 782, 784, 785, 788; see also Howse, R. and K. Nicolaïdis (2008), ‘Democracy without Sovereignty: The Global Vocation of Political Ethics’, in T. Broude and Y. Shany (eds), *The Shifting Allocation of Authority in International Law: Considering Sovereignty, Supremacy and Subsidiarity*, Oxford: Hart Publishing, 163–191, at 164, 182, 191.

towards the precautionary principle. The case concerned three different types of measures: the general EU moratorium on the approval of GMOs, the product-specific moratorium and the safeguards that several EU Member States had taken against specific GM products that had received Community authorisation.

To situate the *EC – Biotech* report in its legal context, we first discuss briefly selected aspects of previous WTO dispute settlement decisions.¹⁰² Even though *EC – Hormones* did not deal directly with Article 5.7 of the SPS Agreement, the Appellate Body displayed a certain sensitivity towards precautionary concerns that is very consistent with our understanding of conflicts law. The Appellate Body recognised that a risk assessment did not have to establish a minimum magnitude of risk and allowed WTO Members to base themselves on minority scientific opinion.¹⁰³ It also noted that panels charged with the task of assessing whether a measure was based on a risk assessment should bear in mind that responsible governments act from a standpoint of caution and prudence where irreversible and especially life-threatening risks are concerned.¹⁰⁴ This can certainly be understood as an acknowledgement that the question of whether or not evidence is sufficient to regulate is not one that can be delegated to science alone but must be based on a political decision. This statement seems to conflict with the Appellate Body's other finding that risk assessments had to be specific to the substance and form of exposure targeted by the measure in order for the measure to be based on a risk assessment in the sense of Article 5.1.¹⁰⁵ We would like to suggest that, by not deciding this issue in *EC – Hormones*, the Appellate Body displayed some prudent management of the dispute because it left it to the disputing parties to work out how to reconcile scientific and political rationality in risk regulation.

Subsequent dispute settlement panels and the Appellate Body abandoned this prudence. Already the Panel and Appellate Body report in *Japan – Apples* can be interpreted as limiting recourse to the precautionary principle qua Article 5.7 to situations where validated scientific risk assessments are unavailable or information is lacking, thus limiting the grounds for recourse to the precautionary principle to scientific ones.¹⁰⁶

¹⁰² We do not discuss the *Japan – Agricultural Products* findings on Article 5.7, which, to us, follow directly from the legal text of the SPS Agreement.

¹⁰³ Appellate Body Report, *EC – Hormones*, paras. 186, 194.

¹⁰⁴ *Ibid.*, at para. 123.

¹⁰⁵ *Ibid.*, at paras. 199–200.

¹⁰⁶ Appellate Body Report, *Japan – Apples*, para. 185; Panel Report, *Japan – Apples*, para. 8.219. As the Appellate Body explained, when there is relevant scientific evidence, recourse to Article 5.7 of the SPS Agreement is possible only when

What remained implicit in *Japan – Apples*, the Panel in *EC – Biotech* made explicit. Thus, the Panel found that recourse to Article 5.7 was precluded when a risk assessment existed.¹⁰⁷ This decision suggests that risk assessments can simply be transposed from one political regulatory context to another, notwithstanding the politico-normative embeddedness that must also play a role in determining which quantum of proof is acceptable for regulatory intervention.¹⁰⁸ In the end, the Panel upset the EU's constitutional settlement which recognised diversity as legitimate.¹⁰⁹ The Panel also imposed a very high evidentiary burden on the EC for it to be able to show that the evidence supporting the Member States' safeguard measures were risk assessments. It rejected even very suggestive if not probative evidence and, because of its formalistic delineation of Articles 5.1 and 5.7, never bothered to investigate whether this evidence was enough to call into question the sufficiency of previous evidence as required by Article 5.7.¹¹⁰ From the perspective of conflicts law, this decision is misguided because it reduces the central question of whether or not regulatory intervention is justified to an empirical or scientific one and displays unjustified faith in the ability of science to answer key questions in risk regulation. What the Panel's decision in essence means is that once a risk assessment has been performed, legitimate reasons for regulatory diversity arising from different political choices for a higher or lower quantum of empirical proof of risk cease to exist.

