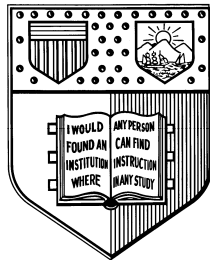


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A Stag Hunt Account and Defense of Transnational Labour Standards—A Preliminary Look at the Problem

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A Stag Hunt Account and Defense of Transnational Labour Standards—A Preliminary Look at the Problem

by Alan Hyde*

Are transnational labour standards, that could be effective in the absence of sanctions, possible? The information and communications technologies that have annihilated space and time and created a global labour market, have simultaneously helped publicize the appalling labour standards in many developing countries, including, though by no means limited to, their sectors producing goods for export to the developed world. Suddenly, the world of transnational labour standards, long the private preserve of specialists at organizations like the International Labour Organization, has come under increased scrutiny, from demonstrators in the streets outside trade negotiations to American presidential debates, which have lately included intense, if confusing, discussions about labour standards in trade agreements.

The scholarly literature on transnational labour standards is still some way from shaping these intense political controversies. To be blunt, it is remarkable how little is known in an academic sense about transnational labour standards. We know very little about when such standards will be promulgated and less still about their systematic effects. In this near-vacuum, it is hard to argue effectively for the rejection of any of the common political positions, such as either the naive proliferation of labour standards (four hundred conventions of the International Labour Organization, on this way of thinking, being self-evidently twice as good as two hundred) or their total rejection as impediments to trade or development.

The most significant gap in the literature is the lack of systematic knowledge about the real-world impact of existing labour standards. Our ignorance here is close to total. It is difficult to find a single case, no matter how publicized, in which one can be confident that attempts to enforce transnational labour standards have in fact improved working conditions.

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Everybody knows that the American television performer Kathie Lee Gifford cried on television when confronted with working conditions at the factories in Honduras producing clothing sold under her name, but few know much about whether this resulted in any improvements there. Everybody knows that pressure was placed on manufacturers of soccer balls in Sialkot, Pakistan, to end child labour, and the United Nations Children's Fund (UNICEF) and the International Labour Organization (ILO) have now declared the industry to be free of child labour.¹ One may, however, read directly conflicting reports as to whether production shifted to Pakistani stitching centers monitored to make sure no children were sewing,² or instead to India under even lower working standards,³ whether the displaced children ended up in school,⁴ or deprived of home schooling,⁵ or working in nonexport industries with even lower labour standards, perhaps even as child prostitutes.⁶ The impact of other initiatives to raise labour standards, such

¹UNICEF, ILO, Declare Soccer Ball Industry Child Labor Free, *The Pakistani Newswire*, April 27, 2002 (available on LEXIS News Database).

²International Program on the Elimination of Child Labor, *Child Labor in the Soccer Ball Industry: A Report on the Continued Use of Child Labor in the Soccer Ball Industry in Pakistan* (1999), www.laborrights.org/projects/foulball/index.html ; Kimberly Ann Elliott & Richard B. Freeman, *Can Labor Standards Improve Under Globalization?* 114-15 (Washington, DC: Institute for International Economics, June 2003).

³Günseli Berik, *What Happened after Pakistan's Soccer Ball Industry Went Child Free*, Conference on Child Labor, Graduate School of Social Work, University of Utah, May 7-8, 2001.

⁴Sources cited n.2.

⁵"It is commonly the case in Sialkot [Pakistan] for women and their children to stitch soccer balls in between other household chores. In order to prevent families from putting their children to work stitching soccer balls, work has been moved from homes to sewing centers. However, as has been noted in a previous section, mothers who work outside of the home place their daughters at risk for fulltime home-work. However, when mothers work in a household enterprise, such as soccer ball stitching, daughters can more readily combine home-work with schooling. As a consequence, this program [Partners' Agreement to Eliminate Child Labor in the Soccer Ball Industry in Sialkot, Pakistan] has the potential to undermine the efforts that Pakistani families are making to educate their daughters." Drusilla F. Brown, Alan V. Deardorff, and Robert M. Stern, *Child Labor: Theory, Evidence, and Policy*, in *International Labor Standards: History, Theory, and Policy Options* 195-247 (Kaushik Basu, Henrik Horn, Lisa Román, & Judith Shapiro eds. 2003)(Malden, MA: Blackwell)[hereafter *International Labor Standards*], at 232-33.

