

Global Environmental Governance and the WTO: Emerging Rules through Evolving Practice: The CBD-Bonn Guidelines

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I. GLOBAL ENVIRONMENTAL GOVERNANCE AND THE WTO

THE LINK BETWEEN trade and environmental policies is a relationship fraught with tension. Although the General Agreement on Tariffs and Trade of 1947 (GATT 47) provided for a general exception for national policies protecting human, animal and plant life, health, and the conservation of exhaustible natural resources¹ from multilateral free trade disciplines, environmental regulation has been perceived as a barrier to trade. Reinforcing this impression, the World Trade Organisation (WTO) has defended itself as not being an environmental organisation. Thus, it gave impetus to the fierce debate about 'trade and environment' during the 1990s. The reluctance of WTO entities to deal with environmental issues, as demonstrated by the debate about observer status to secretariats of Multilateral Environmental Agreements (MEAs) in WTO organs,² is seen as a blockade against the integration of environmental policies into trade policies, which caters one-sidedly for business interests. In the same vein, the establishment and the ineffective work of the Commission for Trade and Environment (CTE) have been qualified as symbolic politics.³

This chapter reiterates the description of the WTO as a mere trade organisation and the observation of non-integration. Its core is the analysis of the conflict between the Council administering the WTO Agreement on Trade-related Aspects of Intellectual Property Rights (the TRIPS Council)

¹ Art. XX GATT 47.

² S Charnovitz, 'WTO and the Doha Agenda: Reform of Trade and Environmental Mechanisms and Rules', GETS-e-version, available at <http://www.gets.org/pages/steve.charnovitz.cfm> (last visited Jan 2006).

³ See U Ehling in the volume.

and the Secretariat of the Convention on Biological Diversity (the CBD Secretariat). Ironically, it is the aim of the CBD to integrate economic and environmental policies by using economic measures for environmental policy goals. It is precisely these measures that have encountered the most outspoken criticism as not being in line with trade disciplines. It will be shown that the political stalemate that has occurred between these two organisations has not blocked the political process which took place beyond intergovernmental politics. We will see that classical forms of public international law have been superseded by new kinds of law which are to be qualified as not legally binding and which address private parties directly under the cover of an apparently intergovernmental arrangement.⁴ This evolution has taken two forms. On the one hand, a new additional type of public international law has emerged which gives credit to internationally active private entities; on the other hand, these new forms push for the relegalisation of the phenomena that have developed, both nationally and internationally.

The hypothesis is twofold. First, as trade and environmental policies are mutually intertwined, political processes dealing with this relationship can be slowed down by blockages in international organisations, but ultimately they cannot be prevented. Secondly, a blockage in one forum sometimes paradoxically accelerates developments in others. Normative conclusions can be drawn from this. In order to perceive these phenomena in the first place and to understand them subsequently, we need to turn to the observation of regimes, in this case regime complexes,⁵ and to governance theory. In the interplay of the various *fora*, political pressure is built up, the integration of environmental and economic policies occurs, and changes in the fabric of economic institutions take place. The discussion about mandatory geographical indications in patent application procedures will serve as an example (Section III). Before that, how the WTO has dealt with the challenges of environmental policy will be reviewed, and the emerging patterns will be described in broad terms (Section II). After the analysis of the CBD-TRIPS conflict, the chapter will expose the tensions in WTO governance patterns in the light of modern regime theory and global environmental governance literature (Section IV). It will close with some reflections on what the debate about environmental governance may contribute to the overall debate about the 'constitutionalisation' of the WTO and international trade policy (Section V).

⁴ Two other contributions in this volume analyse the same phenomenon: see Perez in respect of environmental regulation of industry through internal rules of international finance sector, and Pauwelyn in respect of how the WTO rules respond to these developments.

⁵ The expression was coined by K Raustiala and DG Victor, 'The Regime Complex for Plant Genetic Resources' (2004) 58 *International Organization* 277.

II. WTO ENVIRONMENTAL POLICY

The pattern of how the WTO deals with environmental policy is determined by general rules of vertical and horizontal policy segregation. Burdened with the sharp-edged reports of the GATT Panel in the *Tuna—Dolphin* dispute of 1991, which petrified the artificial and, at that time, already outmoded distinction between product and process measures, a more responsive approach came about only in 1998, when the Appellate Body issued its *Shrimps—Turtle* report.

II.1 The Principle of Vertical Policy Segregation

The conceptual centre of the trade and environment interface is Article XX GATT. It has served as a blueprint for WTO norms such as Article XIV GATS. These norms provide for an exception from international trade disciplines for protective national regulation. They serve a double function. One the one hand, they cushion regulatory sovereignty against trade disciplines. On the other, they relegate public policy from international trade organisations to the level of the nation-state. According to these norms, social regulation can be democratically embedded only at national level. The distinction between internationally convened product norms and nationally accountable process norms is rooted in this principle. However, even in the 1980s, the idea of a clear-cut division of labour between GATT and nation-states had already shifted from one of mutual exclusiveness to one of mutual supportiveness. As a result, various integration clauses were not only negotiated in the constitutive treaties of the WTO in 1994, but were also introduced into the Preamble to the WTO Agreement.⁶ A special environmental division in the WTO Secretariat and a Committee for Trade and Environment (CTE), both of which report to the Council of Ministers, were established.⁷ The Doha Agenda of 2001 reinforced the mantra of mutual supportiveness of trade and environmental policies. For a critical account of these two bodies, refer to Ulrike Ehling's chapter in this volume.

II.2 The Principle of Horizontal Policy Segregation

More important for the trade and environment debate in general, and for the relationship between TRIPS and the CBD in particular, is the principle

⁶ Preamble to the WTO Agreement; also read Arts 7 and 8 TRIPS, the Preamble to SPS, the Preamble to TBT.

⁷ Decision on Trade and Environment adopted by the Ministerial Conference in 1994: 'That there should not be, nor need be, any policy contradiction between upholding and safeguarding an open, non-discriminatory and equitable multi-lateral trading system on the one hand, and acting for the protection of the environment, and the promotion of sustainable development on the other'.

of horizontal policy segregation in international relations, which demands non-co-ordination.⁸ It serves a double function: an administrative and a normative one.

With regard to the administration of treaties, the principle requires that secretariats restrict their communication with others to a minimum, and that they do not convene integrative policies on their own. Horizontal policy integration which aims at balancing competing policy interests is supposed to be restricted to the national realm, where institutions are legitimised (at best democratically).⁹ International organisations must pursue their defined mandate and co-ordinate national policies only by a process of continuous consultation. Consequently, international organisations with different mandates hesitate to co-ordinate their policies. Thus, the argument that the WTO should adhere to its mission to promote free trade¹⁰ is fully in line with this basic principle.

Attempts to overcome this alignment have had little success. A classical instrument for facilitating information exchange is the granting of observer status.¹¹ Whereas historical UN sibling organisations to GATT, such as the World Bank and the International Monetary Fund, enjoy observer status in various WTO organs,¹² the observer status of Multilateral Environmental Organisations is both contested and limited. After a fierce debate about observer status, prior to and at the WTO Ministerial Conference in Seattle in 1999, the discussion on criteria has been mandated by Paragraph 31(ii) DD see p 477.¹³ Just four MEA Secretariats¹⁴ and the United Nations Environmental Programme (UNEP)¹⁵ were granted observer status to the CTE

⁸ T Gehring, 'Schutzstandards in der WTO?' in M Jachtenfuchs and M Knodt (eds), *Regieren in internationalen Institutionen* (Opladen: Leske & Budrich, 2002).

⁹ For a problematical argument with regard to the minor influence of national parliaments on international policy arrangements, see C Godt, 'IPRs and Environmental Protection after Cancun' in Conference Proceedings, Moving forward from Cancun, Berlin, 2003, available at <http://www.ecologic-events.de/Cat-E/en/presentations.htm>, last visited Jan 2006, at 12.

¹⁰ For an academic account of this position as exemplified in describing the tasks of the Dispute Settlement Body, see J Trachtman, 'The Domain of WTO-Dispute Resolution' (1999) 44 *Harvard International Law Journal* 333.

