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Of The World Trade Court's Burden

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Abstract

This article argues that in adjudicating sensitive disputes, such as those concerning human health, the WTO tribunal (Court) acts as a Dworkinian Hercules which provides its own answers on risks and science. In judging which party should win the case, this Hercules assesses parties' arguments and evidence on risks and regulatory responses through a technical rule labelled the 'burden of proof' (BOP). Yet the BOP is more the Court's burden than parties' burden (who to prove) in that the final outcome of the case hinges eventually on those elements which the Court requires parties to prove (what to prove), as well as whether the Court approves that a party has discharged its BOP and allows the burden to shift to the other party (whether to prove). As long as the Court plays the role of Hercules by handing down substantive justice on issues of high controversy, such as risks and science, whatever decision it makes will hardly satisfy the parties concerned, and thus will never fully resolve their disputes. If the Court's own answer (substantive justice) cannot put an end to parties' antimonial struggle, the Court should contemplate guiding parties to discover the solution between them via constructive regulatory dialogue. The Court can achieve this new goal by transforming its current substantive hermeneutics over the BOP into a 'procedural' one. The Court's new interpretation can reoperationalize the BOP in a way that brings out certain important administrative law elements, such as transparency and reason-giving, embedded in major SPS obligations such as risk assessment.

'We are not final because we are infallible; but we are infallible only because we are final.'[1]

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[1] US Supreme Court Justice Robert Jackson in *Brown v. Allen*, 344 US 443, at 540 (1953) (concurring opinion) (quoted in R.H. Gaskin, *Burden of Proof in Modern Discourse* (1992), at 242).

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1 Introduction: Trade and Science

Ever since the historic launch of the World Trade Organization (WTO),[2] its dispute resolution tribunal, the World Trade Court (the Court),[3] has commanded enormous attention, and often admiration, from both its users and commentators. This crown jewel of the WTO system has attracted over 350 cases in the past decade alone.[4] The Court has addressed three times more cases than the International Court of Justice (ICJ) has done during the latter's half-century of existence.[5]

Ironically, the Court's magnetism has been a mixed blessing. In addition to conventional trade issues, such as tariffs, subsidy, and anti-dumping, in which the World *Trade* Court certainly retains expertise, high-profile, non-trade issues, such as human health and safety, have recently gravitated towards the Court.[6] The advent of the modern welfare state which takes social hygiene seriously is attributable in part to the rise of regulatory concerns within the WTO.[7] As a result, risk regulations, such as those related to hormone-treated beef, have occupied a centre stage of trade disputes. Although these disputes may potentially be *great* cases, in that they crisscross trade and non-trade values, they are nonetheless predisposed to creating *bad* law, as Oliver Wendell Holmes had warned earlier,[8] in that those decisions may be intolerable and confusing.[9]

[2] Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations, 15 Apr. 1994, Legal Instruments – Results of the Uruguay Round, 33 ILM (1994) 1140 (hereinafter Results of the Uruguay Round); Marrakesh Agreement Establishing the World Trade Organization, Legal Instruments – Results of the Uruguay Round, 33 ILM (1994) 1140 (hereinafter WTO Agreement).

[3] In this article, I use the term 'World Trade Court (WTC)' or 'Court' only in a metaphoric sense. Technically, the WTO tribunal, i.e., a panel or the Appellate Body, is not a court *per se* and its decision constitutes a 'recommendation' to the WTO Dispute Settlement Body (DSB): WTO Dispute Settlement Understanding (DSU), Art. 19. Nonetheless, it is still a 'judicial' or at least 'quasi-judicial' organ which performs an adjudicative function.

[4] World Trade Organization List of Disputed Cases, available at: www.archive.official-documents.co.uk/document/cm43/4310/4310.htm (last visited 24 Feb. 2007).

[5] List of Cases Brought before the International Court of Justice, available at: www.icj-cij.org/icjwww/idecisions.htm (last visited 24 Feb. 2007).

[6] In this article, the conceptual scope of 'science' is encompassing: it includes not only natural science but also social science, such as public policy, sociology, psychology, and economics, which can base policy prescriptions on certain social issues, such as human health.

[7] See Jackson, 'Global Economics and International Economic Law', 1 *J Int'l Economic L* (1998) 1, at 1–4.

[8] *Northern Securities Co. v. United States*, 193 US 197 (1904) (J. Holmes dissenting).

[9] Robert Hudec characterized this type of dispute as 'wrong cases': Hudec, 'GATT Dispute Settlement after the Tokyo Round: An Unfinished Business', 13 *Cornell Int'l LJ* (1980) 145, at 159. See also Davey, 'Dispute Settlement in GATT', 11 *Fordham Int'l LJ* (1987) 51, at 67–78; Jackson, 'The Jurisprudence of International Trade: The DISC Case in GATT', 72 AJIL (1978) 747, at 779–780 (raising a similar concept of 'big cases', which cannot be handled properly by adjudication). See also J. Scott, *The WTO Agreement on Sanitary and Phytosanitary Measures: A Commentary* (2007), at 3 (observing that 'with the turn to science, the WTO opened itself to charges of epistemological imperialism, and positive simple mindedness').

First of all, the subject-matter of those disputes, that is local regulations on foodstuffs, tends to be intrinsically combustible on account of scientific controversies and socio-cultural sensitivities around it. Yet once adjudicated, the WTO dispute settlement mechanism forces the Court to review and evaluate substantive regulatory determinations which domestic regulators reached in their own contexts. Then, the Court issues a *final* decision as to which party is right or wrong. At this juncture, one may find a transcendental image of a Dworkinian 'Hercules' who omnisciently renders his own (always correct) answers on risks and science.[10]

To grapple fully with necessary details of the Court's judicialization of science, including its nature, scope, and process, it is imperative to identify the unique hermeneutical pathway which the Court takes to reason out the solution on risks and science. This article maintains that the notion of 'burden of proof' (BOP) offers the key to such pathway. Critically, this article attempts to reconstruct the conventional concept of BOP as the *Court's* interpretive burden. Unlike the conventional BOP borne by *parties*, the article argues, the Court as a judicial Hercules itself shoulders such burden in processing parties' arguments and evidence. In doing so, the Court operationalizes the BOP in a way which betrays its own version of science, i.e., it 'judicializes' science.

Under the conventional approach employed in public international law, the BOP is basically the parties' burden: any party which invokes a certain fact bears the burden of proving its veracity (*actori incumbit probatio*[11]). This position was affirmed in an early WTO case, *Shirts and Blouses*.[12] The logical corollary of this default rule is as follows: if a party bearing the BOP fails to discharge it, the party will lose; and if all pieces of evidence available to the Court are insufficient or in equipoise in their probative force, the party bearing the BOP will also lose, since the other party enjoys the benefit of the doubt.[13]

[10] See generally R. Dworkin, *Law's Empire* (1986). In an appeal to the Appellate Body of the *Hormone* panel report, the EC accused the panel of failing to defer to the EC the reasonableness of its science policy and instead imposing the panel's own assessment of scientific evidence: Appellate Body Report, *European Communities-Measures Concerning Meat and Meat Products (Hormones)*, WT/DS26/AB/R (16 Jan. 1998) (hereinafter *Hormones)*, at para. 14.

[11] See Bin Cheng, *Principles of Law as Applied by International Courts and Tribunals* (1953), at 327, 334; *Temple of Preah Vihear (Cambodia v. Thailand)* [1962] ICJ Rep 6, at 15–16.

[12] Appellate Body Report, *US – Wool Shirts and Blouses from United States – Measures Affecting Imports of Woven Wool Shirts and Blouses from India*, WT/DS33/AB/R (25 Apr. 1997) (hereinafter *Shirts and Blouses*), at 15.

[13] Accordingly, disputants have strived to manipulate a normative configuration of pertinent WTO rights/obligations to evade the initial proof burden and instead obtain the benefit of presumption. For example, a complaining party tends to argue that a defending (regulating) party's domestic regulation can be invoked only as an 'exception' to a contrary obligation so that the defending party should prove necessary elements that satisfy the exception. See, e.g., the US position in *Hormones:* Panel Report, *European Communities – Measures Concerning Meat and Meat Products (Hormones)*, WT/DS26/R (18 Aug. 1997), at para. 4.87 ('the EC ban was not covered by the *exceptions* in Article 3.3 to the requirements of Article 3.1') (emphasis added) (hereinafter *Hormones* (Panel)). In stark contrast, the defending party tends to argue that it has an autonomous 'right' to regulate in the first place so that the complaining party should prove conflicting facts which may nonetheless refute such right. See, e.g., EC's position in *Hormones*: *ibid.*, at para. 4.86 ('each Member was *free to decide* its appropriate level of sanitary or phytosanitary protection. This was not a scientific judgment and scientific committees or expert groups could not replace the *democratically elected authorities of Members*') (emphasis added).

In practice, however, how the Court weaves its own answers on risks and science, and eventually which party the Court will pick in the end as a winner, depends little on the BOP in terms of the parties' burden (*who* to prove). No matter how hard a party may attempt to strategize this aspect of the BOP in the proceeding, it is always the Court (Hercules) which ultimately determines such allocation via interpretation. Even if a legal text pre-destines an initial allocation of BOP, the final outcome of the case still rests decisively on those elements which the Court requires parties to prove (*what* to prove), as well as on the issue whether the Court approves that a party has discharged its proof burden and allows the burden to shift to the other party (*whether* to prove).

However, as long as the Court may (appear to) play the role of Hercules by handing down substantive justice on issues of risk and science, whatever decision it makes will hardly reassure the parties concerned, in particular the losing party. These circumstances are not likely to motivate the losing party to implement the Court's decision in a sincere manner.[14] Accordingly, even the Herculean Court may fail to put an end to antinomian battles between dogmatic parties over these notoriously sensitive issues. Moreover, such decision may even further antagonize a defeated party beyond a typical level of losers' resentment and further alienate parties concerned in a way which deprives them of any subsequent opportunities for mutually adjustable solutions. Under these circumstances, the Court may never resolve parties' disputes in a genuine sense. The inevitable fissure between the judicialization of science and parties' obsession with their own versions of science tends to undermine both the credibility and effectiveness of the Court.

The well-known *Hormones* saga in the WTO[15] provides a case in point. In the *Hormones* decision in 1998 the WTO's High Court, the Appellate Body (AB), struck down the European Communities (EC)'s contentious ban on the importation of hormone-treated beef and beef products from the United States on the ground that the ban was adopted with no scientific justification.[16] The decision irked many governments, scholars, and consumer organizations, which accused the Court of forcing them to accept low regulatory standards in the name of science.[17] In fact, the losing party (EC)

[14] See Guzman, 'Food Fears: Health and Safety at the WTO', 45 *Virginia J Int'l L* (2004) 1, at 26–27 (warning that the WTO tribunals' intrusive determination on the area of food safety, which is regarded as belonging to domestic prerogatives, tends to precipitate non-compliance from losing parties).

[15] In fact, the root of this dispute between the US and the EC can be traced back to the old GATT era: see Foreign Agricultural Service, United States Department of Agriculture, 'Chronology of the European Union's Hormone Ban', available at: www.fas.usda.gov/itp/policy/chronology.html.

[16] *Hormones, supra* note 10, at para. 197.

[17] See D. Barker and J. Mander, *Invisible Government. The World Trade Organization: Global Government for the New Millennium?* (1999), at 26; Christoforou, 'Genetically Modified Organisms: Colloquium Article Settlement of Science-Based Trade Disputes in the WTO: A Critical Review of the Developing Case Law in the Face of Scientific Uncertainty', 8 *NYU Environmental LJ* (2000) 622, at 646 (criticizing that the current WTO dispute settlement practice 'leaves too much discretion to non-expert, non-specialized panellists to judge issues of tremendous scientific complexity'); Wirth, 'The Role of Science in the Uruguay Round and NAFTA Trade Disciples', 27 *Cornell Int'l LJ* (1994) 817, at 844 (observing that the idea of a science court is impractical because science is not justiciable in an adversarial setting even if all the judges are scientists).

has never complied with the decision despite the winning party (US)'s retaliation.[18] Four years later, the EC attempted to re-justify the same ban under a *new* set of scientific evidence which the EC alleged warranted the ban.[19]

In a recent sequel to the original *Hormones* dispute (*Hormones – Suspension*), the WTO's Lower Court, a panel, rejected the EC's new bases of justification for its original ban on hormone-treated beef.[20] The EC accused the panel of seeking to determine the 'correct scientific conclusions' by itself without taking into due consideration the WTO members' autonomous right to establish an appropriate level of regulatory protection and to rely on any 'diverging', non-mainstream, scientific opinions in the process.[21] According to the EC, the panel attempted 'to become the jury on the correct science . . . by picking and choosing between conflicting and contradictory opinions of the experts in an arbitrary manner'.[22]

Markedly, certain limitations in the WTO's appellate process, such as the lack of the AB's formal 'remand' power, tend to aggravate this problem.[23] The AB's foreclosing of the case without a remand tends to deprive panels of potential opportunities to finesse their previous rulings. In fact, it seems that the AB in *Hormones – Suspension* attempted to provide certain instructions as to the panel's standard of review, which might have remedied the panel's substantivism upon remand.[24] Under these circumstances, the Court's judicialization of science may be more structural than intentional. In annulling the panel's overstepped determinations on substantive issues on science, the AB did highlight the panel's limited standard of review in this sensitive area.[25]

Unbeknown to the AB, however, its very invalidation of the panel's substantivism on science ironically only betrays the AB's own version of substantivism in that the AB supports such invalidation with its corroboration of, or at least its sympathy with, yet other substantive scientific conclusions opposite to those of the panel. For example, in *Hormones – Suspension* the AB faulted the panel's decision on the EC's risk assessment

[18] *European Communities – Measures Affecting Meat and Meat Products (Hormones)*, Recourse to Arbitration by the European Communities under Article 22.6 of the DSU, WT/DS26/ARB, Arbitrators' Report circulated on 12 Jul. 1999, at para. 83, available at: www.wto.org/english/tratop_e/dispu_e/find_dispu_cases_e.htm.

[19] *United States – Continued Suspension of Obligations in the EC – Hormones Dispute*, WT/DS320/AB/R, Appellate Body Report circulated on 16 Oct. 2008, available at: www.wto.org/english/tratop_e/dispu_e/find_dispu_cases_e.htm (hereinafter *Hormones – Suspension*). See also Bhala and Gantz, 'WTO Case Review 2004', 22 *Arizona J Int'l & Comp L* (2005) 99, at 114.

[20] *Hormones – Suspension, supra* note 19, WT/DS320/R, Panel Report circulated on 31 Mar. 2008, at para. 7.513, available at: www.wto.org/english/tratop_e/dispu_e/find_dispu_cases_e.htm.

[21] *Hormones – Suspension*, *supra* note 19, at para. 514.

[22] *Ibid.*, at para. 583.

[23] I owe this observation to Professor Joseph Weiler. Regarding proposals to grant the AB a remand power, see P.D. Sutherland *et al., The Future of the WTO: Addressing Institutional Challenges in the New Millennium, WTO Consultative Report* (2005), ch. VI (The WTO Dispute Settlement System), at 57, available at: www.wto.org/english/thewto_e/10anniv_e/future_wto_e.htm; Davey, 'The State of International Economic Law – 2006, The WTO: Looking Forwards', 9 *J Int'l Econ L* (2006) 3, at 21.

[24] See *Hormones – Suspension*, *supra* note 19, at paras 583–618.

[25] See, e.g., *ibid.*, at para. 612 (emphasizing that 'it was not the Panel's task … to determine whether there is an appreciable risk of cancer arising from the consumption of meat from cattle treated with oestradiol-17β').

on the ground that the panel failed to consider any potential risks of abuse or misuse of oestradiol-17β.[26] The panel had originally given its decision based on substantive experts' opinions provided by a group of scientists. In criticizing and eventually rejecting the panel's own substantive science, the AB appeared to have engaged in its own substantive scrutiny on risk science in this area. After all, the AB attempted to rationalize its own position by highlighting a diverging scientific view, which submits that risks deriving from residues of oestradiol-17β in beef are 'likely to increase' in the absence of good veterinary practices in the administration of this hormone.[27] In doing so, the AB practically endorsed this particular scientific view, which the EC had subscribed to, but the panel had rebuffed. To the losing party (the US), the AB might seem to have rejected a conventional version of science, although to the winning party (the EC) the AB might seem to have supported the latter's version of science in this highly sensitive dispute.

Against this alarming backdrop, this article explores a new interpretive path by which the Court can avert, or at least alleviate the impact of, the AB's judicialization of science. If the Court's own answer (substantive justice) cannot put an end to parties' antimonial struggle, the Court should contemplate guiding parties to discover the solution among themselves via constructive regulatory dialogue. In other words, the Court, instead of throwing out its own right answers in front of already dogmatized parties, might encourage them to fulfil their dialectical discourse through talking to, deliberating with, and enlightening each other. This nuanced judicial posture can greatly mitigate any unnecessary adversarial tensions, which will in turn secure a certain space for accommodation or recognition of different regulatory positions.[28] As Jutta Brunnée and Stephen Toope trenchantly observed, 'inclusive processes reinforce the commitments of participants in the system to the substantive outcomes achieved by implicating participants in their generation'.[29]

The Court can achieve this new goal by replacing its current substantive interpretation behind the BOP by a 'procedural' one. To wit, the Court can reoperationalize the BOP in a way which brings forth certain important administrative law elements embedded in those substantive provisions by reinterpreting them. For example, if a regulating (defending) party refuses to engage in a good faith regulatory deliberation, in the form of reason-giving and transparency, with an exporting (complaining) party, or is interested only in protracting the dialogue, the Court will find in such failure negative probative forces which may corroborate the fact that the former has failed to fulfil its risk assessment obligation under SPS Article 5.1. The Court may even

[26] *Ibid.*, at para. 545.

[27] *Ibid.*

[28] In this context, Gaskin observed that '[t]he strategic power of polarized argumentation will always deliver short-term benefits to successful advocates, thereby strengthening popular reliance on transcendental reasoning. Over the longer term, however, dialectical reasoning offers everyone a less divisive accommodation with arguments-from-ignorance by limiting their authority to restricted domains within a broader conceptual horizon': Gaskin, *supra* note 1, at 240.

[29] Brunnée and Toope, 'International Law and Constructivism: Elements of an Interactional Theory of International Law', 39 *Columbia J Transnat'l L* (2000) 19, at 53.

establish a presumption against the former that its measure was adopted without valid scientific justification. The underlying logic is that a regulating country is not likely to conduct a meaningful risk assessment when it fails to take into account interests of most trading partners affected, i.e., exporting countries.

The crucial benefit from this procedural hermeneutics is more than merely forcing disputants to engage with each other to avoid any adverse evidentiary inferences by the Court. The new way of interpretation transforms the nature of remedies in the area of social regulation disputes. It offers disputants a dialectical avenue of regulatory discourse and thus immunizes them from any zero-sum ruling which would widen their initial antimonial stance, rather than narrowing it.[30] Under the procedural approach, a Court's decision on risk regulation[31] is inherently *provisional*. Even after the decision, parties may still be able to reach a compromise, as they naturally continue their regulatory dialogue as the losing party complies with the Court's procedural decision the remedy for which tends to be procedural as well.