⁶Working in other industries: Violation of Labour Rules in Sialkot District, *The Pakistani Newswire*, March 3, 2002 (available on LEXIS News Database); U.S. Department of State, Bureau of Democracy, Human Rights and Labor, *Country Reports on Human Rights Practices*,

as conditioning trade preferences in the Generalized System of Preferences program on particular labor standards in the exporting country,⁷ is similarly known entirely through anecdote.⁸ The lack of systematic empirical research into the impact of transnational labour standards casts its shadow over the entire field.⁹ Economic analyses, definitely including this Chapter, revert to modeling standards in ideal labour markets, when the one thing we know about labour regulation is that it often has different real-world consequences than would be predicted by economic theory that assumes classical labour markets.¹⁰

Pakistan-2001, Sec. 6d (March 2002), www.state.gov/g/drl/rls/hrrpt/2002/sa/8237.htm . On child prostitution, I have seen references to a report that I have not been able to find on line or in any library and suspect has been suppressed: ILO-IPEC and National Commission for Child Welfare and Development (Pakistan), *Combating Child Trafficking, Sexual Exploitation and Involvement of Children in Intolerable Forms of Child Labor: Pakistan country report* (1998). However, see also United Nations, Economic and Social Commission for Asia and the Pacific, *Sexually Abused and Sexually Exploited Children and Youth in Pakistan: A qualitative account of their health needs and available services in selected provinces* (2001), www.unescap.org/esid/hds/sae/pakistan.pdf .

“To make conversation at a dinner party at the World Economic Forum in Davos, I once asked the then-finance minister of Pakistan whether child labour was a problem in his country. Perhaps thinking I was a potential investor, he replied, ‘No, child labour is not a problem. You can hire all the children you want.’” Alan B. Krueger, *The Political Economy of Child Labor*, in *International Labor Standards*, cited supra n.5, 248-55, at 248.

⁷The US legislation is codified at 19 U.S.C. §2461 et seq., the requirement that beneficiaries observe labour rights is at 19 U.S.C. §2462(b)(2)(G) and (H). See generally Lance Compa & Jeffrey S. Vogt, *Labor Rights in the Generalized System of Preferences: A 20-Year Review*, 22 *Comp.Lab.L. & Policy J.* No.2/3 (2003). Similar GSP programs are found in other developed countries.

⁸ See, e.g., Henry J. Frundt, *Trade Conditions and Labor Rights: U.S. Initiatives, Dominican and Central American Responses* (Gainesville, FL: University Press of Florida 1998)(attributing effectiveness to U.S. threats to suspend GSP benefits, particularly to the Dominican Republic).

⁹For a rare exception, see Ann Harrison and Jason Scorse, *Moving Up or Moving Out?: Anti-Sweatshop Activists and Labor Market Outcomes*, *National Bureau of Economic Research Working Paper 10492* (2004)(campaign against sweatshops in Indonesia resulted in wage improvements but some plant closings and relocations).

¹⁰See, e.g., David Card and Alan B. Krueger, *Myth and Measurement: The New Economics of the Minimum Wage* (Princeton: Princeton University Press 1995); Truman F. Bewley, *Why Wages Don't Fall During a Recession* (Cambridge, MA: Harvard University Press 1999).

Despite this major empirical uncertainty, legal scholars who examine transnational labour standards typically focus on three major features of the current legal regime that seem anomalous or puzzling from a legal point of view. First, the multiplicity of norms; in particular, the contrast between multilateral and bilateral norms. Second, particularly in the United States, the choice among international, transnational, or distinctly American standards (whether created specially for foreign workplaces, or the same standards applied at home). Third, the ineffectiveness, approaching absence, of current sanctions. I shall refer to these three questions as the “legal scholar’s questions.” Let me explain these further.

First, a complete picture of transnational labour standards includes a bewildering array of public and private law. In no particular order, one encounters genuinely international standards, typically promulgated as conventions of the International Labour Organization (ILO) but possibly also including provisions of international covenants such as the Universal Declaration of Human Rights and the International Convention on Economic, Social, and Cultural Rights. There are also labour rights provisions in formal treaties, such as the North American Agreement on Labour Cooperation¹¹ (the so-called “side agreement” to the North American Free Trade Agreement), that are transnational but not international, and thus unsatisfactory to many people for that very reason.¹² Some labour standards are found in domestic legislation. In the U.S., such domestic legislation includes very different models of regulation. The Civil Rights Act applies to the foreign operations of American firms, but in terms only to the American citizens employed there.¹³ U.S. trade laws now require all trade agreements to require labour standards in the main text.¹⁴ As mentioned, some trade benefits are conditioned on recipients’ observance

¹¹<http://www.dol.gov/ilab/regs/naalc/naalc.htm>

¹²For some free-traders like Jagdish Bhagwati, *Free Trade Today* 95 (2002)(Princeton: Princeton University Press) any smaller trading pact, such as NAFTA, necessarily detracts from the free trade system (NAFTA “a pox on the world trading system”).

¹³Civil Rights Act of 1991, §109, amending Civil Rights Act of 1964 §§ 701(f) and 702(c), 42 U.S.C. §§2000e(f) and 2000e-1(c), and Americans with Disabilities Act of 1990 §102(c), 42 U.S.C. §12112(c). For a remarkable application, see *Kang v. U.Lim America, Inc.*, 296 F.3d 810 (9th Cir. 2002), where the court applied the Civil Rights Act to a California corporation without facilities and too small to be covered by the Act, by combining it with a maquiladora electronics factory that it owned in Tijuana, Mexico. This permitted a claim by an executive of Korean origin, now an American citizen, working at the Tijuana plant. The court explained that the statutory reference to U.S. citizens did not mean that the legislation was restricted only to such U.S. citizens. It is not easy to explain how a Mexican citizen, working in Mexico for a plant owned by a U.S. employer, can be a statutory employee under the U.S. Civil Rights Act for purposes of counting employees, but not for purposes of complaining about discrimination.