¹¹ Although the position of 'observer' is restricted mainly to receiving documents: see K von Moltke, 'Information Exchange and Observer Status: The World Trade Organisation and Multilateral Environmental Agreements. Paragraph 31 (ii) of the Doha Ministerial Declaration', available at www.iisd.org/pdf/2003/trade_wto_meas_21.pdf (posted 2003, last visited 1 Feb 2006). The intra-organisational alternative of the participation of CTE delegates at TRIPS, SPS and TBT sessions is even less fruitful, as delegates are mainly the same, and the informational value is limited because the CTE delegates are either diplomats or sent by trade ministries.

¹² For a complete list of observers to WTO Councils and Committees, see http://www.wto.org/english/thewto_e/igo_obs_e.htm#sps.

¹³ For an account of the status of discussions, see CTESS Summary Report TN/TE/R/7 (1 Aug 2003).

¹⁴ CBD, the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), the International Commission for the Conservation of Atlantic Tuna (ICCAT) and the United Nations Framework Convention on Climate Change (UNFCCC).

¹⁵ With regard to UNEP, it confirms the Co-operation Arrangement between WTO and UNEP from Nov. 1999 (TN/TE/S/2, 2).

Regular Session in 2001.¹⁶ *Ad hoc* special invitee status (not full observer status) to the CTE Special Sessions was granted to six MEAs¹⁷ and UNEP in February 2003.¹⁸ Applications of MEA Secretariats¹⁹ and UNEP²⁰ for observer status in other WTO bodies, such as the TRIPS Council, the SPS and TBT Committees, the Committee on Trade and Development²¹ and the Committee on Agriculture, have been denied. The reasons for denying observer status are different for each WTO body. Observer status in CTE Special Sessions was opposed by developing countries-in other bodies, for example, the TRIPS Council, it was opposed by industrialised countries.²² Thus, the question of observer status has become a bargaining chip in highlighting strategic interests which result in the sacrificing of information exchange.²³ Policy integration seems to be sacrificed to strategic intergovernmental bargaining in a manner which amounts to forum shopping.²⁴ The opportunistic move of discussions from one international organisation to the other is structurally due to the segregation principle.

With regard to normative content, the horizontal segregation principle predetermines the ultimate conflict rules between conflicting treaties. Although international law generally presumes that international treaties are consistent and non-contradictory, in cases of conflict judges turn to conflict rules such as the *lex posterior* or the *lex specialis* rule.²⁵ Both predetermine 'either or' answers and gear the trade and environmental debate. The rule of *lex posterior derogat lex anterior* tends to give WTO rules

¹⁶ With regard to this decision, the WTO repeatedly refers to Document WT/CTE/W/41/Rev. 8 of 19 Sept 2001. However, the document lists only those IO which were granted observer status. Since then, the number of MEAs among the IOs has not changed (WT/CTE/INF/6, 2004). The request of the International Tropical Timber Organisation (ITTO) is still pending. For the full (actual) list of IOs at CTE, see http://www.wto.org/english/tratop_e/envir_e/envir_background_e/c9s1_e.htm.

¹⁷ *Ibid*, plus ITTO and Montreal Protocol.

¹⁸ TN/TE/R/5. The *ad hoc* status was renewed in the following Sessions: see TN/TE/R/6, para 44 ff. (12 June 2003); TN/TE/R/7, para. 15 ff. (1 Aug. 2003). The EC advocates CTESS observer status for around 13 MEAs listed in TN/TE/S/2, para 11.

¹⁹ The CBD request is pending for the Committee on Agriculture and the TRIPS Council.

²⁰ The UNEP request is pending for the General Council and the TRIPS Council.

²¹ Here, UNEP enjoys observer status: TN/TE/S/2, 8.

²² Although the EC adapted a comparatively 'soft' stance, see European Commission, DD (see p 416) para 31(ii)-MEAs: information exchange and observer status-EC submission to the WTO, Ref. 44/02-Rev. 2 (10 Oct 2002), at 6 (para 19).

²³ The way to approximation has turned out to be stony. The CBD has repeatedly invited the WTO to participate and engage in information exchange. Whatever the reasons have been (may also be the participation of WTO employees), delegates to the 7th CBD Conference of Parties (COP) in Kuala Lumpur, 2004, uncomfortably felt that 'trade permeates biodiversity talks': see BRIDGES Trade BioRes, Vol. 4 No. 3, 20 Feb 2004.

²⁴ C Godt, n 9 above, and Raustiala and Victor n 5 above, at 299.

²⁵ For a critical discussion, see C Godt, 'International Economic and Environmental Law—Exercises in Untangling the Dogmatic Conundrum' in L Kraemer (ed), *Recht und Um-Welt. Essays in Honour of Prof. Dr. Gerd Winter* (Groningen: Europa Law Publishing, 2003), at 238 ff.; J Pauwelyn, 'The Nature of WTO Obligations', *Jean Monnet Working Papers* 1/2002, at 71.

priority over environmental conventions.²⁶ Its counterpart is the *lex specialis derogat lex generalis* rule, which usually advocates the priority of the MEAs.²⁷ Hitherto, the Dispute Settlement Body has not yet ruled explicitly on the WTO-MEA relationship.

Due to this fundamental conflict, the CTE Regular and Special Sessions are mandated to clarify the relationship between the WTO Agreements and the MEAs. However, negotiations have been diffuse. Several competing proposals were submitted.²⁸ Unexpectedly, the UNEP argued against a clear-cut rule and favoured a case-by-case approach.²⁹ Some advocated for the inclusion of the MEAs in Article XX GATT³⁰—leaving the relationship with the other WTO Treaties such as SPS, TBT, TRIPS and GATS unresolved. Others argued in favour of a general clause modelled on NAFTA.³¹ Consensus is not within reach.³²

II.3 The WTO Dispute Settlement

The WTO Dispute Settlement deserves special consideration as its rulings calibrate the delimitations of horizontal and vertical segregation. As long as the GATT panel was in charge, the rulings were still narrowly determined by the concepts of horizontal and vertical segregation. It is in this concept that the fundamental distinction between process and production measures (PPMs) and product rules is rooted. PPMs are not to be governed by trade rules. They deal only with effects inside a given sovereign country. Product rules, however, 'travel with' the product across borders and affect

²⁶ As TM Spranger explicitly argued for the relation of TRIPS and CBD in 'Der Zugriff auf pflanzliche Genressourcen im internationalen Regelungsgeflecht' (2002) 40 *Archiv des Voelkerrechts* 64 at 78.

²⁷ For an early account of this argument, see J Cameron and J Robinson, 'The Use of Trade Provisions in International Environmental Agreements and Their Compatibility with the GATT' (1991) 2 *Yearbook of International Environmental Law* 3.

²⁸ For an academic discussion, see P-T Stoll, 'How to Overcome the Dichotomy Between WTO-Rules and MEAs?' (2003) 63 *Zeitschrift fuer auslaendisches und oeffentliches Recht und Voelkerrecht* 439.

²⁹ WT/CTE/W/213 (12 June 2002).

³⁰ Guided by the principle of mutual supportiveness: see the Submission by the European Communities, TN/TE/W/39 (24 Mar 2004).

³¹ I.e., the submission of New Zealand (WT/CTE/W/20). The introduction of a clause similar to Art 104 NAFTA is proposed, applicable when both parties are contracting parties to the MEA in question.

³² Charnovitz comments: 'In conclusion, it is not possible to imagine the WTO agreeing to a broader MEA mandate now, or at the end of the [Doha] Round. Considering the issue in the round is the wrong forum, with wrong negotiation dynamics. Writing articles about the problem or holding new symposia isn't going to make a difference': S Charnovitz, 'Expanding the MEA Mandate in the Doha Agenda', GETS-e-version (2003), available at <http://www.gets.org/pages/steve.charnovitz.cfm> (last visited Jan 2006). Charnovitz proposed a procedural approach: before a dispute involving MEA regulation may be carried to the DSU, the specific dispute settlement in the MEA, if it exists, must be exhausted. The DSU panel shall seek the advice of the Parties to the MEA upon request before interpreting the law and shall secure necessary expertise modelled on para 4 GATS Annex on Financial Services.

importing states. Thus, on the basis of the sovereign right of states to regulate, product rules underlie multinational trade disciplines. The *Tuna-Dolphin* rulings³³ were at the time perceived as strengthening the PPM distinction as the dominant 'conflict rule' for these diagonal conflicts³⁴—and asserting the priority of international trade law over national social regulations.