Critically, under the procedural approach proposed here the Court does not provide any 'final normative standpoint'[32]. Instead, it *de facto* resends the original case to parties with nuanced instructions to communicate with each other in an attempt to overcome their own socio-cultural prejudices on risks and regulation.[33] The extant merits of the SPS Committee as an effective forum to resolve specific SPS disputes via constructivist engagements between disputants tends to corroborate the Court's proceduralized mode of interpretation proposed in this article.[34] This new approach will

[30] 'Rather than bringing conflicts to a peaceful result, contemporary tribunals appear to sharpen existing divisions, even as jurisprudential authority descends from its transcendental abode and shapes the everyday world according to the demands of litigation': Gaskin, *supra* note 1, at 208.

[31] This article focuses on *risk* regulations under the General Agreement on Tariffs and Trade (GATT), Art. XX (General Exceptions), the Agreement on Technical Barriers to Trade (TBT), and the Agreement on Sanitary and Phytosanitary Measure (SPS) which require governments to assess, determine, and manage those risk-related regulatory challenges. Those regulations vary in accordance with different types of societal risks, including human health risks and other risks from illicit practices, such as smuggling and tax evasion. Those risk regulations somehow involve scientific investigations, in that regulators weigh in risks and effectiveness of policy options by means of objective disciplines, such as toxicology, medical science, engineering, economics, and public health studies. Finally, a disclaimer: this article addresses the BOP issues related to risk-related regulations in the areas of health, safety, environment, and other public policies. It does not deal with the BOP issues in other areas, such as anti-dumping law, which have a quite different set of rules and jurisprudence.

[32] Gaskin, *supra* note 1, at 242.

[33] *Ibid.*, at 264. Cf. Davey, 'WTO Dispute Settlement: Segregating the Useful Political Aspects and Avoiding "Over-Legalization"', in M. Bronckers and R. Quick (eds), *New Directions in International Economic Law: Essays in Honor of John H. Jackson* (2000), at 295–296 (prioritizing 'consultation' over adjudication in resolving politically sensitive disputes).

[34] During the period 1995–2004, 56 out of 204 specific SPS-related trade concerns were resolved in the SPS Committee: WTO Committee on Sanitary and Phytosanitary Measures, 'Review of the Operation and Implementation of the Agreement on the Application of Sanitary and Phytosanitary Measures', G/SPS/36 (11 Jul. 2005). See also Scott, *supra* note 1, at 4 (taking the view that the SPS Committee can stimulate 'regulatory learning and adaptation' in a non-rationalist manner). Of course, such regulatory dialogue can also benefit from professional advice from the scientific community; *ibid.*, at 53 (reporting that the observer representative of the World Health Organization provided scientific views in the SPS Committee meeting).

encourage more parties to talk away their disputes in the SPS Committee. In fact, this interpretive turn to procedural disciplines corresponds with the original normative orientation of those rules which govern risk regulations, i.e., GATT Article XX and the SPS Agreement. The preambular language (*chapeau*) of GATT Article XX focuses on the *manner* in which a measure is applied. Also, obligations under the SPS Agreement, such as the risk assessment requirement, focus more on regulatory procedures than on substantive, specific levels of protection.[35]

This article unfolds in the following sequence: Section 2 makes a case of 'judicialization of science'. It observes that the Court plays the role of a Hercules, as was portrayed by Ronald Dworkin, who always knows correct answers on science, and ends the disputes before him based on this omniscience which the Court generates in an aura of its judicial authority. Section 3 then corroborates this observation by investigating the Court's interpretation on the issues related to risks and science in terms of 'burden of proof (BOP)'. Importantly, the Part shifts the diagnostic focus from the parties to the Court in an attempt to reconceptualize the BOP as the Court's interpretive burden, under which the Court must determine *who* to prove, *what* to prove, and *whether* to prove before it finally picks the winner in each case. Section 4 criticizes this substantive finality which the Court pursues. The Court's continuous accumulation of extra layers of doctrinal complexities in each new SPS case is symptomatic of the futility of its substantivism on risks and science, namely the judicialization of science. Such judicial incapability leads naturally to jurisprudential disarray, which is in and of itself a disservice to the global trading community. As a solution, Section 5 submits that the Court should interpretively reconstruct relevant GATT and SPS provisions from a procedural standpoint, and thus motivate parties to engage in regulatory dialogue and cooperation. It emphasizes that the Court's institutional responsibility, as it is manifested in the Court's interpretive burden, is closer to that of a *constitutional* court than to that of a mundane civil court. Section 6 concludes.

2 The World Trade Court as Hercules: The Judicialization of Science

A *The Judicial Regulation of Science*

Analysing the jurisprudential track record of the last decade over risk regulations, one might raise a reasonable suspicion that the Court has not only resolved disputes involving risk science but also *judicialized* scientific questions. In other words, the Court has given, intentionally or unintentionally, definite scientific answers, instead of merely settling science-related disputes.

The phenomenon of judicialization of science first appeared in a paradigmatic case in this area, i.e., *Hormones*. Originally, the panel in *Hormones* imposed an initial BOP as to Article 5.5 of the SPS Agreement (the prohibition of arbitrary or unjustifiable

[35] Victor, 'The Sanitary and Phytosanitary Agreement of the World Trade Organization: An Assessment After Five Years', 32 *NYU J Int'l L and Policy* (2000) 865, at 925–926.

discrimination) on the complaining party (the United States). The United States argued that the EC's asymmetrical regulatory treatment between naturally occurring hormones (in meat and other foods) which had led to no regulatory intervention at all and the artificially injected ones for growth promotion purposes which had led to a total ban was arbitrary and unjustifiable.[36] Having assessed the United States' argument, the evidence it adduced and the experts' opinions,[37] the panel found that the United States had made a *prima facie* case, and thus the initial BOP had shifted to the EC, which was supposed to rebut what the United States had proven.[38] The panel held that the EC had not met its BOP.[39]

However, the AB reversed the panel's finding on the EC's arbitrarily and unjustifiably asymmetrical regulatory treatment between naturally-occurring hormones (no regulation at all) and artificially administered hormones (a total ban). Here, the AB endorsed the EC's adoption of a zero-tolerance policy on hormone-treated beef by itself denying a comparison between these two situations in direct defiance of the conventional science which a majority of experts (scientists) represented in their opinions in this dispute. These scientists took the view that health risks from residual hormones in our bodies would be the same regardless of 'differences in pathways taken or metabolites', i.e., whether endogenously present or consumed via foods.[40] Nonetheless, the AB replaced this conventional science by its own version of science when it declared that there existed a 'fundamental difference' between these two situations.[41] It further criticized any attempt to compare them as 'absurdity'.[42] Therefore, the AB sided with the EC, which also argued that such fundamental difference justified fundamentally different treatments (no intervention v. a total ban) in these two situations.

The AB differed radically from the mainstream view in understanding the risks from hormones in food.[43] It rejected the conventional science (laboratory science) in favour of a rather common sense-based science which it perceived befitted the 'real world where people live and work and die'.[44] In doing so, the AB effectively created a *de facto* presumption in favour of the EC's zero-tolerance policy which was embodied in a total ban on hormone-treated beef. Suddenly, the hitherto defensive EC's position seemed to turn offensive. Now the United States should bear the burden of proving that the EC's ban

[36] *Hormones* (Panel), *supra* note 13, at para. 8.171.

[37] '[*A*]*ll scientific experts* advising the Panel have concluded that residues of the three natural hormones present endogenously in meat and other foods or administered for therapeutic or zootechnical purposes are *qualitatively the same* as the residues of these hormones administered for growth promotion and that if any differences between these hormones could exist (e.g., *differences in pathways taken or metabolites*), these differences would in any event not have consequences for the potential adverse effects of these hormones': *ibid.* at para. 8.187 (emphasis added).

[38] *Ibid.*, at para. 8.55.

[39] *Ibid.*, at para. 8.197.

[40] *Ibid.*, at para. 8.187.

[41] *Hormones, supra* note 10, at para. 221.

[42] *Ibid.*

[43] In this sense, Jeffrey Atik observed that the Kuhnian paradigm shift is a 'process of interpretation, not of observation': Atik, 'Science and International Regulatory Convergence', 17 *Northwestern J Int'l L & Business* (1996–1997) 736, at 751.

[44] *Hormones, supra* note 10, at para. 187.

was still arbitrary and unjustifiable. However, the presumption seemed nearly irrebuttable since the AB never second-guessed the EC's autonomous regulatory determination. Simply, there would exist no referential points against which one might evaluate its scientific justification. In sum, the EC was granted absolute deference for its ban.

Naturally, the AB's interpretation militates against the authority of the mainstream science harnessed by risk assessment and international standards (the Codex standards). In *Hormones – Suspension*, the AB effectively diluted, or expanded the scope of, the meaning of 'science' under the SPS Agreement by enmeshing an objective scientific investigation with a subjective policy determination. The AB opined that a regulating member's policy determination on the acceptable level of protection (such as zero-tolerance) should inform its science-based risk assessment.[45] More dramatically, the AB launched the *ad hominem* arguments against those scientific experts the panel had consulted with. The AB held that these experts' 'affiliation' with and 'participation' in an institution (the Joint FAO/WHO Expert Committee on Food Additives) which is responsible for international standards (the Codex standards) had made their professional testimonies biased and thus incredible.[46]

B *Scientific Uncertainty, Hercules and Phronesis*

The *Hormones* case is not an isolated, idiosyncratic anecdote: it certainly shares the same milieu as a modern ethos of social hygiene and welfare state fuelled by highly emotionalized and thus politicized scandals on mad cow disease and Frankenfoods.[47] Amid scientific uncertainty characterized by too little, or too much, information, an identical problem often generates totally different regulatory responses: some are risk-friendly, as in the United States; others are risk-averse, as in Europe.

As Richard Gaskin observed, 'it is now more fashionable to investigate the political and cultural frameworks surrounding scientific expertise'.[48] These diametrically opposite regulatory philosophies in different jurisdictions naturally entail highly dogmatic use of the BOP. In asserting one's own position, one tends to employ polemic strategies to highlight the opponent's inability to disprove her default premise (presumption).[49] Immanuel Kant earlier coined this tendency as the 'polemical employment of pure reason'. Kant observed that 'the contention is not that [one's] own assertions may not, perhaps, be false, but only that no one can assert the opposite with apodeictic certainty, or even, indeed, with a greater degree of likelihood'.[50]

[45] *Hormones – Suspension*, *supra* note 13, at para. 683 ('[T]he fact that the WTO Member has chosen to set a higher level of protection may require it to perform certain research as *part of its risk assessment* that is different from the parameters considered and the research carried out in the risk assessment underlying the international standard') (emphasis added).

[46] *Ibid.*, at para. 481. Concerning the US protest against the AB's view in this matter, see Communication from the United States on Concerns Regarding the Appellate Body's Report, WT/DS320/16, 12 Nov. 2008, at para. 26.

[47] Moore, 'Frankenfood or Doubly Green Revolution: Europe vs. American on the GMO Debate', available at: www.aaas.org/spp/rd/ch14.pdf (last visited 28 Feb. 2007).

[48] Gaskin, *supra* note 1, at 142.

[49] *Ibid.*, at 212.

[50] I. Kant, *Critique of Pure Reason* (1964), at 739–740.

Obviously, such dogmatic confrontation between parties tends to result in a perpetual dispute armed with 'arguments-from-ignorance',[51] which the Court might feel compelled to end with its vested judicial authority. Here, the Court might inevitably assume the role of a transcendental tribunal, which Ronald Dworkin dubbed 'Hercules', which always gives 'right answers' in that it brings finality to the dispute 'at the margins of scientific knowledge' upon which parties themselves can never agree.[52]

The dimension in which the Court bestows its judgment upon disputants is 'transcendental' because such judgment may *not* be reduced to those empirical scientific *facts* which disputants themselves manoeuvre against each other. As Thomas Kuhn trenchantly observed, 'the competition between paradigms is not the sort of battle that can be resolved by proofs'.[53] Instead, the Court's decision is more of *law*, touted by its interpretation and values beneath the letters. Although the Court does embrace scientific facts which disputants adduce as evidence in an effort to support their arguments, it never accepts them as they are. Instead, the Court assesses and 'constructs' them in a way which may warrant its own conclusion. Even experts' opinions which the Court hears are not meant to replace the Court's own judgment. The Court is free to selectively adopt those professional views or even depart from them entirely. More fundamentally, it is within the Court's discretion to decide when and whether to hear those opinions in the first place.

The Court's transcendental judicialization often stands out against the turbulent milieu of competing paradigms echoed by Kuhn. According to Kuhn, a paradigm represents 'normal science' which actualizes itself by 'increasing the extent of the match between those facts and the paradigm's predictions, and by further articulation of the paradigm itself'.[54] Under the SPS Agreement, relevant international standards embody such normal science, in that the SPS Agreement champions such standards and requires a regulating state to base its SPS measure on them.[55] In this vein, the Codex standard would be a reification of normal science created and practised by an epistemic community round the Codex Alimentarius Commission. Yet this normal science cocooned in a particular paradigm is nonetheless subject to being shifted, as it subsequently encounters certain anomalies which the original paradigm cannot fathom. Therefore, a given paradigm holds only a provisional, and thus limited, value and influence in modern science. Kuhn coined such paradigm shift as 'scientific revolution', after which 'many old measurements and manipulations become irrelevant'.[56]

[51] Gaskin, *supra* note 1, at 172–176.

[52] *Ibid.*, at 213.

[53] T.S. Kuhn, *The Structure of Scientific Revolutions* (3rd ed., 1996), at 148.

[54] *Ibid.*, at 24.

[55] Agreement on the Application of Sanitary and Phytosanitary Measures, the WTO Agreement (hereinafter SPS), preamble, Art. 3.1.

[56] Kuhn, *supra* note 53, at 129. In contrast, Karl Popper argued that one could never 'verify' certain theories but could only 'falsify' them. See notably K. Popper, *The Logic of Scientific Discovery* (1968), at 40–41. From this perspective, any scientific discovery only tentatively holds water until it is proven wrong in the future: Atik, *supra* note 43, at 750. Yet Kuhn, at 147, contended that falsification is a type of verification in that 'it consists in the triumph of a new paradigm over the old one').

The AB in *Hormones* appeared to assume the role of this paradigm shifter. In rejecting the panel's findings, the AB seemed to divulge certain anomalies which would justify a 'breakdown' in normal science subscribed by the panel. According to Kuhn, certain developments are symptomatic of such breakdown, including a 'different attitude toward existing paradigms', the 'proliferation of competing articulations', the 'expression of explicit discontent', and the 'recourse to philosophy and to debate over fundamentals'.[57] In *Hormones*, the AB visibly exhibited these symptoms.

For example, as discussed above, the AB even itself rejected a comparison of residual hormone levels in the human body and food with those in beef treated with growth promoting hormones. The AB reached this conclusion rather summarily as it highlighted an 'incommensurable' nature of these two regulatory situations, which would render any comparison absurd.[58] The AB's common sense-based paradigm tends to defy the normal science reincarnated in the Codex standards on the residual hormone levels. To the AB as a reincarnation of the Dworkian Hercules, everyday science should trump awkward laboratory science: *phronesis*, not *techne*, should be a guiding principle by which the Court should comprehend science. Under this cognitive framework, it may be justified that a society reacts more seriously to any carcinogenic risks from environmental asbestos concentration (one death per 100,000 or less) than to those from car accidents (1,600 deaths per 100,000), despite an enormous stochastic gap between these two situations.[59]

The AB's position is reminiscent of Edmund Husserl's reputed criticism of modern science as a 'mathematization of nature' which is arguably detached from the 'life-world' (*Lebenswelt*).[60] From the AB's prioritization of common sense (*phronesis*) over technical knowledge (*techne*),[61] one might catch a glimpse of the time-honoured tradition of critical philosophy of anti-scientism. This position accuses scientific positivism, espoused by August Conte, of a self-fulfilling prophesy fatally alienated from actual life-world and human interests.[62] In this sense, the AB's rendition of science is close to the titular 'trans-science' the properties of which lie on a continuum between pure scientific facts and value (policy) judgement.[63]

[57] *Ibid.*, at 90–91.

[58] *Hormones, supra* note 10, at para. 221. See Kuhn, *supra* note 53, at 4 ('What differentiated these various schools was not one or another failure of method – they were all "scientific" – but what we shall come to call their *incommensurable* ways of seeing the world and of practicing science in it') (emphasis added).

[59] Panel Report, *European Communities – Measures Affecting Asbestos and Products Containing Asbestos*, WT/DS135/R (18 Sept. 2000) (hereinafter *Asbestos* (Panel)), at para. 3.54; Commins, 'Estimations of Risk from Environmental Asbestos in Non-Occupational Exposure to Mineral Fibres', IARC Scientific Publication no. 90 (1989), at 476–483.

[60] S. Critchley, *Continental Philosophy: A Very Short Introduction* (2001), at 71.

[61] Cf. Tyreman, 'Promoting Critical Thinking in Health Care: Phronesis and Criticality', 3 *Medical Health Care & Philosophy* (2000) 117, at 117 (arguing that '*phronesis* adds a necessary corrective dimension to modern Western medicine's over-emphasis on *techne*').

[62] *Ibid.* at 112; see notably, J. Habermas, *Knowledge and Human Interests* (1968).

[63] See Weinberg, 'Science and Trans-Science', 10 *Minerva* (1972) 209; McGarity, 'Substantive and Procedural Discretion in Administrative Resolution of Science Policy Questions: Regulating Carcinogens in EPA and OSHA', 67 *Georgia LJ* (1979) 729, at 732–747. Both articles are cited in Walker, 'Keeping the WTO from Becoming the "World Trans-Science Organization": Scientific Uncertainty, Science Policy, and Fact-finding in the Growth Hormones Dispute', 31 *Cornell Int'l LJ* (1998) 251, at 251, n. 1.

Perhaps the AB responded to the 'democratic' concerns associated with regulatory decisions. Robert Howse located a democratic value in the AB's SPS jurisprudence. Howse took the view that the AB instilled the value of democratic rationality among citizens in the SPS interpretation by reserving a certain deliberative space where citizens' value judgements could effectively trump any mainstream science.[64] To Howse, the AB's rejection of a widely accepted distinction between risk assessment (based on facts and science) and risk management (based on non-scientific, value-oriented judgements) might attest to the AB's fidelity to the democratic value in that deliberative room might be bigger in the absence of a strict dichotomy between science and value. Howse's view resonates well in the notion of 'weak programme' in the sociology of science which presupposes that 'democratic values . . . are necessary conditions for the development of epistemic strategies that can lead to critical understanding of our individual and collective experiences and progressive . . . inquiry'.[65]

3 The World Trade Court's Hermeneutical Path to Judicialized Science: The Reconstruction of the Burden of Proof

Having divulged the Court's hidden pattern of judicialization of science, this article next documents the Court's unique interpretive pathway to this pattern. Here, the article employs the notion of 'burden of proof' (BOP) as an investigative device with which to track down the Court's reasoning on issues related to risks and science. Importantly, unlike the traditional BOP directed to parties, the article observes that the Court as a judicial Hercules self-imposes such burden in processing parties' arguments and evidence. Therefore, by probing how the Court operationalizes the BOP on its own terms, one can comprehend the true nature of judicialization of science.

A *Parties' Burden: The Conventional Approach on the Burden of Proof in International Trade Law*

The panel practice in administering the BOP under the GATT centred on the allocation issue (who to prove).[66] Under the GATT system, panels developed a BOP doctrine despite the lack of any textual ground.[67] Under this doctrine, a complaining party must demonstrate that a defending party has violated certain provisions of the

[64] Howse, 'Democracy, Science, and Free Trade: Risk Regulation on Trial at the World Trade Organization', 98 *Michigan L Rev* (2000) 2329, at 2342–2343.