¹⁴The Bipartisan Trade Promotion Authority Act of 2002 sets out “trade negotiating objectives” for the United States, as part of setting up a system limiting Congress’s ability to

of labour standards.¹⁵ However, in both cases, the specified labour standards are similar, but not identical to, the ILO's truly international standards.¹⁶ The Alien Tort Statute may require U.S. corporations to respect, in their overseas operations, those international human rights that have become part of the "law of nations," and these international human rights might include some ILO standards.¹⁷ U.S. corporations may also be liable for failing to observe basic health and

revise trade agreements, once negotiated. Among these objectives are "to promote respect for worker rights and the rights of children consistent with the core labor standards of the ILO (as defined in section 2113(6), 19 USC §3813(6) and an understanding of the relationship between trade and worker rights," §2102(a)(6), 19 USC §3802(a)(6); "to seek provisions in trade agreements under which parties to those agreements strive to ensure that they do not weaken or reduce the protections afforded in domestic environmental and labor laws as an encouragement for trade," §2102(a)(7), 19 USC §3802(a)(7); "to promote universal ratification and full compliance with ILO Convention No. 182 Concerning the Prohibition and Immediate Action for the Elimination of the Worst Forms of Child Labor," §2102(a)(9), 19 USC §3802(a)(9); "to ensure that a party to a trade agreement with the United States does not fail to effectively enforce its environmental or labor laws, through a sustained or recurring course of action or inaction," §2102(b)(11)(A), 19 USC §3802(b)(11)(A). While the legal status of these objectives is not clear, U.S. trade negotiators have chosen to treat them as binding, see Elliott and Freeman, *supra* n.2, at 87-89.

¹⁵*supra* n.7.

¹⁶While the Bipartisan Trade Promotion Authority Act of 2002 includes respect for ILO core labor standards as a trade negotiating objective of the U.S., *supra* n.14, it includes an idiosyncratic definition of those standards that omits their ban on discrimination. Section 2113(6), 19 USC §3813(6).

¹⁷Alien Tort Statute, 28 U.S.C. §1350. Courts have found some claims of violations of labor rights to be torts in violation of the "law of nations" that thus might be brought under this statute. *Villeda Aldana v. Fresh Del Monte Produce, Inc.*, 416 F.3d 1242 (11th Cir. 2005)(kidnapping and death threats for union officials raise issues of mental torture violating law of nations); *Estate of Locarno Rodriguez v. Drummond Co., Inc.*, 256 F.Supp.2d 1250, 1258-65 (N.D. Ala. 2003)(murder of union officials by conspiracy of government and paramilitaries would violate freedom of association and hence violate law of nations). See also *Doe v. Unocal*, 395 F.3d 932 (9th Cir. 2002)(Unocal violated law of nations in participating in pipeline project staffed with forced labor recruited under military compulsion), vacated for rehearing en banc, 395 F.3d 978 (9th Cir. 2003). Unocal has settled this case. Lisa Girion, *Unocal to Settle Rights Claims*, *Los Angeles Times*, Dec. 14, 2004. See *Sosa v. Alvarez-Machain*, 542 U.S. 692 (2004)(suggesting "law of nations" enforceable under this statute must "rest on a norm of international character accepted by the civilized world and defined with a specificity comparable to the features of the 18th-century paradigms we have recognized", namely, mercantile questions, law merchant, violation of safe conduct, infringement of rights of ambassadors, and antipiracy).

safety norms of unclear provenance, violated when pesticides banned for domestic use are used in their overseas operations.¹⁸ Finally, labour standards are found in purely private compacts and commitments of the corporations themselves.¹⁹ To the legal scholar, this multiplicity of lawmaking authority normally appears as a weakness of transnational labour standards. We lack any model that would explain why this multiplicity might be functional, so it naturally appears as something that could be exploited by corporations seeking the lightest form of regulation.²⁰

Second, in the U.S., this regulatory redundancy creates painful choices for advocates for workers in developing countries, from the public interest lawyers at the International Labor Rights Fund, to the personal injury lawyers who sued the banana growers hoping to do well by doing good. Bluntly, the efficacy of the law seems inversely related to its international character. The developments summarized at notes 13-18 represent a new aggressive unilateralism by American courts, applying American law to the overseas operations of American firms, with little or no reference to any international standards. Advocates may thus choose law applied by U.S. courts, with U.S. procedure and real monetary remedies (tort law in the banana worker cases; Alien Tort Statute; Civil Rights Act in *Kang*). It is hard to explain why they should instead explore transnational regimes with vaguer remedies (NAALC); or international standards with no remedies at all (ILO Conventions, UN Covenants). Advocates may hardly be criticized for selecting strategies with remedies. Academics and others who favor genuinely transnational standards are hard-pressed to explain exactly why internationalism is important, in the teeth of this recent American unilateralism.