Today, these rulings are interpreted in the light of the *Shrimps-Turtle* report of the WTO Appellate Body³⁵ which broke with this clear-cut distinction. The discussion about trade and environment is less determined by the allocation decision on which rule prevails than by what the measures are that determine legitimacy.³⁶ Comparable to the yardsticks spelled out in the *Hormones* case in the food sector,³⁷ the *Shrimps-Turtle* ruling smoothed crude public international conflict rules and elaborated on the value of both multilateralism and sovereignty. By interpreting the *chapeau* of Article XX GATT, the Appellate Body encouraged members to engage seriously in negotiations with trading partners before instituting regulations with extraterritorial, trade-restrictive effects. Three consequences result. All touch on the legitimacy of multilateral negotiations. First, the likelihood that Article XX GATT will apply is greater in a case where a national measure complies with a Multilateral Environmental Agreement than where it is unilaterally applied and is not multilaterally convened.³⁸ Secondly, even if there is no agreement in the end, the serious attempt to reach consensus may give the national environmental measure priority over the trade verdict—as the norm evidently was not intended to be protectionist. Thirdly, although the *Shrimps-Turtle* report is ambiguous, the wording suggests that the Appellate Body may regard a national environmental

³³ US Restrictions on Imports of Tuna, 3 Sept. 1991, not adopted, [1991] ILM 1594; US Restrictions on Imports of Tuna, 16 June 1994, not adapted, GATT Doc DS29/R and ILM [1994], 842. For a concise summary and analysis, see N Notario, *Judicial Approaches to Trade and Environment: The EC and the WTO* (London: Cameron & May, 2003), at 143-151, esp. at 144.

³⁴ The term 'diagonal conflicts' was coined by C Joerges, 'The Impact of European Integration on Private Law: Reductionist Perspectives, True Conflicts and a New Constitutional Perspective' (1997) 3 *European Law Journal* 378, and C. Schmid, 'Vertical and Diagonal Conflicts in the Europeanisation Process' in C Joerges and O Gerstenberg (eds), *Private Governance, Democratic Constitutionalism and Supranationalism* (Luxemburg: Office for Official Publications of the EC, 1998), 185.

³⁵ *United States—Import Prohibition of Certain Shrimp and Shrimp Products*, Appellate Body, WT/DS 58/AB/R (12 Oct 1998), interpreting the *chapeau* of Art XX GATT; for a concise description and further literature, see N Notario, (n 33 above), at 187 ff.

³⁶ See D Driesen, 'What is Free Trade? The Real Issue behind the Trade and Environment Debate' (2001) 41 *Virginia Journal of International Law* 270, at 308.

³⁷ WT/DS 26 und 48/AB/R (16 Jan 1998), for further analysis see C Godt, 'Der Bericht des Appellate Body der WTO zum EG-Einfuhrverbot von Hormonfleisch—Regulierung im Weltmarkt' [1998] *Europaeisches Wirtschafts- und Steuerrecht* 202.

³⁸ D Wirth, 'Multilateral Environmental Agreements in the Trade and Environment Debate, Annex to the Submission of the European Communities to the CTE' (TN/TE/W/39, 24 Mar 2004), leaving the problem of non-parties aside.

measure that is consistent with multilaterally agreed environmental standards as trade law-consistent even if the affected country is not a member of the environmental agreement in question.³⁹

Moreover, with regard to the concept of proportionality, the Appellate Body took a step forward. On the basis of the *Hormones* case,⁴⁰ it refined the concept by dropping the measure of least-restrictedness in respect of Article XX(g) GATT (exhaustible natural resources).⁴¹ The Appellate Body clarified that it was ready to devise ways to use its 'creative room for manoeuvre'⁴² and better to define the relationship between the WTO Agreement and environmental norms-without falling back on a bipolar scheme.⁴³

II.4 Conclusion

Overall, the pattern of WTO environmental governance can still not be characterised as integrative. WTO bodies are reluctant to deal with environmental policies. Members fence off the WTO either by referring to national sovereignty or by deviating discussions to other *fora* as being 'more competent'.⁴⁴ Even if the Dispute Settlement Bodies have become more responsive to environmental concerns, the integration of trade and environmental policies—in the sense that trade policies are questioned in the light of their environmental effects and that integrative policies are deliberated—has not come about in the WTO.

III. INTERNATIONAL GOVERNANCE OF THE TRANSFER OF GENETIC RESOURCES

However, inactivity in one international organisation does not dissolve pressing problems. The lack of international integrative policies merely

³⁹ J Scott, 'International Trade and Environmental Governance: Relating Rules (and Standards) in the EU and the WTO' (2004) 15 *European Journal International Law* 307, at 346 ff.

⁴⁰ J Scott, *On Kith and Kine (and crustaceans): Trade and Environment in the EU and WTO*, *Harvard Jean Monnet Working Paper* 3/1999, available at <http://www.law.harvard.edu/Programs/JeanMonnet/papers/99/990301.html>, at 13; G Godt, n 37 above, at 207.

⁴¹ See Notario, n 33 above, at 242.

⁴² Scott, n 39 above, at 346 ff.

⁴³ *Ibid.* *Amicus curiae* briefs may become instrumental in qualifying a national measure as either being protectionist or environmental in nature in the future. In the *Shrimps-Turtle* Appellate Body Report, n 35 above, they were first held to be legitimately considered by the Appellate Body autonomously—without being submitted by one of the parties. In a wider sense, the question of who may bring facts legitimately to the attention of the Dispute Settlement Body may eventually change the nature of the actual procedure: see R Howse, 'Membership and its Privileges: the WTO, Civil Society, and the *Amicus* Brief Controversy' (2003) 9 *European Law Journal* 496.

⁴⁴ For a critical account of the sovereignty argument, see K Raustiala, 'Rethinking the Sovereignty Debate in International Economic Law' (2003) 6 *Journal of International Economic Law* 841; for a critical account of the regulation to other *fora*, see Raustiala and Victor, n 5 above, for the latter.

shifts the centre of activity back to nation-states and private actors. As regime theory has taught us, practical solutions are invented which reconcile economic and environmental policies.⁴⁵ One example of this is the international transfer of genetic and biological material.

III.1 The TRIPS-CBD Conflict

The issue of integrating trade and the environment in the international transfer of biological material became crystallised as a question of inconsistency between the TRIPS and the CBD.⁴⁶ TRIPS sets minimum standards for national patent regulation. It is part of the constitutive body of multilateral agreements that a country signs when acceding to the WTO. The CBD was the only legally binding instrument which countries had agreed upon at the UN Conference on Environment and Development in Rio (UNCED) in 1992. It is a convention with almost global membership. 188 countries have signed it, as compared to 147 for the WTO and 191 for the UN. It was amended by the Cartagena Protocol on Biosafety in 2000 and the Bonn Guidelines in 2002. However, one important country has not yet ratified the CBD: the US.⁴⁷ Initially, the US even refused to sign it—arguing that the CBD violates general principles of patent law.⁴⁸ After TRIPS came into force, the dominant argument shifted to the dogmatic argument that TRIPS would override the CBD.

In contrast to its name, the CBD is not a pure convention for environmental protection. The global loss of species propelled activities of both economic and environmental communities. Without this unusual coalition, the CBD would not have come into being. As an offspring of the UNCED Conference, the convention aims at 'sustainable development', geared to the integration of environmental and economic policies. It builds on the realisation of their mutual dependency and instrumentalises both: economic instruments for environmental policy goals and, *vice versa*, environmental

⁴⁵ The following are ground-breaking: RO Koehane, 'The Demand for International Regimes' (1982) 36 *International Organizations* 3, and S Krasner (ed), *International Regimes* (Ithaca, NY: Cornell UP, 1983). For an overview of environmental regimes, see T Gehring and S Oberthuer, *Internationale Umweltregime* (Opladen: Leske & Budrich, 1997).