The Panel's decision on the compatibility of the general and product-specific moratoria with Annex C of the SPS Agreement also reveals its scepticism towards the precautionary principle. Amidst intra-Community controversy over GMOs, the EC had come to stop approvals on GMOs until further evidence was available. The Panel found that this constituted undue delay and infringed Annex C without attaching weight to the fact

this evidence has not come to conclusive or reliable results. As one of us argued elsewhere, the reference to 'conclusive' and 'reliable' seems to refer to terms for establishing the validity of scientific findings. The reasons for this interpretation of the findings in *Japan – Apples* are given in Herwig, note 24, at 316–319.

¹⁰⁷ The EC had acknowledged that the assessments of the relevant Community scientific committees constituted a risk assessment but made the case that notwithstanding this risk assessment, Member States had 1) undertaken a different risk assessment or 2) had found scientific evidence to be insufficient.

¹⁰⁸ We have developed this argument in Section III.A.3 above.

¹⁰⁹ Joerges, C. (2009), 'Judicialization and Transnational Governance: The Example of WTO Law and the GMO Dispute', in Bogdan Iancu (ed.), *The Law/Politics Distinction in Contemporary Public Law Adjudication*, Utrecht: Eleven International Publishing, 67–84.

¹¹⁰ For a detailed discussion, Herwig, note 53, at 11–15, 17.

that GMO approval was politically contested. Again, this diminishes the important element of political decision on risk that the precautionary principle and conflicts law want to safeguard and gives the interests of biotechnology companies seeking authorisation greater weight.¹¹¹

As discussed above, the panel's findings on the relevance of Multilateral Environmental Agreements for the contextual interpretation of the SPS Agreement limit the potential impact of the precautionary principle as enshrined in non-WTO law on the SPS Agreement. The result was that the SPS Agreement's science-based rationality resulting from the *EC – Biotech* decision would trump international political resolutions of regulatory problems inspired by precautionary thinking.

We thus beg to differ with Nico Krisch's assessment of the *EC – Biotech* report. Krisch sees the unclear relationship between WTO law and the Biosafety Protocol and the Panel's refusal to give weight to MEAs in the interpretation of the SPS Agreement as an instance of systemic pluralism, as a contestation over the right constituency to take decisions on GMOs but points out that engagement remains possible. His overall assessment is positive.¹¹² He characterises the Panel's findings as narrow since it did not reject the European system of prior approvals outright and indicated to the EU that it could well have taken restrictive measures against GMOs if only its risk assessment had identified uncertainties or constraints.¹¹³ We fail to see what is narrow or pluralistic about the Panel's findings. The case was – partly – about an intra-European disagreement about GMOs, with the Commission and several Member States in favour of their authorisation and the Member States taking the safeguard measures against. By finding that once a risk assessment existed, recourse to Article 5.7 was impossible, the Panel made such intra-European disagreement impossible and created a hierarchy in favour of the Community that was not there before.

B. . . . Long Live Precaution

In *Continued Suspension*, the Appellate Body resurrected precaution. The case was the second round of the growth hormones dispute. When the EC failed to implement the findings in the first hormones case, the complainants requested authorisation from the Dispute Settlement Body (DSB) to suspend concessions vis-à-vis the EC. After some time, the EC requested the establishment of a panel alleging that novel scientific evidence had

¹¹¹ Joerges, note 109, 81.

¹¹² See Krisch, note 22, at 206–207, 212, 215, 221.

¹¹³ *Ibid.*, at 214.

now brought it into compliance with the SPS Agreement. On appeal, the Appellate Body reversed several of the problematic findings of the Panel.

The first important reversal focused on the question of whether 'sufficiency' as the delineator between Articles 5.1 and 5.7 was to be determined according to scientific or political criteria or both. The Panel had found that the political aims (i.e. the degree of risk aversion and tolerance) of the regulator did not have any influence on whether or not scientific evidence was sufficient.¹¹⁴ The Appellate Body rejected this finding and struck a middle ground: it considered that the political aims of the regulator justified framing the risk assessment by asking certain questions of scientists but that the issue of whether or not scientific evidence is sufficient would be determined according to scientific criteria.¹¹⁵ In effect, this allows regulators to ask many questions of scientists, including ones science cannot answer,¹¹⁶ and allows easier recourse to Article 5.7 of the SPS Agreement. The Appellate Body has prudently refrained from saying how it would look upon a situation where the regulator deliberately frames the risk assessment so as to make it difficult or impossible to carry it out. This indeterminacy is precisely what allows disputing parties to work out between themselves how to account for their regulatory choices and economic activities to each other through recourse to scientific and political argument.