Third, the vagueness or absence of remedies for many regimes of labour regulation naturally make them seem precious and artificial, and limit their interest to many legal scholars and advocates. People who think that standards without sanctions might nevertheless be worth fighting for have not advanced any theory explaining why this might be so.

¹⁸*Martinez v. Dow Chemical Co.*, 219 F.Supp.2d 719 (E.D. La. 2002)(rejecting numerous motions to dismiss); *Dow Chemical Co. v. Castro Alfaro*, 786 S.W.2d 674 (Tex. 1990)(rejecting forum non conveniens defense). The suits on behalf of classes of overseas banana workers are currently being remanded to state courts, following the destruction in *Dole Food Co. v. Patrickson*, 538 U.S. 468 (2003), of the devices that had been used to create federal jurisdiction .

¹⁹See generally Dara O'Rourke, Outsourcing Regulation: Analyzing Non-Governmental Systems of Labor Standards and Monitoring, 31(1) *Policy Studies J.* 1 (2003); Ingeborg Wick, Workers' tool or PR ploy?: A guide to codes of international labor practice, <http://www.suedwind-institut.de/Workers-tool-2003.pdf> .

²⁰Harry Arthurs, Private Ordering and Workers' Rights in the Global Economy: Corporate Codes of Conduct as a Regime of Labour Market Regulation, in *Labour Law in an Era of Globalization: Transformative Practices and Possibilities* 471-87 (Joanne Conaghan, Richard Michael Fischl, & Karl Klare ed. 2002)(Oxford: Oxford University Press).

The thesis of this Chapter is that these three questions—regulatory multiplicity, the value of internationalism, and sanctions-- are related, and answered by the same model. I shall argue that transnational labour standards (of all types) arise to solve coordination problems in which countries would gain by cooperation but will be disadvantaged if their trading rivals defect. As such, transnational labour standards fall into a class of strategic problems extensively studied, and formalized, by game theorists. Understanding the strategic aspects of regulating labour standards will help explain why there are multiple sources of legal standards; why international standards are necessary but insufficient; why negotiated bilateral standards are also necessary but insufficient; and how standards without immediate sanctions can build the trust that permit countries to maintain standards that benefit them all. On this view, it also follows that some transnational labour standards enhance efficiency and are fully compatible with comparative advantage, as they will be adopted only when in the interest of the affected country.

These are large claims. I advance them in the spirit of provoking and enriching our mutual inquiries. Ultimately, the test of any legal standard is its impact in the observable world. As we have already observed, our empirical knowledge about the impact of labour standards is particularly weak. However, I hope that the model proposed here will sharpen and guide the search for such understanding.

Part I of this Chapter models transnational labour standards as solutions to coordination games, specifically, the game called “Stag Hunt.” Part II reviews the behavioural literature on the actual play of Stag Hunt games in laboratory settings and shows how well it predicts some version of our existing regulatory regime. Part III applies the model to specific regulatory standards, showing how understanding their strategic function explains the level of regulation and the presence or absence of sanctions.

I. The Value of Cooperation: Transnational Labour Regulation as a Stag Hunt

A. Stag Hunts

A Stag Hunt is a game in which players can gain by cooperating, but only if everyone else does. If the other player is selfish, the first player is also better off selfish. The game takes its name from a brief observation in Rousseau’s *Discourse on Inequality*. Rousseau describes the beginnings of morality in societies of hunters. The entire passage reads:

Voilà comment les hommes purent insensiblement acquérir quelque idée grossière des engagements mutuels et de l’avantage de les remplir, mais seulement autant que pouvoit l’exiger l’intérêt présent et sensible; car la prévoyance n’étoit rien pour eux, et loin de s’occuper d’un avenir éloigné, ils ne songeoient pas même au lendemain. S’agissoit il de prendre un Cerf, chacun sentoît bien qu’il devoit pour cela garder fidèlement son poste; mais si un lièvre venoit à passer à la portée de l’un d’eux, il ne faut pas douter qu’il ne le poursuivit sans scrupule, et qu’ayant atteint sa proie il ne se souciât fort peu de faire manquer la leur à ses

Compagnons.²¹

The point is that stag makes a much better dinner than hare but can only be hunted in a group in which everyone cooperates, while hare may be hunted individually.²² If you think that everyone will cooperate, you are better off hunting stag. But if you expect that even one person will go off to hunt hare, then you had better hunt hare yourself.

In formal game theory terms, with two players, Row player and Column player, and payoffs indicated, as is customary (Row, Column):²³

²¹Jean-Jacques Rousseau, *Discours sur l'Origine et les Fondements de l'Inégalité*, Seconde Partie, 3 Oeuvres Complètes 166-67 (Jean Starobinski ed., Pléiade ed. 1964)[1755](all spelling and punctuation as in original). The English translations that I consulted all have basic grammatical errors or sound stilted because of reliance on cognates, so with some hesitation I will offer my own translation:

That is how men could imperceptibly acquire some rough idea of mutual obligations, and of the advantages of keeping them, but only insofar as present and perceptible interest might require; for foresight meant nothing to them, and, far from concerning themselves with the remote future, they did not even think about the next day. In hunting a stag, each knew well that for this purpose he had to maintain faithfully his post; but if a hare happened to pass within reach of one of them, no one can doubt that he would pursue it without scruple, and having attained his prey he cared little about having made his companions lose theirs.