⁴⁶ Although in most accounts, the conflict is reduced to a redistribution issue. The environmental dimension is omitted. For an analysis of these two dimensions, see C Godt, 'Von der Biopiraterie zum Biodiversitätsregime—Die sog. Bonner Leitlinien als Zwischenschritt zu einem CBD-Regime ueber Zugang und Vorteilsausgleich' [2004] *Zeitschrift fuer Umweltrecht* 202 at 208 ff.

⁴⁷ Neither, e.g., did Thailand, thus giving rise to the ubiquitous debate on the relation between WTO law, MEAs and national regulation on countries that are not members of MEAs: see Scott, n 39 above.

⁴⁸ President Bush stated on 12 June 1992 that the treaty 'threatened to retard biotechnology and undermine the protection of ideas': AE Boyle, 'The Rio Convention on Biological Diversity' in M Bowman and C Redgewell (eds), *International Law and the Conservation of Biological Diversity* (London: The Hague, Boston: Kluwer, 1996), 33 at 36. Under the Clinton Administration, the CBD was signed on 4 June 1993.

protection for economic prosperity—an uneasy marriage. A central contentious issue is the benefit-sharing duty. As an overarching goal, it is spelled out in Article 1 CBD, and as a concrete duty in Article 15(7) CBD. It demands that each contracting party take measures ‘with the aim of sharing in a fair and equitable way the results of research and development and the benefits arising from the commercial and other utilisation of genetic resources’. The clause rests on the economic rationale that only a person who has an incentive to protect the environment will do so.⁴⁹

In the beginning, the main argument was about the inconsistencies between these two treaties. The developing countries claimed that the CBD prescribed benefit-sharing which resulted from the use of biological resources. As the TRIPS Agreement allocates all profits to the holder of the property right, they argued that it violated the CBD.⁵⁰ Consequently, they demanded that it be amended.⁵¹ Conversely, the industrialised countries claimed that the CBD violated the TRIPS Agreement for the same reason.⁵² Distributive policies would not be in line with this mission. From this standpoint, the industrialised countries opposed rules which would provide for the retraceability of material as being solely distributive, such as the disclosure rule in patent application procedures.⁵³ They would violate Articles 27, 29 and 30 TRIPS, because the TRIPS Agreement ruled out additional patentability requirements.⁵⁴ This conflict blocked deliberations for years in various *fora*, including the CTE, the TRIPS Council, the CBD and the World Intellectual Property Organisation.⁵⁵ Even high-level negotiations about this question at the WTO Ministerial Meeting in Hong Kong in December 2005 could not bring about any approximation.⁵⁶

⁴⁹ Thus, the CBD is not confined to redistributive purposes: see Godt, n 46 above, at 208.

⁵⁰ This position has been repeated ever since; see the submission to the TRIPS Council of Brazil, China, Cuba, Dominican Republic, Ecuador, India, Pakistan, Thailand, Venezuela, Zambia and Zimbabwe, IP/C/W/356 (24 June 2002).

⁵¹ A demand that became channelled into the claim to amend either Art 27 or Art 30 TRIPS with a mandatory rule to disclose source and/or origin as a patentability requirement.

⁵² Academically spelled out by J Straus, ‘Biodiversity and Intellectual Property’ (1998) 9 *AIPPI Yearbook*, 99, and Spranger, n 26 above, at 75 ff.

⁵³ For an analysis of its twofold function, see Godt, n 46 above, at 208 ff. However, it was the fear of the US that the developing countries would use the CBD to circumvent their Uruguay Round commitments; see K Raustiala, ‘Domestic Institutions and International Regulatory Cooperation—Comparative Responses to the Convention on Biological Diversity’ (1997) 49 *World Politics* 482 at 491.

⁵⁴ NP d. Carvalho, ‘Requiring Disclosure of the Origin of Genetic Resources and Prior Informed Consent in Patent Applications without Infringing the TRIPS Agreement: The Problem and the Solution’ (2000) 2 *Washington University Journal of Law and Policy* 371; NP d. Carvalho, ‘From the Shaman’s Hut to the Patent Office: In Search of Effective Protection for Traditional Knowledge’ in C McManis (ed), *Proceedings of the Conference on Biodiversity, Biotechnology and the Protection of Traditional Knowledge* (St. Louis, Miss: 2003): available at <http://law.wustl.edu/centeris/Confpapers/index.html> (last visited Jan 2006).

⁵⁵ Godt, n 9, above.

⁵⁶ Discussions continue in the CBD; a draft proposal on an Access and Benefit-Sharing Regime was tabled at a meeting of the CBD Ad Hoc Open-Ended Working Group on Access

III.2 Bonn Guidelines of 2002

However, irrespectively of this stalemate, things did develop in practice. Various industries active in the development of cosmetics, biotechnology, food, pharmaceuticals and crops are not autarkic but depend on access to genetic and biological resources in biodiversity-rich countries. After national sovereignty over genetic resources was internationally acknowledged by the CBD in 1992, biodiversity-rich countries issued regulations making access conditional on permits and benefit-sharing. The stalemate in the TRIPS Council instigated strict access regulation in biodiversity-rich countries (mainly in the developing world), thus impeding bio-prospecting.⁵⁷ At the same time, industry, institutions and jurisdictions in biodiversity-rich countries started to experiment with benefit-sharing arrangements.⁵⁸ Notwithstanding the allegations of developed countries that mandatory disclosure rules were in violation of TRIPS, some developing countries instituted these rules as patentability conditions.⁵⁹ Industry embarked on contractual arrangements.⁶⁰ Ironically, the US National Institute of Health (NIH) became a forerunner in supporting complex contractual experiments which aimed at using genetic resources and attributing benefits to the country and to the local communities where the resource was found.⁶¹ A typical feature of these multipolar contracts is the inclusion of both, commercial and non-commercial entities such as research institutions, universities and botanical

and Benefit Sharing in Granada, Spain, 1 Feb 2006. The text was sent to the 8th Conference of Parties to be held in Curitiba, Brazil, in Mar 2006.

⁵⁷ G Henne *et al.*, ‘Access and Benefit-Sharing (ABS): An Instrument for Poverty Alleviation—Proposals for an International ABS Regime’ (Bonn: German Development Institute, 2003).

⁵⁸ A concise collection of case studies is to be found at <http://www.biodiv.org/programmes/socio-eco/benefit/cs.aspx>.

⁵⁹ See, for the examples of Costa Rica, Peru, and Bolivia, CM Correa, ‘Establishing a Disclosure of Origin Obligation in the TRIPS Agreement’, Buenos Aires, Quaker United Nations Office (2003), available at www.quno.org, also, in a moderate form in Denmark: for an overview, see C Godt, *Eigentum an Information—Der Funktionswandel des Patentschutzes in der Wissenschaftsgesellschaft—Die genetische Information als Beispiel* (Tbingen: Mohr Siebeck, 2006, forthcoming), Chap 5.

⁶⁰ An overview of various industrial branches provided by K ten Kate and SA Laird, *The Commercial Use of Biodiversity* (London: Earthscan, 2000). For different varieties of disclosure rules, see Correa, above n 59.