[65] Restivo, 'The Myth of Kuhnian Revolution', 1 *Sociological Theory* (1983) 293, at 299.

[66] See Nichols, 'GATT Doctrine', 36 *Virginia J Int'l L* (1996) 434, at n.318 (viewing that 'burden of proof is used in the sense of assigning which party is responsible for proving or disproving a proposition rather than in the sense of what "degree of proof" that party is required to satisfy'). But see Walker, 'Keeping the WTO from Becoming the "World Trans-Science Organization": Scientific Uncertainty, Science Policy, and Fact-finding in the Growth Hormones Dispute', 31 *Cornell Int'l LJ* (1998) 251, at 290–296 (distinguishing between the issue of allocation of proof burdens and standard of proof).

[67] Nichols, *supra* note 66, at 434.

Agreement.[68] Also, a party invoking an exception bears the burden of proving that it has met all the requirements of that exception.[69] Philip Nichols observed that GATT panels took this allocation issue so seriously that 'changing it would be tantamount to renegotiating the obligations and benefits of the Contracting Parties'.[70] In articulating the doctrine, GATT panels often highlighted that it must be parties', not the panel's, task to demonstrate and prove their arguments and positions.[71]

The WTO inherits from GATT this conventional approach which focuses on the allocation of the initial proof burdens.[72] The AB in *Shirts and Blouses* delivered a paradigmatic ruling in this issue. The AB held that:

> [I]t is a generally-accepted canon of evidence in civil law, common law and, in fact, most jurisdictions, that the burden of proof rests upon the party, whether complaining or defending, who asserts the affirmative of a particular claim or defense. If that party adduces evidence sufficient to raise a presumption that what is claimed is true, the burden then shifts to the other party, who will fail unless it adduces sufficient evidence to rebut the presumption.[73]

This finding has frequently been cited ever since in subsequent cases involving the BOP issues.[74] Panels and the AB often begin their ruling on these issues by referring to the finding. Such habitual citation by subsequent tribunals conferred on the finding a certain aura of authority, and thus established an observable jurisprudence in the BOP area.

Then why have parties taken the initial allocation of proof burdens so seriously? One might reasonably speculate that it would eventually determine the outcome of a case since it grants the power of presumption or the benefit of the doubt to a party which does not bear the initial proof burden. Therefore, parties

[68] See, e.g., *Canada/Japan – Tariff on Imports of Spruce, Pine, Fir (SPF) Dimension Lumber*, 36 Supp. BISD (1989) 167, at 198. See also Farber and Hudec, 'Free Trade and the Regulatory State: A GATT's-Eye View of the Dormant Commerce Clause', 47 *Vanderbilt L Rev* (1994) 1401, at 1420–1421 (noting that the explicit terms of GATT Art. XX require defendant governments to raise justification).

[69] See, e.g., *United States – Measures Affecting Alcoholic and Malt Beverages*, 39 Supp. BISD (1992) 206, at 282; *Canada – Import Restrictions on Ice Cream and Yoghurt*, 36 Supp. BISD (1989) 68, at 84; *Canada – Administration of the Foreign Investment Review Act*, 30 Supp. BISD (1984) 140, at 164.

[70] Nichols, *supra* note 66, at 435.

[71] *Ibid.*, at 434; see *EEC – Quantitative Restrictions Against Imports of Certain Products from Hong Kong*, 30 Supp. BISD (1983) 129, at 138.

[72] See Lichtenbaum, 'Procedural Issues in WTO Dispute Resolution', 19 *Michigan J Int'l L* (1998) 1195, at 1248 (regarding the burden of proof issue as whether a complaining party always bears the burden of proof in the WTO dispute proceeding or whether such burden may shift to a defending party under certain conditions).

[73] *Shirts and Blouses, supra* note 12, pt. IV. Some commentators distinguish between an initial allocation of BOP (*global* BOP) and a shifted one (*local* BOP): Prakken *et al.*, 'Argumentation Schemes and Burden of Proof', paper presented to Workshop on Computational Models of Natural Argument, Valencia (Spain), 24 Aug. 2004, available at: www.cs.uu.nl/groups/IS/archive/henry/cmna04.pdf. Regarding views that the BOP is never shifted see Pauwelyn, 'Evidence, Proof, and Persuasion in WTO Dispute Settlement: Who Bears the Burden?', 1 *J Int'l Economics* (1998) 227, at 252–253 (taking the view that a complainant's duty to establish a *prima facie* case subject to a subsequent rebuttal by a defendant does *not* concern the burden of proof but the evaluation of evidence, and therefore the initial allocation of burden is never shifted); Walker, *supra* note 66, at 295 (arguing that again the burden of persuasion is never shifted onto the defending party, even after the complainant has made its *prima facie* case).

[74] See, e.g., *Hormones, supra* note 10, at para. 40; Appellate Body Report, *European Communities – Trade Description of Sardines*, WT/DS231/AB/R (26 Sept. 2002) (hereinafter *Sardines)*, at para. 27.

have attempted to manipulate a normative configuration of treaty obligation, e.g., whether a provision offers an independent *right* of a regulating party (defendant) or a mere *exception* to a contrary obligation borne primarily by the party, to acquire such presumption.[75]

Treaty texts tend to play a preliminary, albeit provisional, role in this normative configuration between parties. By specifying rights and obligations of parties, treaty texts may establish various presumptions on one side and in turn require the other side to overturn (refute) such presumptions by proving the opposite facts. For this reason, an initial allocation of BOP is tantamount to declaring an opening position which may be advantageous to one party *vis-à-vis* the other. Moreover, if an initial onus of proof borne by one party, be it a complaining party or a defending party, is so heavy that the party is likely to fail to discharge the onus, such allocation of BOP may be decisive to the outcome of the case. Thus, in an adversarial battle of litigation, this original position may be 'prominent', in particular when a dispute involves complicated factual aspects such as risks and science.[76]

For example, the Cartagena Protocol is said to create a presumption of danger, and thus shift the burden of proving that living modified organisms (LMOs) are safe to an innovator (exporter).[77] Thus, an importing country, i.e., a regulating country, holds a right to regulate the importation of the LMOs. Under this normative configuration, an importing (regulating) country's measure will always prevail if an exporting country's burden of proving its LMOs' safety is insurmountable. Likewise, the SPS Agreement arguably establishes a presumption that a WTO member has a right to set its own appropriate level of sanitary protection, even though such level departs from international standards. As a result, the other party (exporting country) would have to bear the burden of proving that the importing country's measure is without scientific justification. However, under the GATT structure, the importing country, not the exporting country, should demonstrate as an exception that such regulation is necessary to protect human health since GATT is premised on free trade obligations by members, not on their rights to regulate.[78]

[75] Cf. Hamilton Krieger, 'The Burden of Quality: The Burden of Proof and Presumption in Indian and American Civil Rights Law', 47 *American J Comparative L* (1999) 89, at 92 (observing that certain modern Indian laws attempted to employ presumptions and burdens of proof as a 'tool for countering the traditional normative system's resistance to the implementation of the new legal regime').

[76] Pauwelyn, 'The WTO Agreement on Sanitary and Phytosanitary (SPS) Measures as Applied in the First Three SPS Disputes', 2 *J Int'l Econ L* (1999) 641, at 659.

[77] Convention on Biological Diversity, Cartagena Protocol on Biosafety, 29 Jan. 2000, UN Doc. UNEP/CBD/ExCOP/1/3 (29 June 2000), available at: www.biodiv.org/biosafety/protocol.asp; Motaal, 'Is the World Trade Organization Anti-Precaution?', 39 *J World Trade* (2005) 483, at 489–490. See also Stenzel, 'Why and How the World Trade Organization Must Promote Environmental Protection', 13 *Duke Environmental L & Policy Forum*(2002) 1, at 44 (contending that the WTO should espouse the precautionary principle and thus impose the burden of proof on manufacturers to demonstrate the safety of a product).

[78] See, e.g., Appellate Body Report, *United States – Standards for Reformulated and Conventional Gasoline*, WT/DS2/AB/R (29 Apr. 1996) (hereinafter *Gasoline)*, at 22–23; *Shirts and Blouses, supra* note 12, at 14–15; Panel Report, *United States – Section 337 of the Tariff Act of 1930*, WT/DS186/R (12 Jan. 2000), at para. 5.27.

B *From Parties' Probative Burden to the Court's Interpretive Burden*

As discussed above, the conventional BOP rule under the GATT/WTO jurisprudence imposes an initial onus of proof on a party invoking certain facts and arguments in its favour. In most cases, the BOP is borne by a complaining party which should demonstrate, or establish a *prima facie* case, that a defending party has violated GATT/WTO rules. As for exceptions or affirmative defences, a defending party bears the burden of proving that its measure, although provisionally WTO-inconsistent, nevertheless falls within the rubric of one of the exceptions and is thus eventually WTO-consistent. Therefore, under the conventional approach, the BOP denotes the *parties'* burden.

Accordingly, in any adversarial form of adjudication, including the WTO dispute settlement system, the issue of the initial allocation of the BOP appears a momentous matter at first glance. Theoretically, if there was insufficient evidence which substantiated neither party's position or if both parties' evidence was in a state of equipoise in their probative force, the BOP, like a tie-breaker, would decide who should win.[79] In other words, the BOP may stand for a risk of non-persuasion. In addition, a party which bears the BOP should invest in a substantial amount of time and effort in adducing relevant and necessary evidence in the first place. This initiation cost may be disadvantageous in a strategic sense under adversarial proceedings.

Under these circumstances, the BOP may be prone to abuse and manipulation. Parties may be tempted to craft their claims in a way in which they could evade certain issues as to which they would not desire to bear the proof burden and force the opposing party to raise and prove those facts.[80] One commentator observed that there is a 'genuine risk' that parties do nothing in the proceedings but claim that the other party should persuade the panel.[81]

However, the conventional standpoint on the BOP fails to notice the fact that it is eventually the *Court* which decides who should win. The initial allocation of the BOP (who to prove) alone seldom decides the outcome of a case. This issue may be of greater importance under the common law system where judicial interventions are seriously curtailed by the existence of jury and litigant autonomy, even in case of evidential incompleteness.[82] Yet, its relative significance tends to wane in international tribunals since these tribunals hold a wider range of discretion in the proceedings and emphasize a collective obligation by parties to cooperate with each other in presenting evidence before the tribunals.[83] The

[79] Lennard, 'Navigating the Stars: Interpreting WTO Agreements', 5 *J Int'l Economic L* (2002) 17, at 84.

[80] Grando, 'Allocating Burden of Proof in WTO Disputes', 9 *J Int'l Economic L* (2006) 615, at 629.

[81] Pauwelyn, *supra* note 73, at 228–229.

[82] See Nance, 'Evidential Completeness and the Burden of Proof', 49 *Hastings LJ* (1998) 621, at 640.

[83] Grando, *supra* note 80, at 616, n. 2. See also M. Kazazi, *Burden of Proof and Related Issues: A Study on Evidence before International Tribunals* (1996), at 119: '[i]t is often said that the idea of peaceful settlement of disputes before international tribunals is largely based on the premise of cooperation of the litigating parties'; Pauwelyn, *supra* note 73, at 234 (quoting Appellate Body Report, *Argentina – Measures Affecting Imports of Footwear, Textiles, Apparel, and Other Items*, WT/DS56/R (25 Nov. 1997), at para. 6.40). See also Ehlermann, 'Six Years on the Bench of the "World Trade Court": Some Personal Experiences as Member of the Appellate Body of the World Trade Organization', in F. Ortino and E.-U. Petersmann (eds), *The WTO Dispute Settlement System* 1995–2003 (2004), at 499, 511 (observing that the issue of the burden of proof has seldom been raised in the European Court of Justice).

World Trade Court is no exception to this trend in that it enjoys wide discretion in fact-finding, including the authority to summon expert witnesses.[84] Therefore, if the Court secures clear and sufficient evidence, this conventional notion of BOP (who to prove) 'becomes of academic interest only'.[85]

Furthermore, as an ostensible departure from the law and economic analysis, the allocation of BOP under the WTO system does not reflect 'respective difficulties that may possibly be encountered by the complainant and the respondent in collecting information to prove a case'.[86] Instead, winning or losing a case hinges critically on how the Court itself interprets both facts and law in proof-related areas, i.e. *whether* to prove and *what* to prove. It is the Court which weighs each item of evidence and determines whether and how much a party has to prove before discharging its BOP, as well as when to shift the proof burden to the other party. The Court enjoys 'a margin of discretion in assessing the value of the evidence, and the weight to be ascribed to that evidence'.[87] This fundamental discretion is even immune from an appeal.[88] The Court may also consider the experts' opinions to determine whether a *prima facie* case has been established.[89] Likewise, it is the Court which decides what should be proved, i.e., the question of 'what the importing Member must demonstrate'.[90]

For example, in *Gambling* both the defendant (the United States) and the complainant (Antigua) appealed on the ground that the panel had erred in its treatment of BOP under GATS Article XIV (General Exceptions). Interestingly, both the US and Antigua argued that the panel, in deciding whether the United States' ban on the online gambling was an arbitrary or unjustifiable discrimination, failed to base its ruling on the other party's arguments and evidence adduced in terms of Article XIV, but instead recycled previous arguments and evidence submitted by both parties under different provisions.[91]

To each party the panel's evidentiary recycling was improper since it unduly advantaged the other party. Antigua took the view that the recycling permitted the United States to discharge the latter's initial burden of making a *prima facie* case under the

[84] But see Howse and Mavroidis, 'Europe's Evolving Regulatory Strategy for GMOs – The Issue of Consistency with WTO Law: Of Kine and Brine', 24 *Fordham Int'l LJ* (2000) 317, at 346 (arguing that a panel's use of expert witnesses in the WTO proceedings should be limited to convincing itself of an already proved *prima facie* case, but not be extended to substantiating such facts as were not presented by the parties).

[85] Pauwelyn, *supra* note 73, at 258.

[86] *Sardines*, *supra* note 74, at para. 281.

[87] Appellate Body Report, *European Communities – Measures Affecting Asbestos and Products Containing Asbestos*, WT/DS135/AB/R (12 Mar. 2001) (hereinafter *Asbestos)*, at para. 161.

[88] Appellate Body Report, *Australia – Measures Affecting the Importation of Salmon,* WT/DS18/AB/R (20 Oct. 1998) (hereinafter *Salmon)* at para. 261 ('The Panel's consideration and weighing of the evidence in support of Canada's claims relates to its assessment of the facts and, therefore, falls outside the scope of appellate review under Article 17.6 of the DSU').

[89] Appellate Body Report, *India – Quantitative Restrictions on the Imports of Agriculture, Textile, and Industrial Products*, WT/DS90/AB/R (23 Aug. 1999), at para. 142.

[90] Appellate Body Report, *United States – Measures Affecting Imports of Woven Wool Shirts and Blouses from India*, WT/DS33/AB/R (25 April 1997), at 14–15.

[91] Appellate Body Report, *United States – Measures Affecting the Cross-Border Supply of Gambling*, WT/DS285/AB/R (7 Apr. 2005) (hereinafter *Gambling)*, at paras 277–279.

exception clause (Article XIV) when the United States had in fact failed to do so.[92] On the other hand, the United States submitted that the same practice (recycling) 'constructed a rebuttal' under the *chapeau* (arbitrary and unjustifiable discrimination) in favour of Antigua when Antigua had failed to do so.[93] Nonetheless, the AB endorsed the panel's discretion to reuse those arguments and evidence previously adduced under different yet still relevant provisions.[94] This overarching evidentiary rule, although it may contribute to judicial economy, tends to override the initial allocation of BOP by allowing the panel effectively to relieve a certain party of its textually prescribed BOP.

Crucially, this article does *not* claim here that the initial allocation of burden of proof (who to prove) is inconsequential. It may still be important. As Henrik Horn and Joseph Weiler aptly observed, it will '*ceteris paribus* affect the probability that the different parties win' by burdening one party over the other.[95] Likewise, it will shape Members' behaviour in various ways, including their resource spending in the proceedings as well as decision-making as to whether to launch litigation at all and/or when to settle.[96] Nonetheless, such determinant power of the allocation of BOP tends to dramatically decrease if the very '*ceteris paribus*' (other things being equal) condition is not met. In other words, if the Court destabilizes this unique condition by controlling the subsequent terms of parties' evidentiary tasks, i.e. *whether* to prove and *what* to prove, the initial allocation (locus) of BOP, i.e. who to prove, may not matter much after all. The AB's jurisprudence confirms this point.

In *Hormones*, the AB originally took the view that 'the Panel mistakenly required that the European Communities take on the burden of proof that its measures related to the hormones involved here, except MGA, are based on a risk assessment', and therefore determined that 'the United States and Canada have to make a prima facie case that these measures are not based on a risk assessment'.[97] Yet the AB still found that 'the United States and Canada, *although not required to do so by the Panel*, did, in fact, make this prima facie case that the SPS measures related to the hormones involved here, except MGA, are not based on a risk assessment'.[98] Therefore, the AB's ruling on *whether* to prove is more conclusive and decisive than its decision on *who* to prove.

In *Sardines*, the AB addressed the effectiveness and appropriateness of an international standard (Codex Standard 94) on the labelling of sardines under the Agreement on Technical Barriers to Trade (TBT).[99] The EC's Regulation monopolized the use of the term 'sardine' for those sardines caught in the European sea in the name of consumer protection, while the Codex standard explicitly endorsed a much more liberal, generic use of the term, which includes Peruvian sardines caught in the Eastern

92 *Ibid.*, at para. 278.

93 *Ibid.*, at para. 279.

94 *Ibid.*, at paras 287–288.

95 Horn and Weiler, '*European Communities – Trade Description of Sardines:* Textualism and its Discontent', in H. Horn and P.C. Mavroidis (eds), *The WTO Case Law of 2002* (2005), at 262.

96 *Ibid.*

97 *Hormones, supra* note 10, at para. 197, n.180.

98 *Ibid.* (emphasis added).

99 *Sardines*, *supra* note 74, at paras 284–291.

Pacific Ocean. Therefore, the labelling of Peruvian sardines as sardines was prohibited by the EC Regulation, which departed from Codex Standard 94 permitting such labelling. Article 2.4 of TBT requires Members to follow a relevant international standard unless it is ineffective and inappropriate in achieving putative regulatory goals. Who should then bear the initial burden of proving that the Codex standard is (in-)effective and (in-)appropriate?