The amenability of this passage for analysis as a formal game was apparently first noticed independently by Amartya Sen, *Isolation, Assurance, and the Social Rate of Discount*, 81(1) *Quarterly Journal of Economics* 112-24 (1967), and David K. Lewis, *Convention: A Philosophical Study* 7 (1969)(Cambridge, MA: Harvard Univ.Pr.). Of course, game theorists do not treat the Stag Hunt as a primitive stage in moral development but rather as a dilemma that might arise in any situation involving gains from cooperation. Interestingly, recent primate research suggests that Rousseau was indeed correct to locate the origins of morality in hunting bands, though the account might apply to species other than human. Sarah F. Brosnan and Frans B.M. De Waal, *Monkeys Reject Unequal Pay*, 435 *Nature* 297-99 (18 September 2003)(capuchin monkeys, who cooperate in hunting, will reject the cucumber that they otherwise regard as fair payment for a pebble if they witness another monkey receiving a grape for the same pebble).

²²As a native of Los Angeles and current resident of New York City, I take on faith all assumptions about hunting.

²³The mnemonic for this is Roman Catholic.

		Column Player	
		hunts stag (cooperates)	hunts hare (defects)
Row player	hunts stag	2,2	0,1
	hunts hare	1,0	1,1

That is, if both players hunt stag they will both get a payoff of 2 for the stag. If either defects to hunt a hare, he will get 1 for the hare and his companion will get nothing. If both know or decide that it is hare that shall be hunted, each will catch a hare for a payoff of 1.

A helpful formal feature of this game is that it may be extended to n -number of players. The selfish strategy (hunting hare) yields a fixed payoff no matter what the other players choose (anyone can catch a hare, apparently), while a cooperative strategy yields increasing payoffs depending on the number of players (the more hunters, the bigger the big game that may be landed).

For simplicity, return to the payoff matrix involving two players. This game has two Nash equilibria: either everyone hunts stag, or everyone hunts hare. Hunting stag is “payoff dominant” (or Pareto-optimal) but risky since one can easily be left with nothing. Hunting hare is “risk dominant”, “secure”, or “maximin,” since it has the highest guaranteed payoff.²⁴ Thus there is one Nash equilibrium (each hunts hare) that is not Pareto-optimal. There is no strategy that is dominant in the sense of being the best regardless of what others do. The best strategy

²⁴Ken Binmore, Alan Kirman, & Piero Tani, Introduction, in *Frontiers of Game Theory* 18 (Cambridge MA: MIT Press 1993). Other general introductions to Stag Hunts are Douglas G. Baird, Robert H. Gertner & Randal C. Picker, *Game Theory and the Law* 35-39 (Cambridge MA: Harvard University Press 1994); Colin F. Camerer, *Behavioral Game Theory: Experiments in Strategic Interaction* 375-95 (New York: Russell Sage Foundation and Princeton: Princeton University Press 2003); Brian Skyrms, *The Stag Hunt and the Evolution of Social Structure* (Cambridge UK: Cambridge University Press 2004). Stag Hunts are also sometimes called “coordination games” or “weak link” games (since if one player, the “weak link,” defects, the others will drop to his level); Amartya Sen calls them “assurance games”, Sen, *supra* n 20. I have found two valuable applications of Stag Hunt models to problems in international law or diplomacy. Carlo Carraro, Modelling International Policy Games: Lessons from European Monetary Coordination, 24 *Empirica* 163-77 (1997)(examining monetary policy decision in four European countries over a decade and finding them best represented as a stag hunt game); Robert A. Green, Antilegalistic Approaches to Resolving Disputes Between Governments: A Comparison of the International Tax and Trade Regimes, 23 *Yale J. Int’l. Law* 79-139 (1998)(analyzing tax treaties, which typically lack enforcement provisions, as solutions to Stag Hunts, and suggesting they work better than legalistic approach associated with trade law).

depends directly on what others do, specifically, whether they will cooperate or not. The n -player Stag Hunt is similar, except that it has a n number of Nash equilibria, each short of the Pareto-optimal solution in which everyone cooperates to hunt stag.

The Stag Hunt is easily confused with the more familiar Prisoner’s Dilemma, in which players similarly weigh the returns from decisions to cooperate or defect, depending on what a partner does. In fact, in behavioural experiments, subjects often turn Prisoner’s Dilemmas into Stag Hunts, cooperating until the partner defects.²⁵

However, in strict modeling, the games are different. In the classic Prisoner’s Dilemma, the highest payoff that a player can receive comes not through cooperation but through being the lucky one who rats on a confederate and is thus rewarded by the prosecutors with a lighter or no sentence. If both prisoners remain silent, they will be convicted of some lesser charge. If both rat, they will be convicted of the main charge. If only one rats he will be set free and his confederate will serve a long sentence. These payoffs might be represented with years of prison, minuses in front to show that the longer term is the worse payoff:

	Column player	
	stays silent (cooperates)	rats (defects)
Row player		
stays silent	-3, -3	-10, 0
rats	0, -10	-6, -6

In such a Prisoner’s Dilemma, people can always do better by being selfish, whatever the other does. They prefer mutual cooperation to mutual noncooperation. That is, mutual cooperation achieves the highest social product (here, $-3 + -3$). But they cannot achieve it, because each player always rationally will select noncooperation. Noncooperation (ratting) always gives the higher payoff, whatever the partner chooses.