⁶¹ The Programme launched the so-called International Co-operative Biodiversity Groups (ICBG). An introduction is provided by JP Rosenthal, ‘Equitable Sharing of Biodiversity Benefits: Agreements on Genetic Resources’ in OECD (ed), *Investing in Biological Diversity—The Cairns Conference*, (Paris: OECD, 1997); for a comprehensive overview, see <http://www.fic.nih.gov/programs/icbg.html> (last visited Sept 2004). The US National Cancer Institute embodied a comparable policy of benefit-sharing: K ten Kate and A Wells ‘The Access and Benefit-Sharing Policies of the US-National Cancer Institute: A Comparative account of the discovery and development of the Drugs Canaloide and Topocetan’ (1998, available at <http://www.biodiv.org/doc/case-studies/abs/cs-abs-nci.pdf> (last visited Jan 2006)). For a comparative analysis of US and UK domestic biodiversity politics, see Raustiala, n 53 above. He highlights the fact that US actors and US NGOs were instrumental in starting CBD negotiations in the first place.

gardens. The inclusion of commercial partners is to ensure actual and future benefit-sharing. 'Intermediaries', such as universities and research institutions, have an important structural function as a buffer zone between competing interests. Their task is to filter and secure information about where and with which method the resource was found (i.e. by random screening or by conveyed traditional knowledge), and to provide a shield against unauthorised disclosure of information that is deemed to be sacred. The ultimate goal of these arrangements is to channel benefits back into the communities. However, they also provide a reasonable basis for the calculation of future shares and (by discriminating between different knowledge types) for preventing commercial partners from escaping into a neighbouring country, thus foregoing their contractual duties. With the passing of time, access permits and benefit-sharing have become a standard for industrial and academic bio-prospectors. Field researchers risk future funding, their reputation and the commercial development of their research results; industrial partners, on their part, fear non-patentability and being publicly blamed for bio-piracy if they do not adhere to their moral obligation.

These developments put pressure on governments to come up with rules which could contain potential free-riders and ultimately improve access.⁶² Rules were sought that could provide for more transparency and build up consensus about equity in benefit-sharing contracts. Thus, the CBD invited 'case studies', and, in 1998, a Panel of Experts on Access and Benefit-Sharing was set up. This body finally submitted draft guidelines which were presented in Bonn in November 2001 and approved by the CBD Conference of Parties as the 'Bonn Guidelines' in 2002.⁶³ On the one hand, they provide guidance for drafting access regulation. For example, one national focal point is to be established from which a bio-prospector will be provided with all relevant information,⁶⁴ and the rules of access have to be simple and transparent.⁶⁵ On the other hand, the Bonn Guidelines provide guidance for drafting benefit-sharing arrangements. Addressees are not only governments, but 'providers' and 'recipients' in general—broken down into provider and recipient states, and private providers and recipients.⁶⁶ Part IV of the Bonn Guidelines guide contract parties through the process. They must first devise a mutual, overarching strategy and then define their intermediate goals.⁶⁷ A list of principles is to guide contracting partners in drafting their texts and in addressing their mutual or concurrent interests.⁶⁸ This

⁶² Regime Building Through Implementation': see Raustiala and Victor, n 5 above, at 302.
⁶³ CBD-COP-6 decision No. VI/24 (UNEP/CBD/COP/6/20, 253 ff). For in-depth description and analysis, see Godt, n 46 above.

⁶⁴ Nr. 13 Bonn Guidelines, Decision VI/24.

⁶⁵ Nr. 16 a Bonn Guidelines.

⁶⁶ Nr. 16 a-d Bonn Guidelines.

⁶⁷ Part IV. A and B Bonn Guidelines.

⁶⁸ Nr. 42-50 Bonn Guidelines.

includes a concise check-list of contract clauses for benefit-sharing arrangements that condense prior experiences.⁶⁹ They also call for compliance with environmental access rules as a precondition to patentability—thus combining environmental and economic policy instruments.⁷⁰ The Bonn Guidelines are perceived as a first step to a more consolidated regime. In September 2002, the World Summit on Sustainable Development⁷¹ called on the CBD to create an 'international regime'—a call which the parties to the CBD Conference of Parties (COP) followed by establishing a working group in February 2004 mandating it with negotiations for a draft proposal,⁷² which it submitted in February 2006.

III.3 Emerging Rules through Evolving Practice

Whether a legally binding protocol on the transfer of genetic resources will ultimately be agreed upon is an open question for now. Whereas the atmosphere in the TRIPS Council has cooled down, tensions have risen at CBD meetings where discussions have become more diffuse. The change of atmosphere in the TRIPS Council may be partly due to a change in the position of the EC,⁷³ and/or partly due to a proceduralisation of discussions as the mega-diverse countries transformed their former demand of the 'tripod'⁷⁴ into a 'checklist'.⁷⁵ As the CBD moves to tackle technical questions, questions on benefit-sharing still seem to be very much contested.⁷⁶

⁶⁹ Nr. 44-45 Bonn Guidelines.

⁷⁰ Nr. 16 b (iv) Bonn Guidelines, see examples for national legislation in Correa, n 59 above, and CM Correa, 'The Access Regime and the Implementation of the FAO International Treaty on Plant Genetic Resources for Food and Agriculture in the Andean Group Countries' (2003) 6 *Journal of World Intellectual Property* 795.

⁷¹ This summit was essentially a global meeting of national environmental ministers, see http://www.un.org/jsummit/html/basic_info/basicinfo.html.

⁷² Decision VII/19/D, 7th Conference of Parties to the CBD (Feb. 2004), UNEP/CBD/COP/VII/21.

⁷³ The EC deems disclosure rules 'possible': COM(2003)821 final of 23 Dec 2003 and its subsequent press release of 7 Jan 2004 (IP/04/21).

⁷⁴ (1) Disclosure of source and origin, (2) prior informed consent by providers and (3) a fair and equitable benefit sharing arrangement, submission to the TRIPS Council of Brazil, India, China, Cuba, Dominican Republic, Ecuador, Pakistan, Thailand, Venezuela, Zambia and Zimbabwe, IP/C/356, 24 June 2002.

⁷⁵ IP/C/W/420 and IP/C/W/420/Add. 1 of 2 Mar 2004. The single reports were submitted in Sept 2004 (disclosure of source and origin), Dec 2004 (prior informed consent) and Mar 2005 (benefit-sharing).

⁷⁶ What is key to the disclosure rule, the provider person or the country? Which legal effects shall the rule imply (only reduced patent application fees in case of disclosure or denial of the issue of the patent in case of non-disclosure)? Does the duty to share benefits (also arise in respect of derivatives)? The tense atmosphere is mirrored by the summary of a preparatory workshop in Paris (Second Paris Roundtable on Practicality, Feasibility, and Cost of Certificates of Origin, 9 and 10 Nov 2004, available at <http://www.iddri.org/iddri/telecharge/biodiv/workshop-abs.pdf>) and the debates on the 3rd Meeting of the CBD Workgroup on Access and Benefit-Sharing in Bangkok, Feb 2005: see Report UNEP/CBD/WG-ABS/3/7 of 3 Mar 2005.

Discussions revolve around certification schemes. However, these discussions are not necessarily connected with the 'tripod' claim, as this is usually considered to be patentability-related.⁷⁷ Nor has the relationship been cleared between the redistributive and the environmental function of benefit-sharing.⁷⁸

However, whatever the outcome will be, it seems that benefit-sharing arrangements have made their way into practice. Patents are no longer the key to the remuneration discourse and have become just one form of benefit-sharing. Benefit-sharing as such has become a social norm in the Weberian sense that bio-prospection is legitimate ('deserves recognition') only when 'prior informed consent' was asked for and was provided (concurrently as a state permit and/or a private consent by indigenous communities) and a benefit-sharing arrangement was made.

IV. PATTERNS OF ENVIRONMENTAL GOVERNANCE

These findings are consistent with various streams of thoughts in political science. In the next section, they will be reviewed in brief.

IV.1 Regime-building

First, these findings seem consistent with regime theory. Regime theory seeks to reach beyond the clear-cut instruments of public international law. Krasner defines regimes as 'implicit or explicit principles, norms, rules, and decision-making procedures around which actors' expectations converge'.⁷⁹ To regime theorists, it is 'not prescription but prediction' that makes regime-building emerge.⁸⁰ The dictum pinpoints the relative importance of legally binding law and principles in international policy-making, and insinuates that the ideas and the vision of key players can be more important than rules and principles. It also implies that open adaptive processes of rule-making may be more solid, as the system may more easily react to the

⁷⁷ S Louafi and J-F Morin, 'Certificates of Origin, Transboundary Movements of Genetic Resources, and International Trade Law' (2005) 5 *Les Documents de Travail de l'Iddre*, tackle certificates only as import requirements; L Glowka, 'Towards a Certification System for Bio-prospecting Activities' [2001] *Schweizer Staatssekretariat fuer Wirtschaft*, understands certificates as certification of bioprospectors: available at <http://www.biodiv.org/doc/meetings/cop/cop-06/other/cop-06-ch-rpt-en.pdf>.