The panel took the view that the defendant (the EC) should bear the proof burden, while the AB took the view that it should rest on the complainant (Peru). The AB, in tandem with its similar ruling in *Hormones*, emphasized that WTO members enjoy regulatory autonomy which would connote even a right to disregard a relevant international standard if they believe that such standard is ineffective and inappropriate. Therefore, according to the AB, Peru should have proved that Codex Standard 94 was in fact effective and appropriate to fulfil the EC's regulatory goals. At first blush, Peru's BOP seems quite heavy since it should produce *direct* (apodeicdic) evidence which would substantiate the fact that Codex Standard 94 could fully address European consumers' concerns for fraud and confusion over sardines. Nonetheless, the AB concluded that Peru did discharge its apparently formidable BOP by applying rather light evidentiary criteria. The AB endorsed the panel's *indirect* (apagogical) fact-finding which noted that 'it has not been established that consumers in most member States of the European Communities have always associated the common name "sardines" exclusively with *Sardina pilchardus'*, which are those sardines harvested in the European sea and thus familiar to European consumers.[100]

One might observe that this type of evidence seems quite inadequate to discharge Peru's ostensibly heavy BOP since there could still be *some* confused European consumers and the EC might pursue a zero-tolerance policy over consumer protection, as it did in *Hormones*.[101] In other words, the AB's generous interpretation of the evidentiary threshold in proving whether an international standard is efficient or appropriate amounts to the second-guessing of members' level of regulatory protection. To the AB, no significant risk of consumer confusion over sardines existed, and thus Codex Standard 94 would be good enough after all to achieve the EC's putative goal of consumer protection. Ironically, this interpretive posture is at odds with the AB's previous allocation of BOP in favour of members' regulatory autonomy, which led Peru, not the EC, to prove the value of Codex Standard 94. Accordingly, the AB's reversal of the panel's allocation of BOP (*who* to prove) from the defendant (the EC) to the complainant (Peru) under the spirit of regulatory autonomy failed to deliver any real impact of the outcome of the dispute on account of the AB's subsequent adoption of a low evidentiary threshold in discharging Peru's BOP (*whether* to prove).[102]

The Court's dilution of the potential impact which the initial allocation of the BOP might have delivered by subsequently lessening the evidentiary threshold (standards

[100] *Ibid.*, at para. 290 (underlining added).

[101] See Horn and Weiler, *supra* note 95, at 272.

[102] See Heiskanen, 'The Regulatory Philosophy of International Trade', 38 *J World Trade* (2004) 1, at 31 (taking the view that the AB's reversal of the *Sardines* panel's ruling on the allocation of the burden of proof 'had no effect on the outcome of the case').

of review) in *Sardines* testifies that the BOP issues are interpretive in nature. It is in the Court's interpretive discretion[103] to resolve who to prove, whether to prove, and what to prove in each dispute on a case-by-case basis. Even the conventional focal point, i.e., who to prove, is subject to this interpretive discretion because in most cases the allocation of an initial BOP is often obscure from the texts themselves and requires the Court's creative construction. This interpretive task concerning the BOP eventually becomes the Court's own responsibility or *burden* under the DSU, in that the task falls within the realm of 'an objective assessment of the facts of the case and the applicability of and conformity with the relevant covered agreements'.[104] In the end, how the Court discharges this burden determines not only the destiny of a given case but also the very legitimacy of the Court.

This interpretive burden appears more salient to the World Trade Court than to domestic courts. International trade agreements, such as the SPS Agreement, are essentially a product of compromise after a series of negotiations, which indicates the inherent ambiguity of their texts.[105] To capture a WTO member's concrete (contextualized) behaviour, such as an alleged violation, based on these abstract (decontextualized) provisions, panels or the AB need to creatively (re-)construct these texts beyond mechanical application of them. Although it is WTO members themselves which ultimately (re-)interpret them in a legislative sense,[106] to resolve a dispute through the aforementioned (re-)construction is still reserved to a WTO panel or the AB.

Finally, the court-oriented approach to the BOP proposed here is more amenable to the practical reality than the conventional, party-oriented one. The BOP, in a conventional narrow sense, concerns only facts, not law. Matters of law are decided exclusively by judges (*jura novit curia*). Parties bear no BOP as to issues of law even though they often present legal arguments in their favour.[107] However, in practice the line between law and facts is often blurred. The fact to be proved (*factum probandum*) is often enmeshed in *legal* claims and arguments. Under the court-oriented approach,

[103] Cf. Pauwelyn, *supra* note 73, at 227 (referring to 'a tool which is particularly attractive to adjudicators: clouded in an air of procedural neutrality but, by the same token, falling to a considerable extent within the quasi-discretionary powers of the panel').

[104] Understanding on Rules and Procedures Governing the Settlement of Disputes, 15 Apr. 1994, Marrakesh Agreement Establishing the World Trade Organization, Annex 2, Legal Instruments – Results of the Uruguay Round, 33 ILM (1994) 112, at 120 (hereinafter DSU). But cf. Walker, *supra* note 63 (submitting that the Appellate Body should impose on panels a minimum requirement of 'rational inference', defined as 'minimal evidence that any reasonable person would consider necessary to support such a finding', namely a 'preponderance standard of proof').

[105] See notably Jackson, 'Appraising the Launch and Functioning of the WTO', 39 *German Yrbk Int'l L* (1996) 20, at 39 (taking the view that 'the decision-making and voting procedures of the WTO, although much improved over the GATT, still leave much to be desired'); Jackson, 'International Economic Law in Times That Are Interesting', 3 *J Int'l Economic L* (2000) 3, at 8 (taking the view that 'treaties are often an awkward albeit necessary method of designing institutions needed in today's interdependent world, but they do not solve many problems').

[106] WTO Agreement, *supra* note 2, Art. IX:2 ('The Ministerial Conference and the General Council shall have the exclusive authority to adopt interpretations of this Agreement and of the Multilateral Trade Agreements').

[107] Pauwelyn, *supra* note 73, at 242.

the Court tends to correspond better with this blurred distinction since it may feel less compelled to dichotomize facts and law for the purpose of the BOP. After all, the Court interprets *both* facts and law.

C *Three Interpretive Burdens of the Court*

1 Who to Prove

As discussed above, parties may not predict precisely who will bear the proof burden in advance since it depends on how the Court will interpret the text.[108] For example, under the title of 'Harmonization', Article 3, paragraph 1 requires that members 'shall base their sanitary or phytosanitary measures on international standards . . . , except as otherwise provided for in this Agreement, and in particular in paragraph 3'.[109] Accordingly, paragraph 3 of the Article permits Members to forgo international standards under certain conditions.[110] In addition, paragraph 2 of the Article establishes that an SPS measure conforming to international standards is presumed to be consistent with relevant SPS provisions.[111] A natural inference from these paragraphs might impose the BOP on a regulating (defending) party in case the party departs from international standards.[112] In this line, the *Hormones* panel ruled that the EC should demonstrate that its ban on hormoned beef, although it failed to observe the Codex standard, would nonetheless be necessary to achieve its regulatory goal. In other words, the existence of the presumption would construct members' duty to follow international standards under Article 3.1 as a general obligation and an opt-out clause under Article 3.3 as an exception.[113]

However, this position was patently rejected by the AB, which instead interpreted the same provision in a diametrically opposite fashion. The AB simply renounced the general obligation/exception relationship in Article 3.1 and 3.3, upholding members' regulatory autonomy which may even encompass a right to depart from international standards despite an explicit obligation to follow those standards under Article 3.1.[114] The AB held that:

> We cannot lightly assume that sovereign states intended to impose upon themselves the more onerous, rather than the less burdensome, obligation by mandating *conformity* or *compliance with* such standards, guidelines and recommendations.[115]

To the AB, harmonization of SPS measures through international standards under Article 3.1 merely embodies an aspiration, not a legal obligation, which is 'yet to be realized *in the future*'.[116] Importantly, these diverging interpretive postures between

[108] Lichtenbaum, *supra* note 71, at 1252.
[109] SPS, *supra* note 55, Art. 3.1 (emphasis added).
[110] *Ibid.*, Art. 3.3.
[111] *Ibid.*, Art. 3.2.
[112] See Barcelo III, 'Product Standards to Protect the Local Environment – The GATT and Uruguay Round Sanitary and Phytosanitary Agreement', 27 *Cornell Int'l LJ* (1994) 755, at 774.
[113] *Hormones* (Panel), *supra* note 13, at paras 8.86–8.87.
[114] *Hormones, supra* note 10, at paras 169–171.
[115] *Ibid.*, at para. 165 (emphasis original).
[116] *Ibid.* (emphasis original).

the panel and the AB are attributable to more than textual grounds. They represent different institutional objectives and purposes (*teloi*) which the panel and the AB projected to the text when they interpreted it. The *telos* that the panel embraced was trade without restrictions, while that which the AB adopted was Members' regulatory autonomy.

Founded against the historical background of economic balkanization in the inter-war period, the original teleology of the GATT was free trade. Although it did recognize certain compromise by permitting non-trade values, such as protection of human health or the environment, these values were upheld only as 'exceptions' under Article XX. In other words, these values were only secondary to the main value of free trade, represented by basic obligations, such as the National Treatment principle.[117] Furthermore, these values were very hard to materialize in a practical sense since exceptions are meant to be interpreted narrowly, not broadly. In fact, in the entire GATT history, not a single non-trade value was upheld under Article XX.[118] Under this pro-trade bias which structurally downgrades non-trade values as exceptions, a burden of proving that any given regulation is legitimate (non-protectionist) and necessary rests on a regulating country. One might justify this position by observing that any regulation is presumed to be protectionist since the government tends to favour its domestic producers in designing the regulation.[119]

Unsurprisingly, this structural and empirical pro-*trade* bias of the GATT regime drew much criticism from both environmentalists and domestic regulators. A number of NGOs have vehemently attacked the neo-liberal mantra of free trade-cum-globalization which they believe undermines more paramount values such as environmental protection or social justice. In addition, the rise of the modern welfare state, which is expected to respond to citizens' heightened demands for better social hygiene, turned a once deregulatory ethos into a re-regulatory one. This elevated recognition of domestic regulations naturally altered the political dynamics around them. In the past, risk regulations were mostly regarded as technical and professional issues which concerned a narrow epistemic community of scientists and policy makers.[120] However, once highlighted and thus politicized, risk regulations have become everybody's business.[121]

Out of this novel pro-*regulation* ethos, negotiators in the Uruguay Round created the SPS/TBT Agreement which escalated those non-trade values once regarded as mere exceptions under GATT Article XX to an autonomous 'right' to regulate. The

[117] See generally S. Cho, *Free Markets and Social Regulation: A Reform Agenda of the Global Trading System* (2003).

[118] See Howse, 'Managing the Interface between International Trade Law and the Regulatory State: What Lessons Should (and Should Not) Be Drawn from the Jurisprudence of the United States Dormant Commerce Clause', in T Cottier and P.C. Mavroidis (eds), *Regulatory Barriers and the Principle of Non-discrimination in World Trade Law* (2000), at 142.

[119] Kometani, 'Trade and the Environment: How Should WTO Panels Review Environmental Regulations Under GATT III and XX?', 16 *Northwestern J Int'l L and Business* (1996) 441, at 449.

[120] See Stewart and Johanson, 'The SPS Agreement of the World Trade Organization and International Organizations: The Roles of the Codex Alimentarius Commission, the International Plant Protection Convention, and the International Office of Epizootics', 26 *Syracuse J Int'l L and Commerce* (1998) 27, at 28.

[121] *Ibid.*, at 52.

TBT preamble recognizes that 'no country should be prevented from taking measures necessary . . . for the protection of human, animal or plant life or health, of the environment';[122] SPS Article 2.1 specifies that 'Members have the right to take sanitary and phytosanitary measures necessary for the protection of human, animal or plant life or health'.[123] Silhouetted against this new ethos valuing regulatory autonomy of member countries, the AB appeared to put members' right to regulate before international standards, even though the SPS envisages harmonization around these standards. This unique value system eventually led the AB to reverse the otherwise literally plausible interpretation by the *Hormones* and *Sardines* panels which imposed on regulating parties the initial burden of proving that these standards were scientifically unjustified or ineffective/inappropriate to achieve their regulatory goals. The AB instead required the complaining parties to prove that these standards were supported by science and effective/appropriate.[124]

2 What to Prove

The second interpretive burden of the Court is to determine what elements parties should prove to discharge their conventional proof burdens. The Court's interpretive orientation in this matter is often embodied in certain doctrinal tests, such as three- or four-prong tests. By designing these tests, the Court manages an adversarial battle between parties in the direction that it chooses in each case. This aspect of BOP was first raised by the AB in *Shirts and Blouses*. The AB took the view that:

> [W]e consider the question of *what the importing Member must demonstrate* at the time of its determination. . . . In the context of the GATT 1994 and the WTO Agreement, precisely how much and precisely *what kind of evidence* will be required to establish such a presumption will necessarily *vary from measure to measure, provision to provision, and case to case*.[125]

Although this burden is not explicitly demonstrated in the Court's ruling, the Court nonetheless relies heavily on it in moving the proceedings forward. For example, the *Hormones* panel originally required the EC to show that it had actually conducted a risk assessment by itself, constructing a procedural duty out of the risk assessment requirement under SPS Article 5.1.[126] However, the AB rejected the panel's interpretation on the procedural aspect of risk assessment and took the view that risk assessment is only a substantive obligation. Therefore, the EC had to demonstrate only that there existed a 'rational relationship' between its measure and risk assessment.[127] Under this ruling, the EC could have even outsourced its risk assessment. Furthermore, according to the AB, a risk assessment need not be based on a mainstream scientific opinion: even a minority opinion is sufficient to justify the risk assessment.[128]

[122] Agreement on Technical Barriers to Trade, Annex 1A, the WTO Agreement, *supra* note 2, preamble (hereinafter TBT).

[123] SPS, *supra* note 55, Art. 2.1.

[124] See Knox, 'The Judicial Review of Conflicts Between Trade and the Environment', 28 *Harvard Environmental L Rev* (2004) 1, at 43–44.

[125] *Shirts and Blouses*, *supra* note 12, pt IV (emphasis added).

[126] *Hormones* (Panel), *supra* note 55, at para. 8-1008.

[127] *Hormones*, *supra* note 10, at para. 193.

[128] *Ibid.*, at para. 194.

These two interpretations by the AB, which were diametrically opposed to those of the panel, would allow the EC to rely even on serendipitous studies which had come out only after it banned the hormone-treated beef.[129] In other words, the AB's liberal interpretation of the risk assessment requirement practically reduced the EC's proof burdens because the EC would easily cherry-pick any novel yet controversial scientific opinions and present them to discharge its proof burdens under Article 5.1.[130] In fact, this is exactly what the EC did, instead of repealing its ban on the hormone-treated beef struck down by the AB. Based on a series of new scientific opinions delivered by the 'Scientific Committee on Veterinary Measures relating to Public Health of the European Commission (SCVPH)', the EC adopted in 2003 Directive 2003/74/EC, which permanently banned one of the six hormones (oestradiol-17β) in question.[131]

3 Whether to Prove

After the Court decides who should bear the BOP over disputed facts and what exactly parties should prove, its last interpretive task on the BOP is to determine *whether* parties bearing the proof burdens have actually discharged them. In other words, the Court should resolve the quantum (standard) of proof issue, i.e., *how much* evidence would be sufficient for a party to establish a *prima facie* case or to rebut the presumption that the initial *prima facie* case created in each case.[132]

For example, when a complaining party claims that a defending party violates Articles 2.2 and 5.1 of the SPS Agreement by maintaining the latter's sanitary measure without scientific justification, the complaining party should prove that there is no rational relationship between the defending party's measure and the scientific evidence. The Court will decide whether such a relationship exists 'on a case-by-case basis', taking into account the 'particular circumstances of the case'.[133] In this line, the *Salmon* panel originally found that the alleged Australian risk assessment on imported salmon (1996 Final Report) 'addresse[d] and *to some extent* evaluate[d] a series of risk reduction factors, in particular, on a disease-by-disease basis'.[134] According to the panel, the 1996 Final Report did 'evaluate the likelihood of entry, establishment or spread of these diseases according to the SPS measures which might be applied' in compliance with Article 5.1 of the SPS Agreement. However, the AB disagreed. It took the view that '*some* evaluation of the likelihood is not enough'. [135]

Therefore, *how much* evaluation needs to be shown to discharge the proof burden regarding risk assessment depends entirely on the Court's interpretation, given each

[129] Quick and Blüthner, 'Has the Appellate Body Erred?: An Appraisal and Criticism of the Ruling in the WTO Hormones Case', 2 *J Int'l Economic L* (1999) 603, at 615.

[130] *Ibid.*, at 618.

[131] *Hormones – Suspension*, *supra* note 19, at para. 493.

[132] Pauwelyn, *supra* note 73, at 233, 252–253 (labelling this aspect of burden of proof as 'presumption technique').

[133] Appellate Body Report, *Japan – Measures Affecting Agricultural Products,* WT/DS76/AB/R (22 Feb. 1999), at para. 84.

[134] Panel Report, *Australia – Measures Affecting the Importation of Salmon,* WS/DS18/R (12 June 1998) (hereinafter *Salmon* (Panel)), at para. 8.91.

[135] *Salmon, supra* note 88, at para. 134 (emphasis original).

circumstance. It was in this way that the AB in *Gambling* concluded that the US had demonstrated successfully the necessity of its ban on remote gambling, while Antigua had failed to identify a reasonably available alternative measure which might have rebutted the US's position.[136] In the same vein, the AB in *Korean Beef* held that Korea had failed to meet its burden of proving that alternatives to the dual retail system were not reasonably available.[137]

Intriguingly, this 'whether to prove' aspect of BOP often plays a face-making function when the Court delivers its final decision. In any WTO dispute, a defending party loses for two reasons. First, it may lose in a direct (apodeictic) fashion when the Court finds that its measure has violated, i.e. been inconsistent with, the WTO norms. Secondly, it may also lose in an indirect (apagogical) fashion when the Court finds that it fails to demonstrate that its measure is not inconsistent with the WTO norms; to wit, it fails to discharge its burden of proving that its measure has *not* violated the WTO norms. The same logic applies to a situation in which a complaining party loses. It may lose when the Court finds that the measure in question is consistent with the WTO norms; it may also lose when the Court finds that the complaining party fails to establish its *prima facie* case that the measure is *not* consistent with the WTO norms.

In both situations, the latter (indirect) type of finding appears less damaging than the former (direct) type to the losing party. While the former tends to blatantly reject a party's claim, the latter tends to provisionally suspend the claim in a given dispute. In other words, on the former occasion, a losing party may not confidently make the same claim in any future dispute since it has been struck down. On the latter occasion, however, it may still make the same claim if it provides more and/or better pieces of evidence which may convince the Court. Therefore, the Court may gracefully mitigate the damage of the losing party by attributing its defeat not to a substantive reason (violation) but rather to a technical, procedural failure (failure to meet the BOP), even though such differentiation may not matter much in a practical sense.

4 A Cumulative Nature of Three Burdens

These interpretive burdens that the Court bears in deciding who to prove, what to prove and whether to prove are interrelated and cumulative in nature, and should thus be understood in their entirety. No single aspect alone would be sufficient to capture true interpretive attributes of the BOP.

As discussed above, the conventional focal point in the BOP, i.e., the assignment issue (who to prove), may not be too critical to the outcome of the case because there are hardly any cases where the initial allocation of BOP solely determines the outcome of litigation absent any prevailing evidence. Moreover, an alternating, ping pong-like shift of BOP between parties rarely happens. A panel or the AB simply interprets both facts and law based on a collection of arguments and evidence submitted by both parties as well as other undisputed facts. In this context, the AB in *Gambling* permitted the

[136] Appellate Body Report, *United States – Measures Affecting the Cross-Border Supply of Gambling*, WT/DS285/AB/R (7 Apr. 2005) (hereinafter *Gambling*), at para. 326.