Free rider problems are Prisoner’s Dilemmas in this sense. “‘Solving’ free rider problems [like other Prisoner’s Dilemmas] hence requires enlarging people’s possible motivations, by for example legal or social sanctions against free riders or repeated contexts in which free riding now might make people not cooperate with you later. ‘Solving’ coordination problems [like Stag Hunts], however, does not require changing people’s motivations: when everyone cooperates, each person wants to do so because everyone else is.”²⁶ In a Stag Hunt or coordination or assurance game, unlike a Prisoner’s Dilemma, cooperation is always rational—but

²⁵Camerer, *supra* n. 24, at 377.

²⁶Michael Suk-Young Chwe, *Rational Ritual: Culture, Coordination, and Common Knowledge* 11-12 (2001)(Princeton: Princeton University Press).

only if everyone else does.

B. Transnational Labour Regulation as a Stag Hunt

We model the adoption of transnational labour standards as solutions to Stag Hunts, in which everyone is better off if all cooperate (hunt stag), but there is a risk that any individual actor might pursue short-term advantage by defecting (hunting hare and leaving the others with only the gains from hare hunting). Actors are countries that choose whether or not to adopt and enforce labour standards. They are assumed to be rational in the sense of favoring Pareto-optimal actions that improve living standards in their population at least where this can be accomplished without taking away from any.²⁷

Some existing and proposed transnational labour standards are, of course, not in the rational interest of all countries to adopt. They cannot be modeled as Stag Hunts and will be ineffective in the absence of sanctions. I'll return to them later. The present point is that at least some transnational labour standards might be voluntarily adopted and enforced in the absence of sanctions. We do not at present have any theory of such standards, and thus one is worth having.

Consider the following highly-stylized statement of the problem. It is clearly in the long-term interest of India, Bangladesh, and Pakistan that all their children go to school and not work in factories. Going to school builds human capital, attracts more and better foreign investment, and generally results in a richer society for all.²⁸ However, if (contrary to fact) India

²⁷This is just a formal requirement of the game. If the leaders have no long-term gains from cooperation, it is not a Stag Hunt. Examples might be kleptocracies that survive by skimming off from current unregulated foreign investment and would lose if any of that investment is lost, Daniel Haile, Abdolkarim Sadrieh, & Harrie A.A. Verbon, Self-Serving Dictators and Economic Growth, Center for Economic Studies and IFO Institute of Economic Research Working Paper 1105, www.CESifo.de (December 2003); or countries with extremely low time horizons, where the population would die of famine in the time interval between passing up the available hare and the cooperative bringing down of a stag. In such situations, there are no net gains from cooperation and the game is a Prisoner's Dilemma or something else. The assumption of this Chapter, however, is that such situations without gains from cooperation are atypical, and that we may helpfully approach the problem of transnational labour standards as a problem in the institutional arrangements that might help countries achieve gains from cooperation. Ultimately, however, the question of which describes reality is an empirical question.

²⁸I hope in future work to specify more precisely the payoffs from cooperating on high labour standards and from deviating for short-term advantage. For present purposes, the payoffs will be crude and ad hoc. However, the crude ad hoc payoffs assumed in this Chapter are in fact compatible with the limited empirical literature on the economic effects of labour standards,

specifically including the contributions to this Symposium by Brian A. Langille, Re-reading the Preamble to the 1919 ILO Constitution in Light of Recent Data on FDI and Worker Rights, 42 *Colum.J.Transnat'l L.* 87 (2003), and Kevin Banks, Globalization and Labour Standards—A Second Look at the Evidence, 29 *Queen's L.J.* 533 (2004). That is, Brian Langille is quite correct that there is no general “race to the bottom.” That is, flows of trade and investment do *not* create inexorable pressure on each country to lower its labour standards so as to attain comparative advantage. My assumption here is that this race, if it exists at all, is limited by each country’s self interest that places serious constraints on how much it will reduce its labour standards in order to attract foreign direct investment. Nevertheless, Kevin Banks is also correct to observe that there may be advantages to a country in lowering its standards, advantages that I model as short-term.