Next, the Appellate Body was faced with the question of whether and under which circumstances Article 5.7 measures could be justified when there was pre-existing sufficient evidence and an international standard of the Codex Alimentarius Commission. The *Continued Suspension* Panel had found that the existence of a Codex standard on four of the five growth hormones at issue generally implied that there was a situation of sufficient scientific evidence.¹¹⁷ The Appellate Body modified the Panel's approach and found instead that the existence of a Codex standard had probative but not dispositive weight.¹¹⁸ On the question of what type of evidence could justify Article 5.7 measures when there was pre-existing sufficient evidence the Panel had opined that only a critical mass of new evidence calling into question fundamental precepts of previous

¹¹⁴ Panel Report, *US – Continued Suspension*, paras 7.609–7.612; Panel Report, *Canada – Continued Suspension*, paras. 7.587–7.590.

¹¹⁵ Appellate Body Report, *US/Canada – Continued Suspension*, paras 685–686.

¹¹⁶ For instance, regulators could ask scientists to research risks that are notoriously difficult to assess because no good methodology exists.

¹¹⁷ Panel Report, *US – Continued Suspension*, para. 7.644; Panel Report, *Canada – Continued Suspension*, para. 7.622.

¹¹⁸ Appellate Body Report, *US/Canada – Continued Suspension*, paras 694–697.

knowledge could justify recourse to Article 5.7.¹¹⁹ The Appellate Body equated this with a requirement of a paradigm shift and considered this much too strict.¹²⁰ Instead, it ruled that the new evidence had to be of such a nature as to call into question previous findings so that one could no longer have reasonable confidence in them.¹²¹ Through both findings the Appellate Body enabled precautionary regulation and protected regulatory diversity. Henceforth, it is possible for one WTO Member to accept products on the basis of a risk assessment while the hurdle for another WTO Member to regulate or ban the product temporarily on the basis of preliminary evidence is not too high. This is what conflicts law calls for.

V. EPILOGUE: WHERE THE LAW ENDS . . .

Atomic energy, the notion used in the Euratom Treaty of 1957,¹²² or nuclear energy, the concept preferred today, is the best conceivable case for the conflicts approach. The risks of this type of energy cannot be confined within the territory of one single state. This is why the decision to rely on this type of energy production reveals a democratic deficit of national decision-making. The example illustrates at the same time the need if not necessity to seek transnational cooperation, be it in the fundamental decisions on the use of that energy, be it in the control of its risks or in the search for renewable forms of energy which might pave the way towards a less risky future. Last but not least, decision-making in this field confirms the validity of Brainerd Currie's queries with judicial decision-making in cases of 'true conflicts'.¹²³ What body could possibly be the final arbiter in controversies about the use or non-use of atomic energy?

It is the vocation of Europe, so we have argued, to compensate the structural deficits of nation state decision-making and to organise cooperative problem-solving where national solutions are inconceivable. Unfortunately, in the field of nuclear energy, European law is far from providing such frameworks. The 1957 Treaty emphasised in its preamble that 'nuclear energy is an indispensable aid for the development and invigoration of the market and for peaceful advance' and then underlined the determination 'to create the conditions for the establishment of a

¹¹⁹ Panel Report, *US – Continued Suspension*, paras 6.141, 7.648; Panel Report, *Canada – Continued Suspension*, paras 6.133, 7.626.

¹²⁰ Appellate Body Report, *US/Canada – Continued Suspension*, para. 706.

¹²¹ *Ibid.*, at para. 725.

¹²² Consolidated version in OJ C 84, 1 of 30.3.2010.

¹²³ See note 15 and accompanying text.

powerful nuclear energy industry'. The decision for or against the use of this form of energy was left to individual nation states. Back in 1957 this could be understood as deference to their political autonomy and should also be read in the context of the then prevailing optimistic consensus. By now, after quite bitter experiences with the risks of atomic energy and after decades of heated debates in a number of European countries, the premises of 1957 are technologically and politically outdated. The Treaty of Lisbon, however, has confirmed the old consensus, re-iterating in Article 194(2) TFEU that 'each member state has the right to determine the conditions for the use of its own energy resources, to choose between different energy resources and to determine the general structure for its energy provision'. This provision confirms also the so-called 'autonomy' of the Euratom Treaty with an implication of particular interest here: the principle of precaution is inapplicable under the Euratom Treaty.¹²⁴

Is that state of the law sustainable even after Fukushima? This seems unpredictable. One pertinent encounter, however, has occurred and reached the ECJ's Grand Chamber:¹²⁵ The background to this case dispute between Austria and the Czech Republic has a long history stretching back to 1985.¹²⁶ The conflict was generated by Austrian concerns over the Temelín nuclear power plant. The plant had been duly authorised by the Czech Republic and had been running on a trial basis since 1985 and at full capacity since 2003 after a technological upgrading of Temelín's Soviet style equipment which was accomplished in bilateral bargaining and under the supervision of the European Commission. Austria felt more at ease, but would certainly have preferred a response respecting its principled rejection of atomic energy in a referendum of 1978 which was 'constitutionalised' by unanimous parliamentary vote in 1997.¹²⁷

These irreconcilable positions reached the law through a back door.