[137] Appellate Body Report, *Korea – Measures Affecting Imports of Fresh, Chilled and Frozen Beef*, WT/DS169/AB/R (11 Dec. 2000) (hereinafter *Korean Beef*), at para. 182.

parties to recycle their arguments and evidence adduced under different provisions, thereby blurring the sequential shift of BOP.[138]

Thus, the Court's decision on who to prove may not change the outcome of the dispute. For example, the *Sardines* panel ruled that a regulating party departing from an international standard should bear the burden of proving that such standard would not be appropriate to the level of protection it pursued.[139] Although the AB reversed the panel's finding and ruled that the complainants, not defendants, bear the burden of proving that the international standard would be appropriate, such reversal did not change the outcome of the case: the EC still lost since the AB simply found that the complainant met the proof burden.[140]

In addition, other aspects of BOP (what to prove and whether to prove) also influence the conventional aspect of BOP (who to prove). Although a defending party (a regulating party) in general bears the burden of proving that a measure in question was necessary to achieve the putative regulatory goal in terms of an affirmative defence (exception) under GATT Article XX,[141] the Court may instead require a complaining party to bear a heavier burden than usual in the preceding stage, i.e., when it establishes a *prima facie* case that the defending party violated a general obligation such as the National Treatment principle. This heavier standard of proof in an earlier stage on the complaining party tends to relieve the defending party of its own BOP at a later (exception) stage.

For example, the AB in *Asbestos* held that the complaining party (Canada)'s initial burden of proving that France discriminated against Canadian asbestos in favour of its domestic substitute fibres was a 'heavy' one.[142] This holding reflects the AB's critical observation that the carcinogenic asbestos and risk-free substitute fibres could not be treated alike.[143] The AB found that:

> This carcinogenicity, or toxicity, constitutes, as we see it, a defining aspect of the physical properties of chrysotile asbestos fibers. The evidence indicates that PCG fibers, in contrast, do not share these properties, at least to the same extent. We do not see how this highly significant physical difference *cannot* be a consideration in examining the physical properties of a product as part of a determination of 'likeness' under Article III:4 of the GATT 1994.[144]

Here, by incorporating health risks, which concerned GATT Article XX(b), into Article III:4 (National Treatment) consideration,[145] the AB dramatically increased the complaining party (Canada)'s burden of establishing a *prima facie* case that Canadian asbestos, which was banned, and French substitute fibres, which were

[138] See *supra,* text accompanying note 91. But cf. *Hormones – Suspension*, *supra* note 19, at paras 580–581 (refusing to accept a holistic BOP approach and instead emphasizing the precise locus of BOP on a provision-by-provision basis).

[139] *Sardines*, *supra* note 74, WT/DS231/AB/R (26 Sept. 2002), at para. 282.

[140] *Ibid.*, at para. 315.

[141] See *supra* pt. I.

[142] *Asbestos*, *supra* note 87, at para. 118.

[143] Cone, III, 'The Asbestos Case and the Dispute Settlement in the WTO: the Uneasy Relationship Between Panels and the Appellate Body', 23 *Michigan J Int'l L* (2001) 103, at 114–118.

[144] *Asbestos, supra* note 87, at para. 114 (italics original, underlining added).

[145] Cho, *supra* note 117, at 20–23.

permitted, would be like products and thus deserve equal treatment. In fact, Canada's initial onus of proof aggrandized by the AB's pro-regulation interpretation appeared to be too heavy for Canada to discharge in a practical matter. It would be highly unlikely to expect Canada ever to persuade the AB to accept that Canadian asbestos and French substitute fibres are like, given the AB's foregoing risk-driven interpretation on physical properties. As a result, the defending party (the EC) was in effect relieved of its burden of proving under GATT Article XX (b) in a later stage that the asbestos ban was necessary to protect human health in France. Therefore, the AB's escalation, via interpretation, of a probative threshold (standard of proof) not only *de facto* shifted the burden of proof as to the necessity of the regulation but also created a *de facto* presumption of regulatory legitimacy which might be practically irrefutable.

A similar *de facto* reversal of proof burden through the Court's construction of what to prove may be found in *Japan – Agricultural Products*. Under the traditional necessity test of GATT Article XX, the defending party (Japan) would have had to demonstrate as an affirmative defence that its measure was the least trade restrictive means. In this case, however, the AB ruled that the complaining party (the US) should demonstrate that a reasonable less-restrictive alternative to the regulation in question could have been feasible.[146]

4 Hercules Demystified: Problematizing the Court's Interpretation of Risks and Science

In trade disputes involving risk regulation, the Court's interpretive practice in discharging its own burden as to BOP questions, namely determining what to prove and whether to prove, has symbolized a transcendental, omniscient tribunal (Hercules) which bestows a final, yet always correct, finding. For example, the Court in *Hormones* predicated its reasoning on its own understanding of risks from residual levels of hormones in the human body as it rejected a conventional way of assessing these risks advocated by scientists. This judicialized form of science, and more broadly 'substantive' judicial decision-making in disputes crisscrossing trade and regulation, tends to generate incoherent jurisprudence and undermine the Court's credibility, since such substantivism is vulnerable to underregulation and/or overregulation.[147]

A *Diverging Oracles from Hercules: Incoherent Jurisprudence*

In the area of social regulation prone to highly controversial scientific disputes, the aforementioned Herculean 'right answer' thesis, which has been embedded in the Court's prescriptive, substantive interpretation, has created incoherent jurisprudence as it makes diverging findings on similar provisions or situations under the

[146] Appellate Body Report, *Japan – Measures Affecting Agricultural Products,* WT/DS76/AB/R (22 Feb. 1999) (hereinafter *Japan-Agricultural Products)*, at para. 126.

[147] Cf. Guzman, *supra* note 1, at 23–24 (observing that, given diverging preferences on health and safety among WTO members as well as diverging opinions among scientists, panels' or the AB's own evaluation of SPS measures is prone to mistakes).

SPS Agreement and GATT Article XX. This jurisprudential incoherence can be found in three different yet still interrelated aspects: within the SPS Agreement, between the SPS Agreement and GATT Article XX, and finally between law and facts. This incoherence is problematic since it costs the WTO jurisprudence its vital asset, i.e., predictability. In addition, as Ronald Allen poignantly observed, while consistency may not ensure correctness, incoherence tends to guarantee errors.[148] After all, diverging oracles from Hercules might confuse their receivers and therefore become a disservice, not a contribution, to them.

1 Incoherence within the SPS Agreement

In *Hormones*, the AB was faithful to the principle of *in dubio mitius*. The AB basically characterized the health risks, i.e., carcinogenicity from the hormoned beef, as *sui generis* and incomparable to otherwise similar regulatory situations, such as health risks from endogenously occurring hormones. Hence, it found an unarbitrary and justifiable distinction between these two regulatory situations. The AB therefore accorded the EU a strong presumption in favour of its regulatory determination, which made it impossible for the complainant, the United States, to rebut. In the same context, the AB, departing radically from the way in which SPS text is structured, accorded the EC the right to depart from the relevant international standards (Codex standards) as well as the right to choose a zero-tolerance level of protection, disregarding the possibility of any controlled use of beef hormones.

The more recent *Hormones – Suspension* case confirmed the AB's broad deference to regulating countries in the area of risk regulation. In this case, the AB harshly admonished the panel for the latter's over-reliance on a mainstream, conventional version of science represented by international standards (the Codex standard) as well as experts' opinions given by a majority of scientists whom the panel had consulted. In doing so, the AB enmeshed two critical regulatory steps under SPS Article 5 – an objective, science-based risk assessment and a subjective, administrative (and often political) determination of the appropriate level of protection.[149] This conceptual enmeshment, despite the explicit textual distinction, led to the latter's dominance over the former. In other words, the EC's conservative regulatory stance (zero-tolerance) manipulated the otherwise objective risk assessment. The AB's squeezing of the panel's standard of review also broadly defined the EC's regulatory space *vis-à-vis* conventional science.[150]

Nonetheless, the Court has often departed from this highly deferential, sovereignty-preserving interpretation in other cases involving similar regulatory circumstances. In *Salmon*, the AB simply viewed the risks of diseases from ocean-caught salmon as

[148] Allen, 'Burdens of Proof, Uncertainty, and Ambiguity in Modern Legal Discourse', 17 *Harvard J L & Policy* (1994) 627, at 644.

[149] *Hormones – Suspension*, *supra* note 19 at para. 544 (taking the view that 'the risks arising from the abuse or misuse in the administration of hormones can properly be considered as part of a risk assessment').

[150] *Ibid.*, at para. 612 (finding that 'it was not the Panel's task … that the Panel consulted, to determine whether there is an appreciable risk of cancer arising from the consumption of meat from cattle treated with oestradiol-17β').

comparable to those from herring used as bait and live ornamental finfish, despite the fact that Australia vehemently argued for unique risks of diseases attached to the former salmon. In particular, Australia noted that 'salmon represented the only finfish on which a species-specific level of protection had been established'[151] and that 'risks associated with other aquatic animals could not be compared in the absence of a risk analysis'.[152]

Here, Australia's regulatory posture seems strikingly similar to that of the EC in *Hormones*, i.e., a risk-averse, zero-tolerance level of protection in the absence of *positive* scientific evidence corroborating the hormoned beef's safety. In other words, Australia, holding an autonomous right to regulate animal (salmon) safety, would have enjoyed the same broad deference as the EC did in *Hormones*. Yet, the AB opined that a shared risk of contracting only *one* common disease between salmon and non-salmonids was sufficient to make these two regulatory situations comparable.[153] According to the AB's approach, any two regulatory situations may still be comparable as long as they share at least one common element (e.g., disease) even though one is subject to additional risks (e.g., multiple, unknown diseases) from the other. Therefore, the AB substituted its own risk-friendly regulatory determination for Australia's more cautious one.

However, why should these two regulatory situations in *Salmon*, that is risks from ocean-caught salmon and those from herring used as bait and live ornamental finfish, be treated as 'comparable', while two other regulatory situations in *Hormones*, i.e., risks from naturally occurring hormones and those from artificially administered hormones, were treated as 'incomparable', despite the fact that health risks from residual hormones in our body would be the same regardless of 'differences in pathways taken or metabolites'?[154] The AB has offered no explanation at all of this serious jurisprudential incoherence.

Once the AB in *Salmon* had framed these two regulatory situations (the importation of ocean-caught salmon, and that of herring used as baits and live ornamental finfish) as comparable, the rest of the analysis under Article 5.5 seemed to be rather automatic. First, the presence of sheer difference in regulatory treatment between the two situations, i.e., prohibiting importation and permitting importation, led the AB to generate a nearly irrebuttable presumption of 'arbitrary and unjustifiable' discrimination in favour of the complainant as the complainant only had to demonstrate the existence of such difference. It was the defendant (regulating state) which had to rebut the complainant's argument by proving in turn that its regulation would nonetheless be unarbitrary and justifiable.

Secondly, such arbitrariness and unjustifiability, once found, determines the onus of burden as to the rest of the elements of Article 5.5 to the detriment of defendants.

[151] Panel Report, *Australia – Measures Affecting the Importation of Salmon*, WS/DS18/R (12 June 1998) (hereinafter *Salmon* (Panel)), at para. 4.187.

[152] *Ibid.*, at para. 4.189.

[153] Appellate Body Report, *Australia – Measures Affecting the Importation of Salmon,* WT/DS18/AB/R (20 Oct. 1998) (hereinafter *Salmon)*, at para. 152.

[154] *Hormones* (Panel), *supra* note 13, at para. 8-1887.

Under the euphemistic labels of 'warning signals', the AB simply derived additional force of the presumption from the existence of 'discrimination or a disguised restriction on international trade', which was also detrimental to the defendant.[155] Under these circumstances, the defendant could hardly rebut such strong presumptions.

This second-guessing on risk determination by the Court, which is certainly at variance with *Hormones*, culminates in its selective imposition of proof burden on a specific *group* of products in question. In *Japan – Apples*, the United States complained that Japan had banned the import of United States apples without sufficient scientific evidence. In doing so, the United States presented arguments and evidence concerning only 'mature, symptomless' apples.[156] Japan argued that the United States should also establish a *prima facie* case that 'infected' apples would pose no risk, unlike mature and symptomless apples.[157] However, both the panel and the AB ruled that it was Japan which should adduce any scientific evidence for such risk that infected apples would cause.[158] The AB held that:

> [T]he Appellate Body's statement in EC – Hormones does not imply that the complaining party is responsible for providing proof of *all* facts raised in relation to the issue of determining whether a measure is consistent with a given provision of a covered agreement. In other words, although the complaining party bears the burden of proving its case, the responding party must prove the case it seeks to make *in response*.[159]

Critically, this innocuous-sounding construction by the AB on the BOP in fact betrays its hidden hermeneutical agenda, i.e., judicialization of science. The AB justified such mitigated proof burden borne by the United States, i.e., the burden of making a *prima facie* case *only* with respect to 'mature, symptomless' apples, on the ground that other apples, such as immature, infected apples, posed only a 'small' or 'debatable' risk which derives from human, technical errors and illegal actions.[160] Here, the AB played the role of a scientist, rather than judge. As a result, the AB granted the United States a *de facto* presumption of safety with respect to *all* apples it exports to Japan by allowing the United States to limit its proof burden to those apples in a normal situation. However, a sanitary regulation does not necessarily presuppose such *normal* situations. On the contrary, a sanitary regulation could take into account those errors and illegal actions which may actually happen. Predicating the appropriate level of protection on such an optimistic scenario can hardly be conceived in any regulatory jurisdictions. In this context, the AB's posture disregarding such risks, albeit small, appears to be an extraordinary risk-taking, which provides a stark contrast with *Hormones* advocating a zero-tolerance approach to health risks.[161]

[155] *Salmon, supra* note 88, at paras 161–163.

[156] Appellate Body Report, *Japan – Measures Affecting the Importation of Apples*, WS/DS245/AB/R (26 Nov. 2003) (hereinafter *Japan – Apples)*, at para. 149.

[157] *Ibid.*

[158] *Ibid.*, at paras 149, 154.

[159] *Ibid.*, at para. 154 (emphasis added).

[160] *Ibid.*, at para. 160.

[161] In its third party argument, the EC took the view that 'the United States should have established a *prima facie* case showing that Japan's measure was not necessary or was disproportionate, including with respect to the importation of *infected* fruit': *ibid.*, at para. 109 (emphasis in original).

All in all, these substantive rulings on specific risks which result in a risk-taking approach in *Salmon* and *Japan – Apples* depart blatantly from the deferential approach that the AB had taken in comparable cases, such as *Hormones*, in which the AB endorsed a 'zero-tolerance' regulatory policy.

2 Incoherence between GATT and the SPS Agreement

In addition to the SPS Agreement, Article XX (General Exceptions) of GATT also provides a justifying mechanism with which a regulating country can prove that its health or other social regulations are necessary to achieve legitimate policy objectives. As within the SPS Agreement, one can witness yet another jurisprudential incoherence between the SPS Agreement and GATT over similar regulatory situations. The Court's own substantive evaluation of various societal risks under GATT Article XX tends to complicate a holistic understanding of its jurisprudence in relation to the SPS Agreement.

At first blush, the Court's interpretations of GATT and SPS seem to converge. In determining whether a French ban on Canadian asbestos products was necessary to protect human health under GATT Article XX (b), the *Asbestos* court issued the SPS line of statement, i.e., 'it is undisputed that WTO Members have the right to determine the level of protection of health that they consider appropriate in a given situation'.[162] Then, the AB upheld the zero-tolerance policy over asbestos adopted by France, noting that 'controlled use' would not be an alternative since it would not guarantee a zero risk that France had pursued.[163] Undoubtedly, this strong presumption in favour of France's regulatory autonomy tends to relieve France of its otherwise heavy burden of proving that its ban was necessary to protect human health as an exception, not as a right, under GATT Article XX (b).

However, the pendulum of the Court's substantive interpretation of risk and regulation swings to the opposite direction in other similarly situated cases under GATT Article XX. In *Korean Beef*, the United States challenged the Korean 'dual retail system' under which foreign beef should be sold separately from domestic beef (*Hanwoo*) in order to prevent some retailers' deceptive practices of misrepresenting cheaper imported beef as more expensive *Hanwoo*. This rather drastic measure, which is in fact a zero-risk approach to these fraudulent practices, could have been deemed necessary considering not only the high commercial values of *Hanwoo* but also certain socio-cultural attachments to this indigenous beef within the unique context of Korean society. Even the panel acknowledged that the system was introduced at a time when these frauds were widespread in the beef sector and that it '*does appear to reduce* the opportunities

[162] *Asbestos, supra* note 87, at para. 168.

[163] 'In our view, France could not reasonably be expected to employ *any* alternative measure if that measure would involve a continuation of the very risk that the Decree seeks to "halt". Such an alternative measure would, in effect, prevent France from achieving its chosen level of health protection…. Given these factual findings by the Panel, we believe that "controlled use" would not allow France to achieve its chosen level of health protection by halting the spread of asbestos-related health risks. "Controlled use" would, thus, not be an alternative measure that would achieve the end sought by France': *ibid.*, at para. 174.

and thus the temptations for butchers to misrepresent [less expensive] foreign beef for [more expensive] domestic beef'.[164]

If a reasonable person applied the *Hormone* and *Asbestos* case law to this situation, she would have few difficulties in finding that the dual retail system was necessary to prevent frauds. However, in a diametrically opposite posture from *Hormones* and *Asbestos*, the Court in *Korean Beef* in fact replaced the Korean government's regulatory judgment by its own through the creation of a quite intrusive doctrine, the 'weighing and balancing' test. The AB took the view that:

> In sum, determination of whether a measure, which is not 'indispensable', may nevertheless be 'necessary' within the contemplation of Article XX(d), involves in every case a process of *weighing and balancing a series of factors* which prominently include the contribution made by the compliance measure to the enforcement of the law or regulation at issue, the importance of the common interests or values protected by that law or regulation, and the accompanying impact of the law or regulation on imports or exports.[165]

This doctrine strips regulating members of their regulatory autonomy in that the Court, not the regulating country, will weigh in all the details related to a given measure in question. In effect, the doctrine usurps from the regulating country a critical presumption of *in dubio mitius,* and thus gravely increases its proof burden in litigation. Obviously, this omniscient attitude of the Court is yet another manifestation of its Herculean image. The Court appears to believe that it is better positioned than the regulating country in delivering right answers on critical regulatory questions, such as 'the extent to which the measure contributes to the realization of the end pursued, the securing of compliance with the law or regulation at issue'.[166]

Saddled with this commandeering interpretive posture, the Hercules in *Korean Beef de facto* overrode *Hormones* without giving any plausible reasons. First, in *Hormones*, the AB refused to equate a regulatory situation as to naturally-occurring hormones with that as to artificially-treated hormones, despite the conflicting scientific evidence. However, in *Korean Beef*, the AB trivialized the uniqueness of the Korean regulatory challenge, such as the fraudulent misrepresentation of imported beef as Korean beef (*Hanwoo*) in direct comparison with other more mundane foods, such as pork and seafood.[167] Tellingly, the very fact that Korea had not suffered any major scandals on the misrepresentation of foreign pork or foreign seafood as domestic counterparts testifies to the incomparability between these two regulatory situations.

Secondly, by implementing a dual retail system the Korean government took a very conservative approach to this grave regulatory challenge, which is analogous to the zero-tolerance policy in *Hormones*. The AB should have respected this high level of protection in the beef sector by the Korean government, as it accepted the EC's total ban on hormoned beef as legitimate, and thus rejected the complainant's arguments on

[164] Panel Report, *Korea – Measures Affecting Imports of Fresh, Chilled and Frozen Beef*, WS/DS169/R (31 July 2000) (hereinafter *Korean Beef* (Panel)), at para. 658 (emphasis added).