In fact, there is no evidence of any general “race to the bottom.” Every study to examine the question has failed to find any relationship between low labour standards and either foreign direct investment or the competitiveness of exports. See generally Theodore H. Moran, *Beyond Sweatshops: Foreign Direct Investment and Globalization in Developing Countries* 79-83 (Washington, DC: Brookings Institution)(2002); Organization for Economic Cooperation and Development (OECD), *Trade, Employment, and Labour Standards: A Study of Core Workers' Rights and International Trade* (Paris: OECD)(1996)(no relationship between low labor standards and any measure of export performance); OECD, *International Trade and Core Labour Standards* 33–42 (Paris: OECD)(2000)(same); Mita Aggarwal, International Trade, Labor Standards, and Labor Market Conditions: An Evaluation of the Linkages, U.S. International Trade Commission, Office of Economics, Working Paper No. 95-06-C (June 1995)(almost half of U.S. foreign direct investment is in Canada, Japan, Germany, the United Kingdom, and France (at 11); little goes to countries that do not observe core labour standards); Drusilla K. Brown, Alan V. Deardorff, & Robert M. Stern, The Effects of Multinational Production on Wages and Working Conditions in Developing Countries, National Bureau of Economic Research Working Paper 9669 (April 2003)(multinational firms routinely provide higher wages and better working conditions than their local counterparts and are typically not attracted preferentially to countries with weak labour standards); Dani Rodrik, Labor Standards in International Trade: Do They Matter and What Do We Do About Them?, in Robert Z. Lawrence, Dani Rodrik, and John Whalley, *Emerging Agenda for Global Trade: High Stakes for Developing Countries* 35-79 (Washington, DC: Overseas Development Council)(1996)(no significant relationship between trade flows and various measures of labour standards, unionization, or standards of political democracy); Peter Morici with Evan Schulz, *Labor Standards in the Global Trading System* 48-57 (Washington, DC: Economic Strategy Institute)(2001)(reviewing and correcting analysis in Aggarwal and Rodrik studies, *supra*, and nevertheless concluding that “violations of workers’ rights do not positively affect aggregate investment,” at 57); David Kucera, The Effects of Core Workers Rights on Labour Costs and Foreign Direct Investment: Evaluating the “Conventional Wisdom” 33 (Geneva: International Institute for Labour Studies Discussion Paper 130 (2001)(“no solid evidence is found in support of the ‘conventional wisdom’ that foreign investors favour countries with weaker worker rights”); Vivek H. Dehejia & Yiagadeesen Samy, Trade and Labour Standards—Theory, New

and Pakistan actually succeeded in getting all their children out of workshops and into schools, there are certain specific foreign investments that would flow to Bangladesh to take advantage of its child labour, and this would be true even if (as we suppose) Bangladesh knows that it is in its long-term interest that children learn instead of work. This is a classic Stag Hunt. If all countries cooperate in ending child labour, all will be better off. Jobs will be taken by unemployed adults, and children will go to school. But if even one country defects by letting children work, it will capture a certain stream of foreign direct investment that others will not. So, if you think one of your rivals will be selfish, it is rational for you to be selfish, too. There are thus two Nash equilibria: one that is Pareto-optimal (no children work), the other that is Pareto-suboptimal (children work).

So stated, this is not exactly a new insight, nor one the acquisition of which requires much formal game theory.²⁹ Child labour, noted John Stuart Mill in 1832, is a case “in which it

Empirical Evidence, and Policy Implications, CESifo Working Paper No. 830 (December 2002)(long hours worked is negatively correlated with export performance; unionization, civil liberties, and occupational injuries all lack significant relation to export performance; “there is no robust evidence that countries with low labour standards are attracting more [foreign direct investment] than those with high labour standards”, at 27); Matthias Busse & Sebastian Braun, Export Structure, FDI and Child Labour, Hamburgisches Welt-Wirtschafts-Archiv (HWWA) Discussion Paper 216 (2003)(foreign direct investment flows are negatively correlated with child labour, even among developing countries); Mahmood Hussain & Keith E. Maskus, Child Labour Use and Economic Growth: An Econometric Analysis, *World Economy* 26:993-1017 (July 2003)(countries with higher amounts of child labour have lower amounts of human capital in the future); Eric Neumayer and Indra de Soysa, Globalization and the Right to Free Association and Collective Bargaining: An Empirical Analysis (2004)(available on SSRN)(countries more open to trade have fewer violations of collective bargaining rights); Eric V. Edmonds and Nina Pavcnik, International Trade and Child Labour: Cross-Country Evidence, *Centre for Economic Policy Research Discussion Paper 4309*(2004)(more trade, less child labour). The largest recipients of foreign direct investment are (in order) Luxembourg, China, France, Germany, the United States, the Netherlands, and the United Kingdom. United Nations Commission on Trade and Development (UNCTAD), *World Investment Report 2003: Overview*, Figure 2, at 4, www.unctad.org/en/docs/wir2003overview_en.pdf.

Particular flows of foreign direct investment that are contingent on host countries’ lowering labour standards of course exist, but are more consistent with the Stag Hunt model presented here (a hare, not particularly nutritious but passing within reach), than with any supposed “race to the bottom.”