⁷⁸ See as just one example the account of the environmental NGO Institut du Développement Durable et des Relations Internationales IDDR, by S Louafi and Morin, n 77 above, who (in contrast to the authors' opinions) deny the environmental function of certificates and question their WTO compliance.

⁷⁹ Krasner, n 45 above, at 2.

⁸⁰ J Brunne and SJ Toope, 'Environmental Security and Freshwater Resources: Ecosystem Regime Building' (1997) 91 *American Journal of International Law* 26 at 30.

changes and adapt to the developments that emerge and deserve to be reinforced. Two aspects seem to converge in regime theory.

On the one hand, regimes integrate various policies that typically cut across the mandates of various 'single issue' organisations, thus giving rise to the more recent term of 'Open-Architecture Integrated Governance'.⁸¹ The formation of a regime is typically accompanied by innovative strategies. Most prominently, the consensus principle, both as a key principle to international negotiations and as a major instrument to obstruct policies, is complemented by majority rules,⁸² time-lines, drop-out options and differentiated duties. Political science has identified issue density as the key for the development of international regimes.⁸³ With regard to its cross-cutting nature, the CBD has been described as a 'regime' from very early on.⁸⁴ A more recent account focussing on the organisations involved coined the term 'regime complex',⁸⁵ which describes more accurately the international landscape in which the CBD talks take place.

On the other hand, regime theory points to institutional changes that are geared by normative changes—and *vice versa*. By now, there is social consensus that benefit-sharing is a duty when using genetic resources. The prevailing notion is that the duty primarily arises when the resource was found in a country that is not the one where the resource is used or marketed (transnational transfer). The Bonn Guidelines react to this change in social norms, although they do not yet amount to political consensus and governments still struggle to formulate rules. Yet, in their subtlety, the Bonn Guidelines overcome the stalemate between the TRIPS Council and the CBD.

⁸¹ FM Abbott, 'Distributed Governance at the WTO-WIPO: An Evolving Model for Open-Architecture Integrated Governance' in MCEJ Bronckers and R Quick (eds), *New Directions in International Law-Essays in Honour of John H Jackson*, (The Hague, London & Boston: Kluwer, 2002), at 15; M Jachtenfuchs and M Knodt (eds), *Regieren in internationalen Institutionen* (Opladen: Leske & Budrich, 2002); A-M Slaughter, 'Networks of Governments' in M Byers (ed), *The Role of International Law in International Politics* (Oxford: OUP, 2000), at 177.

⁸² E.g. Art 2 (9) of the Montreal Protocol permits the adoption of decisions on the basis of a two-thirds majority—and is binding on all parties.

⁸³ Koehane, n 42 above; JG Ruggie, 'International Regimes, Transactions, and Change: Embedded Liberalism in the Postwar Economic Order' (1982) 36 *International Organisation* 379; Krasner, n 4 above, OR Young, *International Co-operation: Building Regimes for Natural Resource and Environment* (Ithaca, NY: Cornell UP, 1989); T Gehring, *Dynamic International Regimes* (Frankfurt aM: Lang, 1994); Gehring and Oberth, n 45 above.

⁸⁴ For prior accounts of the regime interpretation of the CBD, see KG Rosendal, *The Convention on Biological Diversity and Developing Countries* (Dordrecht/Boston & London: Kluwer, 2000), at 141 ff, G Henne and S Fakir, 'The Regime Building of the Convention on Biological Diversity on the Road of Nairobi' (1999) 3 *Max Planck UN Year Book* 315; for a regime interpretation of the CBD-TRIPS interface, see Raustiala and Victor, n 5 above, at 295.

⁸⁵ Ibid; earlier described as 'linkage-bargain diplomacy' by MP Ryan, 'The Function-Specific and Linkage-Bargain Diplomacy of International Intellectual Property Lawmaking' (1998) 19 *University of Pennsylvania Journal of International Law* 535.

IV.2 Global Governance

The second stream of thought with which the Bonn Guidelines seem to be consistent is that governance literature which revolves around policy-making is not confined to governments. Schuppert describes governance theory as a modern strand of regulation theory. He understands it as a reaction to the interventionist failure and as the development of policy networks and the inclusion of private actors.⁸⁶ Governance arrangements react to public policy needs without resorting to regulation. They gain legitimacy by effectively integrating diverse and competing interests, bolstered by participation and transparency. Governance regimes have responded to both regulatory and democratic failures,⁸⁷ and the social functionality of markets.⁸⁸ However, one important insight of modern governance theory seems to be that these new inclusive governance arrangements cannot do without law. As much as they thrive to escape the traditional set-up of legal regulation, they still depend on those functions of law that stabilise communication and provide legitimacy, thus contributing to re-legalisation.

In this sense, the Bonn Guidelines provide a prime example of a governance regime in both aspects. First, they not only address governments. They stick to the intergovernmental paradigm only as far as access regulation is concerned. However, their policy centres are contract principles and clauses that shape the normative idea about the equity of benefit-sharing arrangements. The Bonn Guidelines reach beyond governments to private actors and are geared to governing contracts, both private–public relationships and contracts between private actors. Thus, the Bonn Guidelines react to the modern private–public mix that has been described as being at the centre of the turn from government to governance. Secondly, as much as they contribute to forming these new arrangements beyond traditional law, they also exert pressure on nation states to conceive an internationally binding regime and to provide effective national regulation in support of the newly emerging governance arrangements.

IV.3 Global Environmental Governance

A subset of the global governance theory is the literature that deals with the special features of global environmental governance. It revolves around two centres: the public-good character of ‘the environment’ and its cross-cutting nature. Public goods are internationalistic in nature and only inefficiently dealt with by territorial regulation. Some of them are ‘public

⁸⁶ GF Schuppert, *Governance im Spiegel der Wissenschaftsdisziplinen* (Berlin: Wissenschaftskolleg, Typescript, 2004), at 8.

⁸⁷ J Bohmann, ‘Constitution Making and Democratic Innovation’ (2003) 3 *European Journal of Political Theory* 315 at 316; see, also, Schuppert, n 86 above.

⁸⁸ C Joerges in this volume.

goods’ in the very sense of the term’s meaning in economic theory, such as the ozone layer, the oceans and their beds, the Arctic and Antarctica.⁸⁹ Others are situated inside territorial boundaries, although their conservation depends on international co-operation, such as the protection of migratory species or the regulation of the trade in hazardous wastes and substances. Because of its cross-cutting nature, which makes the assignment of regulation to just one organisation difficult, the principle of horizontal segregation is put into question. This is especially the case for trade measures and economic incentives which integrate environmental and economic policies. As the problem cannot be territorially confined, sovereignty and, thus, the mode of horizontal policy segregation are put into question. These features challenge traditional concepts of vertical and horizontal order in policy-making. And so does the CBD.

(a) Policy Integration I: Trade Measures in MEAs

As Multilateral Environmental Agreements (MEAs) deal with ‘international’ problems, they typically enshrine instruments that react to international activities such as cross-border trade.⁹⁰ The oldest example is CITES,⁹¹ which contains an outright ban on trade in listed species. A more modern version is the Basle Convention,⁹² which establishes a closed transfer regime between member states. A trade measure in the CBD is Article 8(h), which calls on member states ‘to prevent the introduction of alien species which threaten ecosystems’. It echoes the import bans on protected species in CITES. The relationships of these trade restrictions and GATT disciplines have always been fraught with tension. They challenge the very idea of horizontal policy segregation. However, there seems to be consensus that they are functional and justified in pursuing a goal which concurs with trade liberalisation. Implementation and adjudication rest with the MEA secretariats and the International Court of Justice.⁹³ Despite the endless talk in WTO committees about the relationship between WTO law and

⁸⁹ A synonym is the common heritage of mankind; see, e.g., K Baslar, *The Concept of Common Heritage of Mankind* (The Hague, London & Boston: Martinus Nijhoff, 1998); and M Jagels-Sprenger, ‘Der Grundsatz ‘gemeinsames Erbe der Menschheit’ im internationalen Vertragsrecht zum Schutz der natrlichen Ressourcen, Diskussionspapier 5/91 (Bremen: Zentrum fuer Europaeische Rechtspolitik an der Universitaet Bremen, 1991).