[165] *Korean Beef*, *supra* note 137, at para. 164 (emphasis added).

[166] *Ibid.*, at para. 163.

[167] *Ibid.*, at para. 168.

'controlled use'. Yet in *Korean Beef*, the AB replaced Korea's regulatory determination by its own right answer and ruled that Korea *could have used* softer measures, which are tantamount to the controlled use in *Hormones*, such as fines, record-keeping and policing.[168] Here, the AB simply ignored a fundamental fact that the dual retail system had to be introduced *only because* these conventional enforcement measures had not worked in the first place.

Critically, a close scrutiny of the Court's findings on the BOP revealed this Herculean second-guessing. First, the AB, siding with the panel, placed a high proof burden on Korea under which Korea had to prove that '*no* alternative measure consistent with the WTO Agreement is reasonably available at present'.[169] Then the AB took the view that Korea could have adopted those conventional enforcement measures which were already available and were applied to the *same kind* of illegal behaviour.[170] Therefore, the AB simply dismissed the Korean zero-tolerance policy as unpersuasive, i.e., failing to discharge the abovementioned proof burden,[171] instead of according Korea a margin of appreciation of its own regulatory situation, as the AB certainly did in *Hormones*. The manner in which the AB delivered its own regulatory prescription, which made the dual retail system unreasonable, sounded even admonishing. The AB took the view that:

> Violations of laws and regulations like the Korean *Unfair Competition Act* can be expected to be routinely investigated and detected through selective, but well-targeted, controls of potential wrongdoers. The control of records will assist in selecting the shops to which the police could pay particular attention.[172]

It seems puzzling that the AB did not rule in the same way on this kind of regulatory alternative (controlled use) in *Hormones* and *Asbestos*. In *Asbestos*, Canada demonstrated that technological innovations created various regulatory alternatives to a total asbestos ban adopted by France, and that a number of countries were in fact implementing these alternatives.[173] One third party also pointed out some plausible alternatives to the ban, including the disclosure requirement assisting consumers to make informed decisions on asbestos products, as well as the certification system for those handling asbestos.[174] Nonetheless, the AB ruled that:

> [I]t is undisputed that WTO Members have the right to determine the level of protection of health that they consider appropriate in a given situation. France has determined, and the Panel accepted, that the chosen level of health protection by France is a 'halt' to the spread of *asbestos*-related health risks.[175]
>
> In our view, France could not reasonably be expected to employ *any* alternative measure if that measure would involve a continuation of the very risk that the Decree seeks to 'halt'. Such an

[168] *Ibid.*, at para. 180.
[169] *Ibid.*, at para. 167 (emphasis added).
[170] *Ibid.*, at para. 172 (emphasis added).
[171] *Ibid.*, at para. 181.
[172] *Ibid.*
[173] *Asbestos* (Panel), *supra* note 59, at para. 3.55.
[174] *Ibid.*, at paras 4.97–4.98.
[175] *Asbestos*, *supra* note 87, at para. 168.

> alternative measure would, in effect, prevent France from achieving its chosen level of health protection.[176]

This utter jurisprudential incoherence among similarly situated regulatory disputes between SPS (*Hormones*) and GATT (*Korean Beef*), and even between GATT cases (*Asbestos* and *Korean Beef*), is quite troubling. It tends to send a confusing signal to various constituencies in the global trading community, and thus complicates a holistic understanding of the Court's jurisprudence in this critical area of trade and social regulation.

3 Inconsistency between Law and Fact

The Court has addressed the BOP question, such as whether to prove or what to prove, in a selective, and therefore inconsistent, manner between matters of law and fact. Sometimes, the Court sidesteps the BOP question by constructing certain controversial issues as a matter of *fact* and thus deferring the question to the lower tribunal (panel)'s interpretation. Some other times, however, the Court itself engages in the BOP question by constructing those issues of controversy as a matter of *law*.

In *Dominican Cigarette*, the tax code of the Dominican Republic required that stamps be affixed to all cigarette packets in its territory. Although the tax stamp requirement applied to both domestic and foreign cigarettes, foreign cigarette producers accused the requirement of being discriminatory since stamps had to be affixed on the imported cigarette packets in the Dominican warehouses in the presence of Dominican tax inspectors, instead of being affixed in the exporting countries beforehand.[177]

The Dominican Republic justified the tax stamp requirement under GATT Article XX (d), claiming that it was 'necessary' to prevent tax evasion and cigarette smuggling.[178] In the same line as *Hormones* and *Asbestos*, the Dominican Republic argued that it had 'no reasonable alternatives' to achieve its desired level of enforcement, which it had the right to determine.[179] Both the case law and international practice on this subject seemed to support the Dominican position. The panel in *Argentina – Hides and Leather* certainly recognized that certain prevention techniques, such as tax stamps in this case, could address tax evasion.[180] The International Conference on Illicit Tobacco Trade (ICITT) has also identified tax stamps as a legitimate tool to deter the distribution of illegal imports.[181]

However, the panel in *Dominican Cigarette* took the view that a reasonable alternative, such as 'providing secure tax stamps to foreign exporters and affixing the stamps abroad, possibly under the supervision of a reputable company that would conduct pre-shipment inspection and certification', was available, and thus held that

[176] *Ibid.*, at para. 174.

[177] Panel Report, *Dominican Republic – Measures Affecting the Import and Sale of Cigarettes*, WT/DS302/R (26 Nov. 2004) (hereinafter *Dominican Cigarette* (Panel)), at para. 4.3.

[178] *Ibid.*, at para. 4.89.

[179] *Ibid.*, at para. 4.93.

[180] Panel Report, *Argentina – Measures Affecting the Export of Bovine Hides and the Import of Finished Leather*, WT/DS155/R (19 Dec. 2000), at para. 11,305.

[181] *Dominican Cigarette* (Panel), *supra* note 177, at para. 4.90.

the Dominican Republic had failed to establish that the tax stamp requirement was justified under GATT Article XX (d).[182] The Dominican Republic appealed this ruling, highlighting that cigarette producers vigorously collaborated to smuggle cigarettes and that the smuggling of alcoholic beverages increased steeply when it permitted the affixation of tax stamps abroad.[183]

The AB upheld the panel's ruling, thereby endorsing the panel's second-guessing of the Dominican regulatory situation. Yet this position was a downright departure from the previous jurisprudence in *Hormones* and *Asbestos* which took WTO members' regulatory autonomy seriously. The AB simply characterized the panel's finding that the effectiveness of the tax stamp requirement was limited as 'findings of fact', which the AB took the view was reserved to the panel under DSU Article 11.[184] In other words, the AB unconditionally accepted the panel's findings on such issues as 'limited effectiveness of the tax stamp requirement in preventing forgery, smuggling and tax evasion; greater effectiveness and efficiency of measures such as security features incorporated into the tax stamps or police controls'.[185]

However, the panel's findings concerned more standard of review or deference than mere factual findings. Although these findings did involve certain facts, a more fundamental question was whether the panel, not the Dominican Republic itself, should deliver a definite prescription for this grave regulatory problem. In *Hormones* and *Asbestos*, the AB upheld the right to regulate as well as the principle of *in dubio mitius*, thereby never second-guessing the EC's zero-tolerance policy. While this deferential interpretation, or the liberal standard of proof, certainly involves an issue of *law*, the AB in this case labelled it an issue of *fact* and thus escaped its burden.

Under the AB's logic, it should have also accepted the panel's findings in *Gambling* as factual findings. In *Gambling*, the panel concluded that the US's ban on cross-border gambling was not a necessary measure since the US could have pursued a reasonably available alternative, i.e., 'engaging in consultations with Antigua, with a view to arriving at a negotiated settlement that achieves the same objectives as the challenged United States' measures'.[186] Yet, the AB rejected the panel's finding as flawed, in that the panel's solution was not a reasonable alternative because 'consultations are by definition a process, the results of which are uncertain and therefore not capable of comparison with the measures at issue in this case'.[187]

The incoherence between *Dominican Cigarette* and *Gambling* is prominent. The AB characterized the panel's 'necessity' analysis under GATT Article XX as a matter of *fact* in the former case, while it constructed the same analysis as a matter of *law* in the latter case. Therefore, in the former case the panel's conclusion on whether (and what) to prove was upheld, while in the latter case the same conclusion was rejected.

[182] *Ibid.*, at paras 7.232, 7.233, and 8.1(e).

[183] Appellate Body Report, *Dominican Republic – Measures Affecting the Import and Sale of Cigarettes*, WT/DS302/AB/R (23 Apr. 2005) (hereinafter *Dominican Cigarette)*, at para. 12.

[184] *Ibid.*, at para. 71.

[185] *Ibid.*

[186] *Gambling*, *supra* note 136, at para. 317.

[187] *Ibid.*

In sum, if the AB agrees with the panel's findings on critical issues, the AB is not likely to intervene in the panel's findings on the ground that 'the Panel's consideration and weighing of the evidence . . . relates to its assessment of the facts and, therefore, falls outside the scope of appellate review under Article 17.6 of the DSU'.[188] However, if the AB disagrees with the panel's interpretation even on facts, the AB is likely to interfere with it by converting these originally factual issues into legal ones. This incoherent exercise of the Court's interpretive burden tends to undermine the credibility of WTO jurisprudence in general.

B Finality versus Legitimacy

1 Judicialization as Finality

In addition to creating jurisprudential incoherence and the consequent confusion, the Court's judicialization of science and/or regulatory second-guessing in handling the BOP issues risks undermining the Court's legitimacy as a fair arbiter. Judicialization means finality since the Court's final ruling, once adopted, becomes the law in a given dispute: the case is closed for all. The Court may want to justify this finality through science or any other form of rationality. To the Court, science may be a universal language through which the Court could authoritatively utter an ultimate substantive decision. As Hercules, the Court would always be capable of giving a right answer for each dispute.

However, as discussed above, any specific version of science or other form of rationality which the Court picks for its own use may be just one out of many paradigms or perspectives.[189] Critically, *a* peculiar way of understanding and interpreting science leads the Court to disregard certain responses from parties and attach importance to one kind of response over others.[190] It is at this juncture that the Court's judicialization of science may become 'political'. Under these circumstances, the Court's exercise of its interpretive burden over the BOP tends to erode its legitimacy by inviting more, not less, politics from the parties concerned.

Since the Court is a 'judicial' organ, such politicization risks jeopardizing the Court's compliance pull, i.e., legitimacy.[191] A losing party might believe that it had lost the case due to political, not scientific (objective), reasons. If the losing party was an importer (regulating country), it would feel deprived of its regulatory autonomy, and even sovereignty. If the losing party was an exporter, it would feel frustrated over its stymied market access. Either such regulatory failure (under-regulation) or trade failure (over-regulation) would simply be unacceptable to the losing party, thereby eroding the legitimacy of the Court's decision.

[188] *Salmon, supra* note 88, at para. 261.

[189] 'Scientific knowledge, one finds, is hardly universal. What is true and certain within one scientific community constitutes baseless conjecture in another. Science is also intrinsically historical; it is science-of-the-moment': Atik, *supra* note 43, at 738.

[190] *Ibid.*, at 736–737.

[191] See T.M. Franck, *The Power of Legitimacy among Nations* (1990), at 49.

2 Over-regulative Finality: Science trumped by Politics

The Court's judicialization of science, and subsequently politicization of science, tends to make it easier for the Court to depart from conventional scientific positions represented by widely accepted international standards and practices. In doing so, the Court not only blends science and politics but also marginalizes conventional science for the sake of politics.

At first glance, faced with a plethora of documents from both parties which advocate only their own versions (paradigms) of science as well as lengthy experts' opinions, the Court's task seems to be that of a 'Science Court' which determines 'both the meaning and the merits of the risk assessment documents' as well as 'the truth of various scientific propositions'.[192] Unbeknown to it, the Court may be liable to deliver a scientifically correct, and thus legitimate, answer.[193] However, a WTO version of Science Court is fatally prone to politically motivated over-regulation and the consequent restraint of trade, not only because WTO panellists and AB members are non-experts in these scientific matters, but also because science can only be judicialized in a *transcendental*, which is thus political, fashion.[194]

For example, the panel in *Hormones* originally ruled that a regulating party (EC), when its measure (a total ban) departed from the Codex standard on the residual hormone levels, should bear the burden of proving that the ban was nonetheless scientifically justified. Yet the AB, driven by a pro-sovereignty ethos, reversed the panel's finding and ruled that it is the complaining party (the United States) which has to prove that the EC's ban was *not* scientifically justified. In doing so, the AB in fact downgraded the significance of SPS-endorsed international standards, such as the Codex standard, despite the fact that the SPS Agreement is seriously committed to those standards as a vehicle for harmonization.[195]

International standards, at least those that are explicitly recognized in the SPS Agreement, such as the Codex standards, are a reification of the WTO's sovereignty-checking commitments to achieve a communal goal of harmonization. The AB's

[192] Walker, *supra* note 63, at 301–302.

[193] Cf. Gaskin, *supra* note 1, at 163; Walker, *supra* note 63, at 255 (arguing that the WTO should not become a 'global mega-regulator' which would resolve scientific disputes involving carcinogenicity or acceptable levels of risks).

[194] See Christoforou, *supra* note 17, at 646; Wirth, *supra* note 17, at 844.

[195] 'To harmonize sanitary and phytosanitary measures on as wide a basis as possible, Members *shall* base their sanitary or phytosanitary measures on international standards, guidelines or recommendations, where they exist…': SPS, *supra* note 55, Art. 3.1 (emphasis added). See Scott, 'International Trade and Environmental Governance: Relating Rules (and Standards) in the EU and the WTO', 15 *EJIL* (2004) 307, at 333 (observing that the AB watered down the harmonization requirement under SPS Art. 3 for the fear of sovereignty concerns from WTO members). See also Grando, *supra* note 80, at 622–623, 632 (observing that the *Hormone* panel characterized SPS Art. 3.3 as an exception to Art. 3.1 based on the text ('except as otherwise provided for in this Agreement, and in particular in paragraph 3')). But cf. von Bogdandy, 'Law and Politics in the WTO – Strategies to Cope with a Deficient Relationship', 5 *Max Planck Yrbk UN L* (2001) 609, at 637–639 (questioning the decision-making process within the Codex Alimentarius Commission); Victor, *supra* note 35, at 872 (expressing concerns about 'capture' of bodies setting international standards).

reversal of the BOP risks undoing these initial commitments and sending a false signal that a regulating country is free to disregard international standards whenever it finds them inconvenient.[196] As a result, the AB's interpretation of BOP as involving international standards may result in the serious underuse of these standards, thereby undermining their legitimacy. Moreover, members' indifference and lack of inputs to international standards would also deter these standards from being further developed and improved, which is evidently inconsistent with what the SPS Agreement envisages.[197]

Furthermore, in *Hormones*, the AB dismissed a valid distinction between risk assessment (science) and risk management (politics), which has widely been accepted in scientists' circles,[198] purely on a narrow textual ground.[199] As a result, the AB shrank an independent space for conventional science under the SPS. The conventional science in this case was at odds with the ban as it dismissed the necessity of regulatory differentiation between naturally occurring hormones and artificially injected hormones despite their different pathways.[200] The *Hormones* panel attempted to preserve the integrity of this critical scientific finding by distinguishing risk assessment (an 'examination of data and studies')[201] from risk management (a 'policy exercise involving social value judgments made by political bodies').[202] Yet the AB weakened the rigour of a risk assessment requirement, and thus science itself, by electing a loose construction of risk assessment. According to the AB, risk assessment may take into account non-empirical, non-experimental factors, which could encompass even non-scientific considerations such as fears and human biases.[203]

Critically, widely accepted scientific practices which are the outcome of hitherto scientific deliberation and discourse should not be discarded lightly. The AB's rather dogmatic stance like the one in *Hormones* may discourage further discourse and even be abused to cater to disguised protectionism. Even politicians should heed what scientists have found: politicians should not manipulate science in a way which serves their political needs.

[196] See Horn and Weiler, *supra* note 95, at 263; Meltzer, 'State Sovereignty and the Legitimacy of the WTO', 26 *U Pennsylvania J Int'l Economic L* (2005) 693, at 721.

[197] 'Members shall play a full part, within the limits of their resources, in the relevant international organizations and their subsidiary bodies, in particular the *Codex Alimentarius Commission*, the International Office of Epizootics, and the international and regional organizations operating within the framework of the International Plant Protection Convention, to promote within these organizations the development and periodic review of standards, guidelines and recommendations with respect to all aspects of sanitary and phytosanitary measures': SPS, *supra* note 55, Art. 3.4 (emphasis added).

[198] See, e.g., Food and Agricultural Organization (FAO) and World Health Organization (WHO), *Risk Management and Food Safety* (1997).

[199] *Hormones, supra* note 10, at para. 176.

[200] *Hormones* (Panel), *supra* note 13, at para. 8.187.

[201] *Ibid.*, at paras 8.107, 8.110.

[202] *Ibid.*, at para. 8.94. But see Wirth, *supra* note 17, at 833, n.63 (documenting oppositions to this bifurcation).

[203] *Hormones, supra* note 10, at para. 187. ('the actual potential for adverse effects on human health in the real world where people live and work and die'); Quick and Blüthner, *supra* note, at 616–617.

If we maintain a distinction between risk assessment (science) and risk management (politics), we may at least locate a logical sequence between these two stages. In other words, risk assessment should precede risk management, not vice versa. Without a scientific investigation in the first place, the determination of an appropriate level of protection could not be obtained. Yet in *Hormones* the AB ignored this sequence and in effect mingled risk assessment and risk management.

The AB did recognize that the EC failed to comply with Article 5.1 of the SPS Agreement since the EC conducted no assessment of risk caused by any abusive use of hormones and the administrative difficulties in the control of the hormones for growth promotion purposes.[204] The EC therefore failed to provide any scientific assessment of the administrative risk (controlled use) *vis-à-vis* the zero-tolerance policy. This failure should have generated a presumption that the EC's determination of its level of protection would not be appropriate. After all, how could the EC have properly chosen the zero-tolerance level of protection, which would deny the possibilities of controlled use or administration with good practice, without any scientific investigation of such an exorbitant option in the first place?

Therefore, under the AB's approach, the EC might *ex post* justify its pre-determined strict regulatory position, influenced by political considerations, by subsequently locating, or even creating, favourable scientific studies. This sorry state of science *under* politics tends to advocate over-regulation at the expense of legitimate trade interests.

3 Under-regulative Finality: Regulatory Autonomy Lost

The Court's Herculean interpretation of the BOP also tends to 'second-guess' the regulating countries' legitimate policies.[205] This is yet another example of judicialization of science, in that the Court itself assesses all the risks in given situations as well as the effectiveness of possible policy options through its own scientific reasoning to deliver a substantive finality to a given dispute. Such finality may be labelled political, in that the Court's own reasoning may not always be shared by parties, in particular the losing party. The Court's second-guessing under GATT Article XX is conducted via the titular 'weighing and balancing' test invented in *Korean Beef*. Under the test, the AB launched a highly intrusive judicial review in which it assessed both the means and ends of the domestic regulation in question.[206]

As discussed above,[207] this test represents a serious incoherence in the Court's interpretation as it blatantly departs from its *in dubio mitius* standard established in *Hormones*. The basic assumption of the test is flawed since it presupposes that Hercules

[204] *Hormones, supra* note 10, *at para.* 207.

[205] Cf. Guzman, *supra* note 1, at 4 (criticizing the WTO tribunal's substantive review of SPS measures as 'intrusive').