¹²⁴ This oddity has motivated Members of the European Convention, among them the late Neil MacCormick, to ask for the integration of the Euratom Treaty into the general European institutional framework (see their submission to the Convention: Conv 563/03 and for an overview <http://www.eu-energy.com/euratom-reform.htm>, accessed 15 October 2011. In the same vein the Editorial in 45 *CMLRev* (2007), 929, at 934. That motion remained unsuccessful.

¹²⁵ C-115/08, *Land Oberösterreich v ČEZ*, judgment of 27.10.2009, nyr

¹²⁶ For a comprehensive reconstruction see Hummer, W. (2008), 'Temelín: Das Kernkraftwerk an der Grenze', *Zeitschrift für öffentliches Recht*, 63, 501–557, at 523–532.

¹²⁷ Austria, after a referendum held in 1978, committed in its constitution to the rejection of atomic energy and confirmed its position by a unanimous parliamentary vote in 1997. See Pelinka, A. (1983), 'The Nuclear Power Referendum in Austria', *Electoral Studies*, 2 (3), 253–261.

Upper Austria, the owner of land located at a distance of just 60 km from Temelín, complained about ionizing radiation from that power station. Upper Austria based its claim on the *actio negatoria* of Paragraph 364(2) of the Austrian Civil Code.¹²⁸ There was thus a horizontal conflict in private international law between two EU Member States: on the one hand, Austria's claim in real property backed up by a constitutional rejection of nuclear energy; on the other hand, the freedom of the owner of the authorised power plant to use his land for nuclear power generation pursuant to the law of the Czech Republic that had issued the authorisation.

Pursuant to the Brussels Convention of 1968, the conflict came to the ECJ for adjudication.¹²⁹ AG Maduro in his opinion of 11 January 2006, and the ECJ in its judgment of 18 May 2006, discussed whether rights *in rem* were at issue so that the Austrian courts could invoke Article 16 of the Convention and claim exclusive jurisdiction. Or was this matter to be qualified as a tort in the sense of Article 5 III of the Brussels Convention and therefore governed by the *lex loci delicti*? Which characterisation was the proper one? Giving exclusive jurisdiction to Austrian courts would amount to authorising Austria to decide over the Czech Republic's energy policy. That seems beyond the authority of private international law – and this intuition was confirmed by the ECJ:

... it cannot be considered that an action such as that pending before the national court should in general be decided according to the rules of one State rather than the other and in conclusion: this is no case of exclusive Austrian *in rem* jurisdiction.¹³⁰

The flipside, however, of allowing the Czech Republic to operate the plant without regard for the Austrian concerns is equally unsatisfactory because it amounts to rejecting Austrian commitments. Is there a third way? The two countries agreed to cooperate over energy partnerships and safety measures – but this did not bring the dispute to an end.¹³¹ Upper Austria continued to pursue its claim and obtained a judgment from

¹²⁸ § 364(2) of the Austrian Civil Code provides: 'The owner of a land may prohibit his neighbour from producing effects, emanating from the latter's land, by effluent, smoke, gases, heat, odours, noise, vibration and the like, in so far as they exceed normal local levels and significantly interfere with the usual use of the land. Direct transmission, without a specific legal right, is unlawful in all circumstances.' [Translation from Case C-115/08, para. 36.]

¹²⁹ The Brussels Convention provides private international law rules for conflicts of laws between EU Member States. The ECJ is given jurisdiction over disputes arising under the Convention.

¹³⁰ Case C-343/04, para. 36.

¹³¹ See para. 1 *et seq.* of AG Maduro's Opinion in Case C-115/08.