⁹⁰ See the Matrix on Trade Measures Pursuant to Selected Multilateral Environmental Agreements, available at http://www.wto.org/english/tratop_e/envir_e/mea_database_e.htm (2003).

⁹¹ Convention on International Trade in Endangered Species of Wild Flora and Fauna of 1973, available at www.cites.org/eng/disc/text.shtml.

⁹² Basle Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal of 1989, available at www.basel.int/text/documents.html.

⁹³ Note, however, for open questions in respect to the dispute settlement, see G Winter, ‘The GATT and Environmental Protection: Problems of Construction’ (2003) 15 *Environmental Law Journal* 113 at 137.

MEAs,⁹⁴ legally, their priority on trade disciplines has not been challenged. Even though there is as yet no consensus on the technical inclusion as a 'window' or 'waiver', it cannot be argued that trade measures are not accepted as integrated environmental policy instruments.

(b) Policy Integration II: Economic Incentives as Environmental Policy Instruments

The principle of horizontal policy segregation is equally challenged by the mirror-image constellation of trade-enhancing instruments for environmental policy purposes. A sibling to the CBD mechanism is trading in greenhouse gas allowances.⁹⁵ Its system is administered by the respective environmental administrations. Here, too, compatibility with GATT principles has been questioned. However, its consistency with GATT has not been seriously put into question. These evolutions have made it clear that environmental policy is intrinsically intertwined with economic policies and cannot be separated from them.

The CBD created property rights in genetic resources and traditional knowledge for the sake of better management of the environment. Its goal is to institute a contract-based transfer of these goods, thus making benefit-sharing possible as a means of providing people with incentives for conserving natural resources. The contract-based transfer of resources was functionally conceived so as to achieve both benefit-sharing and conservation.

(c) Sovereignty Revisited

Environmental cross-cutting policies are as challenging to the principle of horizontal segregation as the public-good character is to the traditional concepts of sovereignty. Accordingly, any country must regulate its own problems inside its own territory. The boundaries of this concept have been tackled by various MEAs, most prominently by the Kyoto and the Montreal Protocols.⁹⁶ The CBD continues in the same vein. It protects biological diversity as a common concern of humankind,⁹⁷ while at the same time

⁹⁴ U Ehling, 'CTE-Agenda Zusammenfassung Item 1 & 5: "The Relationship between Provisions of the Multilateral Trading System and Trade Measures for Environmental Purposes, including those Pursuant to Multilateral Environmental Agreements" (Item 1) and the "Relationship between the Dispute Settlement Mechanism in the Multilateral Trading System and those Found in Multilateral Environmental Agreements"' (Item 5), typescript, Jan 2004, on file with the author.

⁹⁵ The European emission allowance trading scheme is regulated by EC Dir 2003/87/EC [2003] OJ, 275, 23; EC Dir 2004/101/EC [2004], OJ 338, 18.

⁹⁶ The Kyoto Protocol (1997/2005) supplements and strengthens the UNFCCC (1992, greenhouse gases). The Montreal Protocol on Substances that Deplete the Ozone Layer (adopted in 1987) is based on the Vienna Convention (1985).

⁹⁷ Third recital of the CBD Preamble.

reaffirming the national sovereignty of biological resources.⁹⁸ The inherent tension of common concern and sovereignty is mirrored in various Articles of the Convention—and yet it is ultimately unresolved. A lot of conflicts between developed and developing countries in the CBD can be described along these lines. Developing countries are eager to regulate their access rules autonomously and to pursue their policies of benefit-sharing. Developed countries reject claims for disclosure rules, not least because they oppose a mechanism that could demand the recognition of an international act or an act of a foreign state (access permit, benefit-sharing arrangement, certificate) as a precondition for their own governmental acts—here, the issuing of a patent.⁹⁹

V. CONCLUSION FOR THE OVERALL DEBATE ON CONSTITUTIONALISM

What do these findings contribute to the overall debate on constitutionalisation? This last section surveys the broad debate about constitutionalisation, and identifies the relationship between this debate and environmental governance. From there, it sets out concrete conclusions for the WTO constitutionalisation debate.

V.1 Constitutionalism—a Broad Claim on Legitimacy

The terms 'constitutionalism' or 'constitutionalisation' have become buzzwords. They evoke assumptions about legitimacy being at the heart of every constitution and referring to a 'good order'. The quest for legitimacy is their driving force and the *sujet* of the overall globalisation process (the 'post-national constellation'). The terms touch on a broad range of topics, from the relationship between the individual and the state (human rights,¹⁰⁰ rule of law in the continental Prussian sense enshrined in the idea of *Gesetzesvorbehalt*, judicial review¹⁰¹), to the relationship between law and politics (rule of law in the Anglo-American sense, understood as the relationship between parliament and the executive, and the separation of

⁹⁸ Fourth recital of the CBD Preamble.

⁹⁹ For further reading, see C Godt, n 46 above.

¹⁰⁰ Having 'one unitary entity' to which power is ascribed is perceived as an achievement of the enlightenment: D Grimm, *Die Verfassung im Prozess der Entstaatlichung* (Bremen: Collaborative Research Centre, 2004), available at <http://www.sfb597.uni-bremen.de>.

¹⁰¹ Human Rights as safeguards for individual (economic) freedom; see E-U Petersmann, *Constitutional Functions and Constitutional Problems of International Economic Law: International and Domestic Foreign Trade Law and Foreign Trade Policy in the United States, the European Community and Switzerland* (Fribourg: UP [ff], 1991), or his counterparts, R Howse and K Nicolaidis, 'Legitimacy and Global Governance: Why Constitutionalizing the WTO is a Step too Far' in RB Porter *et al.* (eds), *Efficacy, Equity and Legitimacy: The Multilateral Trading System at the Millennium* (Washington, DC: Brookings Institution Press, 2000), 227, and P Alston, 'Resisting Merger and Acquisition of Human Rights by Trade Law: A Reply to Petersmann', (2002) 13 *European Journal of International Law* 815.

powers¹⁰²), to the transformation of the nature of states¹⁰³ and their tasks.¹⁰⁴ Other assumptions allude to the internal organisation (the relationship between territorial entities, supremacy, and subsidiarity¹⁰⁵) and the relationship between markets and the state.¹⁰⁶ Another strand puts the democratic, non-state-centric quest at the centre of reasoning.¹⁰⁷ All raise questions of good governance (*gute Herrschaft*) which have emerged since regulation has become internationalised, thus escaping from the confines of the nation-state for which all the concepts have been coined.

Here, the focus is policy co-ordination (synonymous with policy integration). It has become a prerequisite of legitimate modern rule, and thus a constitutional norm in the twentieth century. In order to rule legitimately, the state has to take into account and to provide structures and procedures that guarantee the inclusion of¹⁰⁸ all aspects of a negotiated policy. Economic interests do not deserve priority *per se*. This idea has been coined by constitutional law theory as 'practical concordance', in German '*Praktische Konkordanz*'.¹⁰⁹ So far, the constitutional debate about environmental policy in international trade law has revolved around national

¹⁰² For a comparison between the rule of law in the Anglo-American and Continental traditions, see KP Sommermann, *Das Bonner Grundgesetz* (2000), ii, (Arts 20–78), Art 20/3), no. 233 ff; see also C Möllers, *Gewaltengliederung: Legitimation und Dogmatik in nationalen und internationalen Rechtsvergleich* (Tübingen: Mohr, 2005).