[206] 'In sum, determination of whether a measure, which is not "indispensable," may nevertheless be "necessary" within the contemplation of Article XX (d), involves in every case a process of *weighing* and *balancing* a series of factors which prominently include the *contribution* made by the compliance measure to the enforcement of the law or regulation at issue, the *importance* of the common interests or values protected by that law or regulation, and the accompanying impact of the law or regulation on imports or exports': *Korean Beef*, *supra* note 137, at para. 164 (emphasis added).

[207] See *supra* sect. 4.A.2.

would know better than local regulators all the necessary details such as the actual level of protection or what would have been necessary to achieve a certain legitimate policy objective in a given situation. Under the test, it would be very difficult for a defending (regulating) party to discharge its burden of proving that its measure was necessary to achieve its own level of protection before a seemingly omniscient, and commandeering, Court.[208]

Another concern related to the weighing and balancing test centres on the North–South tension. In most cases, developing countries' regulatory challenges as well as their regulatory solutions are unique and hard to generalize. Options available to developed countries may not be feasible to developing countries mainly due to the lack of resources and capacity. If these circumstances are not fully taken into account under the weighing and balancing process, an adjudicatory outcome may be out of sync with the reality, undermining its legitimacy.

This is precisely why the *Thai Cigarette* panel under the old GATT dispute settlement mechanism was criticized so harshly. Despite the World Health Organization (WHO)'s support for the Thai ban on foreign cigarettes to protect public health in developing countries, the GATT panel struck it down on the ground that Thailand had failed to prove that its ban was the least trade-restrictive. The panel took the view that Thailand *could have* found other alternatives, such as 'strict, non-discriminatory labeling and ingredient disclosure regulations', which were highly hypothetical and might have been effective only to rich countries.[209] This northern bias can also be found in a more recent case. In *Dominican Cigarettes*,[210] the AB struck down a Dominican tax stamp requirement as it failed to realize that, for a developing country like the Dominican Republic, the AB's prescriptions, such as conventional enforcement measures, would not work in achieving the level of protection which the Dominican Republic had desired to pursue with its limited budget and staff.

The Court's lack of regulatory deference to developing countries, when juxtaposed to a diametrically opposite position in other cases involving developed countries, tends to arouse a suspicion about the Court's legal realism, i.e., its bias against less powerful WTO members. In *Hormones*, *Asbestos* and *Gambling*, which involved politically powerful developed countries such as the EC and the United States, the Court seemed to be quite deferential to local regulators who stuck to a highly conservative regulatory position, such as a zero-tolerance policy.[211] Yet, in other cases such as *Salmon*, *Dominican Cigarette* and *Korean Beef*, which involved politically less powerful members such as Australia, the Dominican Republic and Korea, the Court seemed to feel more comfortable in second-guessing local regulators' decisions and presenting its own

[208] But cf. Regan, 'The Meaning of "Necessary" in GATT Article XX and GATS Article XIV: The Myth of Cost–Benefit Balancing', 6 *World Trade Rev* (2007) (observing that the AB has not in fact engaged in balancing).

[209] *Thailand – Restrictions on Importation of and Internal Taxes on Cigarettes*, adopted on 7 Nov. 1990, BISD 37S/200, at para. 77.

[210] *Dominican Cigarette*, *supra* note 183, at para. 71.

[211] See Van Damme, 'Sixth Annual WTO Conference: An Overview', 9 *J Int'l Economic L* (2006) 749, at 755 (observing that the AB in *Gambling* gave higher deference to the responding party through the BOP).

prescriptions. Therefore, legal realists might contend that the Court instrumentalizes the BOP as a 'tool to support result-oriented findings'.[212]

4 Finality without Compliance Pull

The WTO is not a World Government, nor does it have a well-developed legislative mechanism as seen in other institutions, such as the European Union. Moreover, socio-cultural foundations for risks and regulation vary among different member states. This lack of both positivistic infrastructure and common moral foundations among members tends to disenable the WTO tribunal from producing truly legitimate answers to controversial regulatory disputes involving health risks and regulatory responses. In other words, with little shared regulatory ethos, i.e., shared assumptions on regulatory decision-making, as well as administrative and political efforts to build up such ethos via mutually recognized and trusted institutions, any substantive closure on highly combustible issues, such as regulations over beef hormones or genetically modified foods, by an unelected international tribunal lacks a base for legitimization, and thus appears as imprudent judicial activism.[213]

Even if the Court attempts to close a case by delivering a final, substantive answer to a dispute, the losing party can re-open the case merely by window-dressing violative measures, instead of truly implementing the answer.[214] Then the winning party will have to re-commence new litigation in an attempt to re-close the original dispute. The Court's inability to close a dispute is not merely attributable to parties' insincere implementation of its original decision. In many cases, especially those involving controversial and complicated public health policies, the Court's final decision may not be final, or at least may not be regarded as final by the losing party, for a number of reasons.

First of all, it would be very difficult, if not impossible, for the Court to digest all the sophisticated, technical scientific evidence and evaluate it to produce a final answer. Secondly, as discussed above,[215] the Court's interpretation of science in a specific context may diverge from those of members. Under these circumstances, if the Court's ruling is based on its own substantive processing of all the scientific evidence, such a ruling may be hard for the losing party to accept. Thirdly, since more often than not the Court's decision addresses only limited, specific provision-based issues, such decisions could not fully address the root of an underlying dispute over a certain regulatory policy.

In other words, even if those decisions on touchy issues may avoid major confrontations between the parties concerned, they are still unlikely to be of great practical value since the scope of any adjudication tends to be limited in nature. For example, the panel in *EC – Biotech*, despite its high-profile reception by the public, did *not* rule on the general safety of genetically modified organisms or on the general legality of the EC approval procedure. Instead, the panel decision, which was a voluminous set of a

[212] Pauwelyn, *supra* note 73, at 258.

[213] Habermas, 'Between Facts and Norms: An Author's Reflections', 76 *Denver U L Rev* (1999) 937, at 940.

[214] See *supra* text accompanying note 14.

[215] See *supra* sect. 4.B.3.

1,000-page report plus yet another 1,000 pages of Annexes after three years' work, addressed very narrow procedural issues such as 'undue delay', which had already become insignificant at the moment the report was released.[216]Under these circumstances, as Richard Gaskin aptly observed, the Court might broaden the existing divisions between the litigants, rather than settling their dispute.[217]

Importantly, an ostensibly satisfactory compliance record on WTO dispute settlement decisions, albeit celebratory, might not immunize the WTO dispute settlement system from any future risks to its legitimacy. A couple of 'wrong cases',[218] such as *Hormones*, may put the whole dispute settlement system and its legitimacy into question. Wrong cases may be defined as those disputes which are likely to undermine the WTO tribunal's judicial integrity and legitimacy on account of subjects which carry with them a thick halo of politics. As in the domestic legal system, certain disputes should be addressed in a non-judicial mode, either by negotiation or by other types of deliberation. Article 3.7 of the WTO Dispute Settlement Understating (DSU) also provides that 'before bringing a case, a Member shall exercise its judgment as to whether action under these procedures would be fruitful'.[219] In this type of case, regulatory experts, not diplomats, from both sides should be given enough time to conduct collective professional deliberation in a workmanlike fashion, having recourse to any relevant international standards available.

In sum, the Court encroaches upon its legitimacy as a neutral adjudicative organ when it delivers substantive justice based on its own weighing and balancing of highly controversial and sophisticated issues such as health risks.[220] Both parties and observers might translate the Court's decision as if the Court proffered its own subjective value, or even *moral* statement on these political subjects, instead of a case-specific ruling on certain narrow legal issues.[221] It is likely that parties and observers will take the view that the Court itself is right or wrong, rather than noting that a specific decision which it delivers may be right or wrong.

Countries have yet to develop a common language over widely shared premises in tackling these troublesome issues. Without these common grounds, a losing party

[216] See, e.g., Panel Report, *European Communities – Approval and Marketing of Biotech Products*, WT/DS293/R (29 Sept. 2006), at para. 4.5. See also Cho, 'The WTO Panel on the EC-Biotech Dispute Releases Its Final Report', *ASIL Insights*, 26 Oct. 2006, available at: www.asil.org/insights/2006/10/insights061026.html.

[217] Gaskin, *supra* note 1, at 208.

[218] See Hudec, 'GATT Dispute Settlement after the Tokyo Round: An Unfinished Business', 13 *Cornell Int'l LJ* (1980) 145, at 159. See also Davey, 'Dispute Settlement in GATT', 11 *Fordham Int'l LJ* (1987) 51, at 67–78; Jackson, 'The Jurisprudence of International Trade: The DISC Case in GATT', 72 *AJIL* (1978) 747, at 779–780 (discussing a similar concept of 'big cases', which cannot be handled properly by adjudication).

[219] DSU, *supra* note 104, Art. 3.7.

[220] Cf. Wirth, 'European Communities Restrictions on Imports of Beef Treated with Hormones – Non-Tariff Barriers – Control of Food Additives – Scientific Basis for Restrictions – WTO Dispute Settlement Mechanisms – Scope of Review', 92 *AJIL* (1998) 755, at 759 (raising the issue of legitimacy from a public health perspective over 'scientific tests employed in the adversarial, adjudicatory setting of dispute settlement under a trade agreement').

[221] Cf. Rosen, 'Defrocking the Courts: Resolving "Cases or Controversies," Not Announcing Transcendental Truths', 17 *Harvard J L and Public Policy* (1994) 715, at 728.

will be reluctant to accept any balancing test exercised by the Court, sharing with it none of such regulatory ethos. This legitimacy risk tends to become more salient when the losing party is a poor country to which any high regulatory standards might be potential trade barriers impeding and hindering its market access to rich countries.

5 Reconfiguring the World Trade Court's Burden: The Case for Global Administrative Law

A *A Copernican Turn: From Substantive Finality to Procedural Legitimacy*

The Court, in adjudicating those WTO disputes involving risk regulations and other similar social regulations, has determined *who* to prove, *what* to prove, and *whether* to prove from the standpoint of Herculean judges who render definite right (substantive) answers with their transcendental authority. This judicialization of science may result in over-regulation or under-regulation, which undermines the compliance pull of those decisions. Under these circumstances, adjudication in the WTO is not likely to put an end to risk-related disputes. Parties would continue to claim substantive authority on their own position to dismiss the other party's case. Losing parties would be tempted to window-dress the Court's decision and eager to find circumventive measures to stand by their original position.[222] Ironically, judicialization of science tends to drive parties to cling to the 'transcendental critiques' which undermine the very objective authority of science.[223]

At this juncture, one might be tempted to overcome this substantive dilemma by perfecting the Court's technical criteria of BOP, such as streamlining the standards of proof in the line of 'preponderance of evidence' and 'beyond a reasonable doubt'.[224] However, this attempt to articulate the standard of proof seems to make no practical difference as long as the Court's standard of review remains substantive. After all, whether the Court is convinced or not hinges on its own free evaluation of the evidence and arguments adduced by parties.

Therefore, instead of closing indefinite cases by prescribing definite answers, the Court should encourage parties to continue deliberating and cooperating with each other until they reach a mutually acceptable regulatory solution. To achieve this, the Court may unearth *procedural* elements, such as reason-giving and transparency, embedded in GATT Article XX (*chapeau*) and major SPS provisions, and determine the BOP questions (who to prove, what to prove, and whether to prove), as they relate to these provisions, in accordance with parties' performance of those procedural

[222] 'EU Approves Farm Animal Hormone Ban', 6(43) *Bridges Weekly Trade News Digest*, 20 Dec. 2002.

[223] Gaskin, *supra* note 1, at 146.

[224] But see Walker, *supra* note 63, at 290–295 (prescribing certain standards of proof to a WTO panel and the Appellate Body).

disciplines.[225] In other words, the Court should reoperationalize the BOP in a way which brings forth certain administrative law elements imbued in those substantive provisions by reinterpreting them.

For example, if a regulating (defending) party refuses to engage in a good faith regulatory deliberation, by dint of reason-giving and transparency, with an exporting (complaining) party, or is interested only in protracting the dialogue, the Court will find in such deficiency negative probative forces which corroborate that the former has failed to fulfill its risk assessment obligation under SPS Article 5.1.[226] The underlying logic is that a regulating country is not likely to conduct a meaningful risk assessment when it fails to take into account the interests of most affected trading partners, i.e., exporting countries.

Considering that regulating members often belittle those procedural obligations,[227] the Court's linking of these obligations to probative values tends to encourage regulating countries to take these obligations more seriously. Sincere, not superficial, notification and reason-giving is an essential prerequisite for any meaningful regulatory cooperation. To achieve this goal, the Court should first reformulate pertinent GATT and SPS provisions related to risk regulations in a way which fully sensitizes procedural disciplines embedded in those provisions.

B *Reinterpreting WTO Provisions on Risk Regulation: Taking Procedural Obligations Seriously*

1 Necessity Test (GATT Article XX)

The Court's 'weighing and balancing test' may impose a high probative threshold on a defending (regulating) country, requiring it to prove that the measure in question is the least trade-restrictive, and thus there are no other reasonably available alternatives. Because it is the Court which actually weighs and balances those actual and hypothetical policy options, the outcome of such weighing and balancing may be quite detached from the local reality. This second-guessing of local risks borders on unhealthy judicial activism, which goes beyond the Court's mandate as an arbiter. It also contradicts another interpretive stance in similar (risk-related) issues represented by *in dubio mitius*. All these problems tend to eventually undermine the Court's legitimacy.

[225] Some commentators take the view that the Court has already performed this task: see Shaffer, 'Power, Global Governance and the WTO: A Comparative Institutional Approach', in M. Barnett and R. Duvall (eds), *Power in Global Governance* (2005); Shaffer and Apea, 'Institutional Choice in the GSP Case: Who Decides the Conditions for Trade Preferences', 39 *J World Trade* (2005) 977 (discussing the AB's 'process-based' approach). See also von Bogdandy, *supra* note 195, at 667 (taking the view that the 'Appellate Body *proceduralizes* the substantive WTO obligations and compels the members to try to achieve a multilateral consensus'); Guzman, *supra* note 14, at 35 (arguing that the WTO tribunal should robustly review regulating members' compliance with procedural requirements under SPS, such as transparency).

[226] See Scott, *supra* note 9, at 51 (arguing that the SPS Committee provides a forum in which WTO members are 'called upon to explain and justify their (proposed) measures, under the gaze of other Members, and in the shadow of the formal system for the settlement of disputes').

[227] Alejandro Jara, Speech at the Inaugural Conference of the Society of International Economic Law, the Graduate Institute of International Studies, Geneva, Switzerland, 17 July 2008 (problematizing insincere notification by some WTO members).

In fact, the weighing and balancing test is a digression from the Court's previous laudable interpretive tradition labelled the 'chapeau test'. In earlier GATT Article XX cases, such as *Gasoline* and *Shrimp-Turtle*, the Court took the local regulatory autonomy seriously and deferred the issue of whether the regulation was a legitimate exercise of its policy objective to a regulating country.[228] Instead, it focused on the procedural aspects of the regulation, i.e., whether the measure was applied in an arbitrary or unjustifiable *manner* stipulated in the introductory language of Article XX (*chapeau*). The Court breathed new life into this quite mundane language, which had long been a dead letter, and created a new procedural construction of regulatory cooperation and due process. Under the *chapeau* of Article XX, regulating countries have to prove that they take into account the interests of exporting countries which might be negatively affected by the former's regulation,[229] and that the regulation respects the due process principle in their legal system.[230]

The *chapeau* test denotes a mature equilibrium between free trade values and regulatory autonomy (non-trade values) in that it highlights 'how' a given measure should be applied, rather than 'what' the measure should be. The Court should further develop this line of jurisprudence, rather than weighing and balancing regulatory details of its own discretion. If a regulating party demonstrates that it seriously engaged with negatively affected countries, such as exporting countries, through consultation and negotiation, the Court should decide that the regulating party has discharged its BOP under GATT Article XX, even if this engagement has no substantial outcome.[231] On the other hand, if the evidence shows that the regulating party refused to work with the exporting countries or responded to their inquiries in a dismissive manner, the Court should rule that the regulating party has not met its BOP under Article XX.

In this context, the AB's recent ruling on the necessity test in *Gambling* departed from the well-established *chapeau* test. The *Gambling* panel rightly held that the United States had failed to satisfy the necessity test under GATT Article XX by rejecting Antigua's invitation to bilateral and multilateral negotiations.[232] Although the panel conducted the *de facto chapeau* test by way of the necessity test, this technical variance was not significant. What truly matters is that the panel did follow the *Gasoline* case law, which requires a regulating country to explore a good faith effort in reaching out to its trading partner which may be negatively affected by the former's regulation with a view to a possible regulatory arrangement. However, the AB reneged on its own jurisprudence as it rejected the panel's ruling. The AB held that 'engaging in consultations with Antigua, with a view to arriving at a negotiated settlement . . . , was not an appropriate alternative'.[233]

[228] *Gasoline*, *supra* note 78, at 28.

[229] *Ibid.*, at 26–27.

[230] Appellate Body Report, *United States – Import Prohibition of Certain Shrimp and Shrimp Products*, WT/DS58/AB/R (12 Oct. 1998) (hereinafter *Shrimp-Turtle)*, at para. 181.

[231] *Ibid.*, at para. 172.

[232] Panel Report, *United States – Measures Affecting the Cross-Border Supply of Gambling*, WT/DS285/R (10 Nov. 2004) (hereinafter *Gambling* (Panel)), at para. 6.531.

[233] *Gambling*, *supra* note 91, at para. 317.

This ruling tends to undermine the value of regulatory dialogue and cooperation in international trade. In fact, reasonable alternatives to a total ban on on-line gambling, including legalization with proper regulations, had genuinely been discussed in the US,[234] and thus could have provided a window for regulatory compromise with Antigua in this case. In fact, according to Antigua, 'international regulatory cooperation in the gambling sector is possible and is already taking place'.[235] However, the US refused even to recognize such constructive possibilities by stubbornly sticking to its original position, which stifled any meaningful regulatory dialogue between the two countries.[236] Therefore, under the original *chapeau* test developed in *Gasoline* and *Shrimp-Turtle*, the US failed to satisfy the general exception clause because it did not take into account the interests of its trading partner, Antigua.

In sum, the restoration of the *chapeau* test will encourage parties to engage in more regulatory dialogue and cooperation because this is what they should prove under GATT Article XX. After all, this test envisages a 'good and responsible government' which takes into account its trading partners' interests in the era of interdependence and globalization.[237]

2 Harmonization (SPS Article 3)

In *Hormones*, the Court recognized the defending (regulating) parties' right to depart from international standards and thus required complaining parties to prove that such departure would nonetheless lack scientific justification.[238] However, this interpretation weakened the normative prominence of international standards by constructing the compliance with these standards as a mere option, not as an obligation, despite the explicit language under SPS Article 3.1 which requires members to base their sanitary measures on these standards. Under the SPS Agreement, the Codex standards, in particular those referred to in Annex A, are a reincarnation of science.[239] These standards embody views of an epistemic community in a given sector as well as its professional accountability.[240] They

[234] See Grohman, 'Reconsidering Regulation: A Historical View of the Legality of Internet Poker and Discussion of the Internet Gambling Ban of 2006', 1 *J Legal Technical Risk Management* (2006) 34, at 65–70 (introducing several legislative proposals in the US towards legalized on-line gambling).

[235] *Gambling* (Panel), *supra* note 232, at para. 6.525.