Austria's *Oberster Gerichtshof* in which the court refused to recognise the Czech authorisation on the basis of exception from the *actio negatoria* in Paragraph 364a.¹³² The *Oberster Gerichtshof* failed to see a good reason why Austrian law should restrict the property rights of Austrian landowners purely in the interests of protecting foreign policies and the fostering of economic and governmental interests.¹³³

This Austrian view, understandable as it may seem domestically, is unacceptable in a European forum, however. Unsurprisingly, the principled refusal to recognise the Czech Republic's authorisation because of its 'foreign' origin was held to be irreconcilable with Austria's European commitments in the eyes of both the ECJ and its Advocate General. The grounds on which this conclusion was reached, however, were different – and this difference is enlightening.

The ECJ found the Austrian decision discriminatory.¹³⁴ In this holding the ECJ failed to give any normative weight to the democratic and constitutional credentials of the Austrian position; it also failed to discuss the lack of any European competence to authorise the construction and operation of nuclear installations.¹³⁵

AG Poiares Maduro had operated on different grounds. In his analysis, the Temelín case was characterised by 'reciprocal externalities',¹³⁶ a finding which seems to be fully compatible with our 'external effects' theorem and its objective of

making national authorities, insofar as is possible, attentive to the impact of their decisions on the interests of other Member States and their citizens since this goal can be said to be at the core of the project of European integration and to be embedded in its rules.¹³⁷

The dilemma of the Temelín constellation, however, stems from the reciprocity of these externalities. In his assessment of this conflict AG Maduro

¹³² This provision reads: 'However, if the interference is caused, in excess of that level, by a mining installation or an officially authorised installation on the neighbouring land, the landowner is entitled only to bring court proceedings for compensation for the damage caused, even where the damage is caused by circumstances which were not taken into account in the official authorisation process.' [Translation taken from Case C-115/08, para. 37.]

¹³³ See the report on this judgment in Case C-115/08, [2009] ECR I-10165, at para. 51.

¹³⁴ Case C-115/08, para. 86 *et seq.*

¹³⁵ Articles 30–31 Euratom Treaty only set forth procedures for the coordination of national standards for the protection of dangers from ionizing radiation; see paras 111 *et seq.* of Case C-115/08, [2009] ECR I-10265.

¹³⁶ See para. 1 of his Opinion in Case C-115/08.

¹³⁷ *Ibid.*

seems to take a step too far and too fast when arguing that the economic freedoms are not duly respected where

the extraterritorial application of that [Austrian] State measure may affect economic activity in another Member State [the Czech Republic] or between other Member States. What is relevant is for the cross-border impact of the measure of one Member State to be liable to affect the enjoyment of the internal market advantages by economic operators established in other Member States.¹³⁸

What the AG fails to explain is why European economic freedoms should trump Austria's constitutional provisions and the political rights of its citizens in a field where the Union is not empowered to govern. Austria's autonomy *not* to use atomic energy is subjected to the priorities of the Czech Republic when Austria is asked to

take account of the fact that Community law specifically authorises the development of nuclear installations and the development of nuclear industries in general [and of] the fact that the authorisation granted to the Temelín facility by the Czech authorities was granted in accordance with the standards established by the relevant Community law.¹³⁹

The principle of precaution has not been invoked in this conflict. We do not suggest that it provides a 'solution'. But we submit that it helps us to understand this 'true conflict': Austria's risk aversion and the Czech Republic's risk propensity contradict each other and must be reconciled somehow. This, however, cannot be done one-sidedly by one Member State nor by judicial fiat of the ECJ. The contradiction which the principle of precaution brings to the fore requires a European response, albeit one which is backed by democratic political processes. The deeper failure of European law in the present case is that it has institutionalised a structure which inhibits political contestation and democratic decision-making.¹⁴⁰

¹³⁸ *Ibid.*, para. 10.

¹³⁹ *Ibid.*, para. 16.

¹⁴⁰ Christian Joerges has defended, in a contribution to the Conference 'The European Citizens' Initiative: How to get it started', organized by The Green/European Free Alliance in the EP, the idea that this new instrument which was introduced by Article 11(4) TEU could be used to initiate such debates; see Joerges, C. (2011), 'The Timeliness of Direct Democracy in the EU – The Example of Nuclear Energy in the EU and the Institutionalisation of the European Citizens Initiative in the Lisbon Treaty', Contribution to the Conference 'The European Citizens' Initiative: How to get it started', Brussels, 29 June 2011, organised by The Green/European Free Alliance in the EP; the talk is available at <http://www.greenmediabox.eu/archive/2011/06/29/eci/>, accessed 15 October 2011; the written version is forthcoming in *Beijing Law Review*, 2 (3) and will be available at www.scirp.org/journal/blr.