¹⁰³ Bounded sovereignty through ever-increasing numbers of conventions on the one hand and increasing emergence of soft law regimes (non-binding instruments, private governance regimes), see Pauwelyn in this volume; for sovereignty as embedded in a multi-layered system, see C Schmid, *A Theoretical Reconstruction of WTO Constitutionalism and its Implications for the Relationship with the EC* (Fiesole-Florence, European University Institute, 2001), Dep. of Law, EU-Working Paper LAW No. 2001/5.

¹⁰⁴ Social security and risk regulation.

¹⁰⁵ This line of thought links 'the constitution' to the achievements of the nation-state (especially the concentration of all power in the nation-state) referring to prerequisites of sovereignty and autonomy; see Grimm, n 100 above; N Walker, 'The EU and the WTO: Constitutionalism in a New Key' in G de Burca and J Scott (eds), *The EU and the WTO: Legal and Constitutional Issues* (Oxford: Hart Publishing, 2001), 33; see, also, Scott, n 39 above, at 62; DJ Elazar, *Constitutionalizing Globalization* (Lanham, Mtd, Boulder, New York & Oxford: Rowman & Littlefield, 1998).

¹⁰⁶ 'Wirtschaftsverfassung' or 'regulated markets'?

¹⁰⁷ G Teubner, 'Societal Constitutionalism: Alternatives to State-centred Constitutional Theory?' in: C. Joerges, I-J Sand and G Teubner (eds), *Transnational Governance and Constitutionalism* (Oxford & Portland Ore: Hart, 2004), at 3; C Joerges, 'Constitutionalism and Transnational Governance: Exploring the Magic Triangle' in *Ibid.*, at 339.

¹⁰⁸ For the modern perspective on governmental accountability and involvement in private governance regimes, see H Schepel, *The Constitution of Private Governance—Product Standards in the Regulation of Integrating Markets*, (Oxford: Hart Publishing, 2005).

¹⁰⁹ Advocated internationally by T Cottier, E Tuerk and M Panizzon, 'Handel und Umwelt im Recht der WTO: Auf dem Wege zur praktischen Konkordanz' [2003] *Zeitschrift fuer Umweltrecht*, 155, and M Hilf and S Puth, 'The Principle of Proportionality on its Way into WTO/GATT law' in A von Bogdandy, P Mavroidis and Y Meny (eds), *European Integration and International Cooperation. Studies in Honour of Claus-Peter Ehlermann* (The Hague: Kluwer International Law, 2002), at 199. He was criticised, however, as 'non-liberal' by K-H Ladeur, *Kritik der Abwaegung in der Grundrechtsdogmatik—Plaedoyer für die Erneuerung der liberalen Grundrechtstheorie* (Tuebingen: Mohr Siebeck, 2004).

governmental activity (vertical segregation). Whereas national regulation is supposed to secure basic rights with regard to the execution of economic rights by others,¹¹⁰ and international economic law subjects national public policy to trade disciplines, national regulation is *a priori* perceived as a barrier to trade. Thus, hitherto, the debate about trade and environment has been very much dominated by national sovereignty as the key constitutional norm.¹¹¹

V.2 Global Environmental Governance and Constitutionalism

Oren Perez was the first to argue that environmental governance theory could contribute to the constitutionalisation debate. It would provide for a more 'pragmatic and contextual readiness to live with polycentric constitutionalisation'.¹¹² He referred to divergent rationalities that could enhance the responsiveness of international actors. His example was the IMF. Key to his reasoning is integration. However, while Perez' analysis is empirical in nature, the argument here complements his findings in conceptual terms. Global environmental governance enriches the current debate on constitutionalism, as it refines the idea of sovereignty and its safeguarding of legal sub-structures. The impetus is threefold. First, it shows that most global problems are not efficiently dealt with within the national realm. The most successful regimes have curtailed sovereignty. Secondly, global environmental problems have to be tackled as international economic problems. Thirdly, effective regimes depend on the inclusion of private actors. Thus, environmental governance theory challenges the central concepts of inter-governmental policy which are conceived to safeguard (democratic) sovereignty. The principles of vertical and horizontal segregation turn out to obstruct constructive problem-solving.

Dwelling on the given example of genetic resources, the conclusion has to be drawn that economic institutions such as private property cannot be confined either to the TRIPS Council or to the CBD Secretariat. The Bonn Guidelines have transformed the notion of intellectual property that the WTO aspires to uphold.¹¹³ The case of the international transfer of genetic resources shows that solutions emerge in practice where environmental and economic concerns are reconciled, even if institutions such as the TRIPS

¹¹⁰ Thus clearly put by D Wirth in 'Multilateral Environmental Agreements in the Trade and Environmental Debate', Annex to the Submission by the European Communities to the WTO-CTE (TN/TE/W/39), 24 Mar 2004.

¹¹¹ See, e.g., R Howse and D Regan, 'The Product/Process Distinction. An Illusionary Basis for Disciplining "Unilateralism" in Trade Policy' (2000) 11 *European Journal of International Law* 249; Howse and Nicolaidis, n 101 above; criticising this strand as democratically flawed: Raustiala, n 44 above.

¹¹² See O Perez, 'The Many Faces of the Trade-Environment Conflict: Some Lessons for the Constitutionalisation Project' in Joerges, Sand and Teubner (eds), n 107 above, at 233.

¹¹³ Argument elaborated in Godt, n 9 above.

Council resist taking this development into account. We face the paradox that diverting the problem-solving process to other institutions results in accepting the transformation of economic institutions that is driven by non-purely economic organisations.¹¹⁴ The Bonn Guidelines and the actual contractual arrangements on benefit-sharing are an example of the fact that the segregation principle of international relations as a constitutional norm is *de facto* being undermined.

V.3 Components of WTO Constitutionalisation

If it is true that the erosion of the principle of horizontal segregation is consistent with a modern perception of the legitimacy of international politics, then it follows that the rhetoric of the WTO 'being a single-issue organisation' is not legitimate. By responding to environmental claims the WTO will not turn into an environmental organisation. In fact, it will not influence environmental policies any more than by pursuing its strict policy of negative trade integration. The state of the art is that it interferes with both national and international environmental policies by constantly claiming that anything but negative integrating policies is inconsistent with WTO law. Vice versa, legitimacy is not safeguarded when the WTO turns to positive integration. Positive or negative regulation is not at issue here.¹¹⁵ With regard to the constitutional norm of policy integration, members act 'legitimately' if they use the WTO to react more responsibly to national and international quests of economic adaptation to the aims of environmental policy.

The current resistance to dealing with environmental issues foils the commitments made in the Doha Declaration of 2001.¹¹⁶ Doha Declaration No 31 (DD) acknowledges the 'mutual supportiveness' of trade and environment. In No 31(i) DD, members committed themselves to negotiating the relationship between trade rules and MEAs. In No 31(ii) DD, they committed themselves to regular information exchange between the MEA Secretariat and the WTO committees. Article 32(ii) DD calls upon the CTE to negotiate the environmental provisions of TRIPS. Beyond entering into the required negotiations, one concrete undertaking to bring about policy integration is to secure environmental expertise in the CTE sessions.¹¹⁷ Another one would be to grant observer status to requesting MEAs in all WTO committees and councils, especially to the CBD Secretariat in the

TRIPS Council. Another one would be to enter into negotiations in the TRIPS Council on how to integrate a certification scheme that is consistent with the non-discrimination discipline. From the normative perspective, the current position of the members in the TRIPS Council to obstruct discussions about the shape of intellectual property lacks legitimacy.

¹¹⁴ An argument elaborated by the author earlier in *ibid.*

¹¹⁵ This dimension is explored by J Scott, n 39 above.

¹¹⁶ Irrespective of the precise legal status of the Declaration: see P Rott, 'The Doha Declaration on the TRIPS Agreement and Public Health and the Subsequent Process—Good News for Public Health?' [2003] *Intellectual Property Quarterly* 284, and S Charnovitz, 'The Legal Status of the Doha Declaration' (2002) 5 *Journal for International Economic Law* 207.

¹¹⁷ See U Ehling in this volume.