[236] The US conceded that it was 'reluctant' to cooperate with Antigua since the two countries took different positions on the legality of internet gambling and internet gamblers: *ibid.*, at para. 6.524. The attorney who represented Antigua in this case recalled that 'all the negotiations we've had so far, though, have just been one-sided conversations with obvious non-decision-makers on the American side': Tripoli, 'At the Table with Mark Mendel', 10 *Gaming L Rev* (2006) 91, at 93.

[237] von Bogdandy, *supra* note 195, at 613. But see Shaffer, 'A Structural Theory of WTO Dispute Settlement: Why Institutional Choice Lies at the Center of the GMO Case', 42 *NYU J Int'l L & Politics* (2008) 65 (warning that regulating countries might just formally observe these procedural disciplines without any genuine consideration of foreign trading partners' concerns).

[238] *Hormones*, *supra* note 10, at paras 108–109.

[239] But see von Bogdandy, *supra* note 195, at 642 (emphasizing that the 'world view of the natural sciences are often one-sided and biased by the peculiarities of their own, specialized scientific community').

[240] But see *ibid.*, at 636–638 (observing that the Codex standard for hormones was enacted by a thin majority (33–29) within the Commission, under the US' meat industries' heavy lobbies and against the EC's position based on precaution and moral consideration). Nonetheless, this is also the case in most domestic regulatory statutes.

are a representative repository of scientific evidence, and therefore should not be taken lightly. Both the preamble and Article 3 attest to the fact that harmonization via international standards is one of the main objects and purposes of the SPS Agreement.[241] Therefore, the Court should take international standards more seriously.

From this standpoint, Article 3.1 tends to create a procedural obligation to seriously engage in international standards, that is a good faith effort to adopt international standards. The Court should guide parties to focus on this procedural aspect in deciding whether they discharge their proof burdens as to Article 3.1–3.3. In particular, the Court should interpret Articles 3.4 and 5.8 as informing Article 3.1–3.3. Article 3.4 requires members to engage in serious regulatory dialogue over international standards,[242] and Article 5.8 mandates a regulating member departing from international standards to respond to an exporting member's inquiries.[243]

Granted, international standards may not satisfy all the members. Yet a regulating member departing from these standards may at least present its different views in a relevant forum, such as the Codex Alimentarius Commission, to persuade other members to modify these standards if it truly means to respect the Article 3.4 requirement. Likewise, the regulating member should also fulfil the reason-giving requirement under Article 5.8. The Court should demand that the parties, whichever bear the BOP, prove these aspects. If a regulating party forsakes international standards without performing these procedural obligations, that is sufficient to create a presumption against scientific justification, since under these circumstances the measure could be presumed to be a unilateral regulatory determination with no involvement with the relevant scientific community.

3 Risk Assessment (SPS Article 5.1)

The Court should interpret the reason-giving requirement under Article 5.8 as also informing Article 5.1. If a respondent fails to engage with a requesting country, this is tantamount to admitting that the requesting country, i.e., the potential complainant, has made a *prima facie* case, since such failure generates a reasonable presumption

[241] See Heiskanen, *supra* note 102, at 9–10 (observing that the SPS Agreement 'expressly subscribes to the philosophy of positive harmonization').

[242] 'Members shall play a full part, within the limits of their resources, in the relevant international organizations and their subsidiary bodies, in particular the Codex Alimentarius Commission, the International Office of Epizootics, and the international and regional organizations operating within the framework of the International Plant Protection Convention, to promote within these organizations the development and periodic review of standards, guidelines and recommendations with respect to all aspects of sanitary and phytosanitary measures': SPS, *supra* note 55, Art. 3.4.

[243] 'When a Member has reason to believe that a specific sanitary or phytosanitary measure introduced or maintained by another Member is constraining, or has the potential to constrain, its exports and the measure is not based on the relevant international standards, guidelines or recommendations, or such standards, guidelines or recommendations do not exist, an explanation of the reasons for such sanitary or phytosanitary measure may be requested and shall be provided by the Member maintaining the measure': *ibid.*, Art. 5.8.

that the respondent's SPS measure was adopted without reasons which connote scientific justification.[244]

Likewise, the Court may link procedural disciplines under Article 7 (Transparency) as well as Annex B (Transparency of Sanitary and Phytosanitary Regulations) to the risk assessment requirement under Article 5.1. For example, if a complainant has requested from a defendant 'the products to be covered by the regulation together with a brief indication of the objective and rationale of the proposed regulation'[245] but receives no genuine response, such failure to respond could generate a presumption against the regulating country (defendant)'s fulfilment of the risk assessment obligation. In other words, if the defendant has failed to present a proper justification for its SPS measure, one may raise a reasonable suspicion that such measure was adopted without necessary disciplines, such as risk assessment based on scientific evidence. Under these circumstances, an initial BOP imposed on the complainant may be shifted to the defendant, which should now prove that it nonetheless performed risk assessment. Procedural flaws, such as the lack of due process or reason-giving, are often suggestive of substantive deficiencies, such as the lack of a substantial relationship between an alleged internal assessment and an adopted SPS measure.[246]

Suppose that the regulating state (defendant) does respond to the inquiring state (complainant) with certain reasons and justification. If the inquiring state is satisfied with such reason-giving, no further inquiry will follow, and hence no dispute. If the inquiring state, still unsatisfied, raises further questions as to the scientific justification of the measure, the regulating state should also respond to these additional inquiries in good faith. This series of question and answer processes is likely to constitute a meaningful regulatory dialogue between the regulating and inquiring state. This regulatory dialogue tends to contribute to the mitigation, if not the eradication, of tensions which may stem from ignorance and misinformation. This dialectical exchange of reason-demanding and reason-giving by the parties concerned is a prerequisite for any regulatory cooperation since such dialogue creates certain room for each party to take into account the other's interests and concerns. Even if such dialogue cannot entail full regulatory cooperation and litigation finally ensues, the Court may use the parties' arguments and submissions as undisputed facts or at least circumstantial evidence which may assist the Court to discharge its own burden on the BOP.[247]

[244] 'The United States could have requested Japan, pursuant to Article 5.8 of SPS Agreement, to provide "an explanation of the reasons" for its varietal testing requirement, in particular, as it applies to apricots, pears, plums and quince. Japan would, in that case, be obliged to provide such explanation. The failure of Japan to bring forward scientific studies or reports in support of its varietal testing requirement as it applies to apricots, pears, plums and quince, would have been a strong indication that there are no such studies or reports': *Japan – Agricultural Products*, *supra* note 146, at para. 137.

[245] SPS, *supra* note 55, annex B, at para. 5(b).

[246] Under some jurisdictions, a procedural failure (such as the absence of notification) may lead to disapplication of an underlying (substantive) measure: see, e.g., Case C–194/94, *CIA Security International SA v. Signalson SA and Securitel SPRL* [1996] ECR I–2201 (ruling that a domestic court should disapply a technical regulation if a Member has failed to notify such regulation to the European Commission under Council Dir. 83/189, OJ (1983) L109/8).

[247] The Court, as in *Hormones*, may use them as warning signals or additional factors which help the Court discharge its interpretive burdens.

4 Risk Management (SPS Article 5.5 and Paragraph 5 of Annex A)

In determining the appropriate level of protection under Article 5.5 of the SPS Agreement, a regulating party must satisfy many requirements, such as minimizing any restrictive impact on trade and avoiding any arbitrary and unjustifiable distinction.[248] In fact, these requirements can be translated into certain procedural duties. To minimize trade restriction under Article 5.4, a regulating party should reach out to its trading partners which may be affected by its regulation, such as exporting countries. In other words, this obligation tends to impose on the regulating state a certain procedural duty to cooperate with these exporting countries in consulting and negotiating over possible arrangements which can achieve both goals of regulatory protection and free trade.

Likewise, to avoid any arbitrary and unjustifiable distinction in determining the appropriate level of protection under Article 5.5, the regulating country should investigate and re-investigate whether its SPS measure has been consistent with its hitherto regulatory practice in similar issues and whether it may generate other due process concerns. Naturally, the Court's final decision on whether a regulating country has violated those SPS provisions may depend on whether the country has discharged its burden of proving that it has genuinely adhered to those procedural disciplines.

According to this approach, the AB in *Hormones* should have declared that the EC should prove that it had adequately communicated with other affected parties (the United States) before it reached the conclusion that artificially-injected hormones were riskier than naturally-occurring hormones. Admittedly, the AB would still have found the EC's total ban on hormoned beef to be legal under the SPS Agreement, yet for a different – procedural, not substantive – reason.

5 Provisional Safeguard (SPS Article 5.7)

The SPS Agreement permits WTO members to have recourse to a provisional SPS measure in the event that the available scientific evidence is inadequate. Article 5.7 provides a four-pronged requirement which a regulating member must meet to invoke such a regulatory safeguard. First, the provisional SPS measure at issue should be adopted where 'relevant scientific information is insufficient'; secondly, the measure should be adopted 'on the basis of available pertinent information'; thirdly, where the member imposing the provisional measure 'seek[s] to obtain the additional information necessary for a more objective assessment of risk'; and fourthly, where the member 'review[s] the . . . measure accordingly within a reasonable period of time'.[249]

In interpreting Article 5.7, the Court has thus far focused mainly on the first and the second prongs, namely the insufficiency of available scientific evidence.[250] However, as discussed above,[251] this tricky interpretive issue has led the Court to slip down a

[248] SPS, *supra* note 55, Art. 5.5.

[249] *Ibid.*, Art. 5.7; *Japan – Agricultural Products*, *supra* note 146, at para. 89.

[250] The AB often undertakes the third and the fourth prong in a rather passing way after it addresses the first and the second prong: see, e.g., *Japan – Agricultural Products*, *supra* note 146, at paras 92–93.

[251] See Cho, 'International Decisions, United States – Continued Suspension of Obligations in the EC – Hormones', 103 *AJIL* (forthcoming, 2009).

slippery slope of substantivism, resulting in an incoherent set of jurisprudence in this area. Therefore, the Court should shift its interpretive focus to the procedural aspects of conditions under Article 5.7, namely the third and fourth prongs. Importantly, a reasonable regulator is likely to take into consideration these procedural disciplines under the third and fourth prongs even when it mulls over the assessability of relevant risks. Failure to heed these procedural disciplines may be indicative of substantive flaws in the regulator's preliminary assessment under the first and second prongs. Given this situation, the Court may find in these procedural flaws negative probative forces against the regulating state's substantive proofs.

In sum, by exerting more interpretive attention and energy in these procedural obligations, the Court could motivate disputants to 'promote reflexivity on the part of Members as they fulfil their obligation to re-visit measures adopted on a periodic basis'.[252]

C *Risk Communication, Global Administrative Law and Regulatory Cooperation*

As discussed above, the Court can discharge its true adjudicative burden by directing parties to prove their fulfilment of certain procedural obligations, such as those in SPS Articles 5.8 (Reason-Giving) and 7 (Transparency), when it deals with disputes involving social/risk regulations under SPS Articles 3 and 5. Taking these procedural obligations, which have thus far been largely ignored, seriously tends to contribute significantly to risk communication and lead to better informed decisions by both regulators and consumers.

Risk communication is defined as the 'exchange of information and opinions concerning risk and risk-related factors among risk assessors, risk managers, consumers and other interested parties'.[253] International trade can benefit greatly from this risk communication. Recently, an increasing number of domestic regulations have concerned new health and safety risks, the analysis of which is challenging due to scientific uncertainty as well as socio-cultural differences in perceiving and responding to those risks. Such uncertainty and regulatory divergence naturally burdens international trade and often results in trade disputes, such as *Hormones* and *EC – Biotech*. As argued in this article, however, any adjudicative solution alone without meaningful regulatory dialogue and deliberation is futile. It often aggravates the intensity of the dispute and widens the pre-existing gap of regulatory heterogeneity. Risk communication tends to mitigate this tension by encouraging both regulators and other interested parties to exchange information and views. The Court's highlighting of procedural obligations in the reconstruction of BOP can facilitate this risk communication and consequent regulatory dialogue by incentivizing disputing parties who fulfil those obligations in the face of certain probative advantages.

[252] Scott, *supra* note 9, at 119.

[253] See Food and Agricultural Organization (FAO) and World Health Organization (WHO), *The Application of Risk Communication to Food Standards and Safety Matters* (1998), available at www.who.int/foodsafety/publications/micro/feb1998/en/index.html.

In addition, this BOP-driven risk communication and regulatory dialogue prevent domestic regulations from being captured by special industry interests which often take advantage of, or even manipulate, public fears and instrumentalize risk regulations as trade barriers.[254] Procedural disciplines which the Court's new BOP interpretation may animate will make a regulatory decision-making process more transparent and thus deter those special interests from manipulating the process. Admittedly, this inoculation effect will become truly effective only if these procedural virtues, such as reason-giving and notification, can outreach to the 'omitted voices',[255] such as foreign producers. In this context, the Court should pay particular attention to SPS provisions on 'enquiry points' under which 'nationals' of members can receive answers to their reasonable questions on 'risk assessment procedures, factors taken into consideration, as well as the determination of the appropriate level of sanitary or phytosanitary protection'.[256] For example, if a regulating member can demonstrate in a dispute that it has sincerely engaged in this regulatory dialogue (enquiry and answer) with exporters from the complaining party, such demonstration will help the Court determine whether the defending (regulating) party has discharged its BOP as to the requirement of risk assessment under SPS Article 5.1.

As the Court grant disputants probative incentives to focus on procedural disciplines in proving both the affirmative and the negative as to substantive requirements under GATT Article XX and SPS Articles 3 and 5, it can raise awareness of these procedural duties, which largely mirror domestic administrative law principles, among trading nations. For example, both a regulating country and an exporting country (and its nationals) will proactively engage in notification, inquiries, reason-giving and other regulatory dialogue activities even in non-dispute situations as it understands that invoking or fulfilling these procedural disciplines will advantage it when a dispute arises. This regularization of procedural disciplines in the realm of international trade and social regulation tends to usher in the introduction of 'global administrative law'.[257] As is analogous to domestic administrative law, global administrative law, as far as the WTO is concerned, obliges members to respect certain procedural disciplines when they regulate domestic (social) regulations which may potentially impede or hinder international trade.

[254] See Chang, 'Risk Regulation, Endogenous Public Concerns, and the Hormone Dispute: Nothing to Fear But Fear Itself?', 77 *S California L Rev* (2004) 743, at 759–762.

[255] See Baert Wiener and Graham, 'Resolving Risk Tradeoffs', in J.D. Graham and J. Baert Wiener (eds), *Risk versus Risk: Tradeoffs in Protecting Health and the Environment* (1995) at 226, 230.

[256] SPS Annex B (Transparency of Sanitary and Phytosanitary Regulations), at para. 3.

[257] My use of this terminology ('global administrative law') is different from a conventional one. Those scholars who have pioneered the conceptualization of this phenomenon focus mainly on certain procedural disciplines which the WTO, as an administrating body itself, should observe in its own decision-making process in order to enhance its institutional legitimacy. See Kingsbury *et al.*, 'Forward: Global Governance as Administration – National and Transnational Approaches to Global Administrative Law', 68 *Law & Contemporary Problems* (2005) 1, at 5; Esty, 'Good Governance at the Supranational Scale: Globalizing Administrative Law', 115 *Yale LJ* (2006) 1490, at 1543–1547. In contrast, my use of this term concerns WTO Members, not the WTO itself, which adopt and apply certain domestic regulations which may affect international trade. In other words, global administrative law for the purpose of this article is a global extension of domestic administrative law principles. It may also be translated into a global trade constitution in that this nascent body of law regulates behaviours of Members of the global trading community.

Finally, the aforementioned risk communication and regulatory dialogue will expand the shared grounds on social regulations between importing and exporting countries. More deliberation from both regulators and interested parties with better information disclosed due to procedural disciplines will screen out certain irrational fears or misunderstandings on risks which may be mobilized by protectionist forces. Moreover, importing and exporting countries can also reach constructive regulatory arrangements such as mutual recognition agreements which negatively harmonize certain social regulations between participants. In the long run, the Court's procedural shift in discharging its own burden tends to *prevent*, rather than solve, disputes.

6 Conclusion

The current way of discharging the Court's own burden on BOP issues, such as who to prove, what to prove, and whether to prove, risks undermining the Court's legitimacy by giving definite (transcendental) answers in combustible risk-related disputes to parties which have already been entrenched with their own dogmatic answers. As a solution, the Court should focus on procedural aspects of WTO obligations in this area so that it can encourage parties seriously to commit themselves to regulatory dialogue and cooperation.

This rethinking of the Court's role is not radical if one acknowledges that the Court's institutional responsibility is closer to that of a 'constitutional' court than to that of a mundane civil court. The purpose of the Court lies not only in simply resolving disputes by picking the winner but also in constituting a legal (regulatory) community within the WTO system. While the Court's hitherto incoherence in the BOP jurisprudence has exacerbated an adversarial struggle of parties and led to ever-lengthening reports, it has also failed to motivate parties to engage in a regularized pattern of regulatory discourse between themselves. After all, real closure on any sensitive regulatory (scientific) dispute with socio-cultural characteristics may originate from the parties themselves, not from the Court.[258]

The proceduralized interpretive methodology proposed here tends to provide both parties with adequate incentives to facilitate regulatory dialogue and regulatory cooperation. An exporting country would like to proactively inquire from an importing country about the latter's SPS measure with challenging scientific information which would help the former establish its *prima facie* case on risk assessment. Even if the importing country had eventually rejected the information, it would still have to register, for the record, other information counteracting the exporting country's original information. This would in turn trigger yet another round of inquiries or regulatory dialogue. As their dialogue deepens, so does their level of mutual understanding. The exporting country might be persuaded by the importing country's reason-giving and forsake the idea of WTO litigation. Or both parties might reach a certain regulatory

[258] See Kuhn, *supra* note 53, at 210 ('Scientific knowledge, like language, is intrinsically the common property of a group or else nothing at all. To understand it we shall *need to know the special characteristics of the groups that create and use it*') (emphasis added).

arrangement to resolve their disputes. In sum, this culture of proceduralism will eventually *prevent* disputes, rather than settle them.

Notably, this strategy of prioritizing legitimacy over closure seems prudent, especially when a fact-finding mission of the Court is severely challenged by scientific uncertainty and disagreement on risks involved. As Lawrence Solum contends, BOP under these circumstances should function to achieve certain purposes, such as fairness.[259] The Court's interpretive refocusing on procedural disciplines not only enhances the legitimacy of its decision but also helps parties reach mutually acceptable regulatory settlement through continuing regulatory cooperation, which those procedural disciplines tend to provide. This procedural approach will also shelter the WTO from potential criticisms from interest groups, such as environmentalists and consumer advocates, since the Court could refrain from giving substantive answers of its own.[260]

In conclusion, the Court's new hermeneutics proposed here will help parties change their way of engaging with each other in the global trading community.[261]

[259] Solum, 'You Prove It! Why Should I?', 17 *Harvard J L & Public Policy* (1994) 691, at 699.

[260] See Charnovitz, 'The Supervision of Health and Biosafety Regulation by World Trade Rules', 13 *Tulane Environmental LJ* (2000) 271, at 301 (predicting that 'in adjudicating SPS complaints, the WTO may gain a reputation as a naysayer to health and biosafety regulation').

[261] See Horn and Weiler, *supra* note 95, at 255 (trenchantly observing that 'legal hermeneutics is a discourse which is far richer than the thin gruel served up by the AB').