²⁹A number of economists have noted in passing that labour standards might solve strategic interactions in which countries might get stuck in a low level Nash equilibrium, e.g. Kaushik Basu, Child Labor: Cause, Consequence, and Cure, with Remarks on International Labor Standards, 37 *Journal of Economic Literature* 1083-1119, at 1107 (1999); Thomas I. Palley, The Economic Case for International Labour Standards, 28 *Cambridge Journal of*

would be highly for the advantage of every body, if every body were to act in a certain manner, but in which it is not the interest of any *individual* to adopt the rule for the guidance of his own conduct, unless he has some security that others will do so too.”³⁰

Nor is it necessary for present purposes to specify all the ways in which a country might rationally adopt a labour standard if it is assured that its rivals will do the same. In our paradigm case, ending child labour, sending children to school builds human capital and lays the foundation for better future development. In general, mutual adoption of higher standards might similarly direct investment to higher-level development projects. In other contexts, mutual adoption of a higher standard might be rational in other ways. A government that agrees to such a standard credibly commits, to domestic and foreign constituencies, that it will not backslide in the future by giving in to domestic pressure. In our hypothetical, Bangladesh can credibly tell the outside investor who proposes to use child labour that it is committed to the eradication of the practice. By participating in group efforts to create transnational standards, each country will acquire information about its partners’ practices. By making the standard formal, mechanisms for monitoring can be created. Labour standards of this type are rational and thus do not destroy any country’s comparative advantage.

The value of turning toward game theory is thus not just that it is a fancy way of demonstrating the rationality of some labour standards, something that Mill knew. Rather, it is for the illumination that game theory offers, particularly in its behavioural version, precisely to the legal scholars’ questions of regulatory multiplicity, choosing between unilateral and multilateral norms, and sanctions.

Just these legal scholars’ questions elude the many interesting attempts, by economists of trade, to model trade agreements in similarly strategic terms. There is a long tradition of economic analysis of trade agreements, such as customs unions or agreements to reduce tariffs, as formal cooperative solutions to similar strategic dilemmas.³¹ To oversimplify, in these models trade between two countries can reach at least two equilibria, a low equilibrium in which they may not trade at all (perhaps because of high tariffs), and a higher one marked by low tariffs and more trade. A formal trading agreement may assure the country that is lowering its tariff that its partner will do the same. In this analysis, however, agreements of this type are self-enforcing,

Economics 21, 27 (2004); but I have located no formal models.

³⁰John Stuart Mill, *Employment of Children in Manufactories*, in *Newspaper Writings August 1831-October 1834*, 23 *Collected Works of John Stuart Mill* 398-401 (Ann P. Robson & John M. Robson eds. 1986) (Toronto: University of Toronto Press)[1832], at 399.

³¹The most recent is Kyle Bagwell and Robert W. Staiger, *The Economics of the World Trading System* (Cambridge, MA: MIT Press)(2002). Earlier reviews include John McMillan, *Game Theory in International Economics* (Chur: Harwood)(1986), and Avinash Dixit, *Strategic Aspects of Trade Policy*, in *Advances in Economic Theory Fifth World Congress* 329-62 (Truman F. Bewley ed. 1987)(Cambridge, UK: Cambridge University Press).

requiring no formal enforcement mechanism. If one partner defects (by refusing to lower the tariffs that it had promised to lower, for example), the other simply retaliates by refusing to lower its tariffs.

While we will show that labour standards, like trade agreements, similarly enforce high-equilibrium cooperative solutions to games with nonunique equilibria, we will not be able to adopt these economic models of trade agreements. In the world of labour standards, such self-enforcement-through-retaliation is neither feasible nor desirable. To return to our example, if Bangladesh breaks a labour standards agreement by letting children work in factories, it accomplishes nothing if India now lets children start working in its.³²

Can countries cooperate to lift labour standards if there are short-term advantages in defecting, and little effective sanction against defectors? Game theory suggests at least three possible areas of research: first, make the theory dynamic by repeating the game; second, examine the behaviour of countries that adopt labour standards to see whether it is compatible with the model; and third, examine behavioural experiments on how people actually play these games. (Again, I recognize there are many areas of research that lie outside game theory, most important being the comparative empirical study of competing public and private attempts to improve labour standards).

First, the Stag Hunt game of labour standards that we have developed so far, like Rousseau's original, is a static game. A hunter chases hare; the stag hunt aborts; one hunter eats hare; everyone else is hungry. Rousseau does not explain why the other hunters will tolerate this situation or what, if anything, they might do to enforce the joint project.

A closer approximation to reality is to play the game over and over again, to see whether those with a taste for stag can develop ways of keeping the hare hunters' mind on stag hunting. The theory of repeated games is complex and beautiful, and revolves around a so-called Folk Theorem that states that any Pareto-optimal outcome can be maintained as a Nash-equilibrium if the game is repeated.³³ The implications for transnational labour standards are obvious.

³²Sensing this problem, the authors of one game theory model of labour standards assume that, if one country defects by lowering labour standards, its partner will retaliate on some other dimension of trade policy, such as by raising a tariff. Kyle Bagwell and Robert W. Staiger, *The Simple Economics of Labor Standards and the GATT*, in *Social Dimensions of U.S. Trade Policies* 195-231 (Alan V. Deardorff and Robert M. Stern, eds. 2000)(Ann Arbor: University of Michigan Press). This assumes away what is precisely of interest to the legal scholar. In the real world, as everybody (including of course Bagwell and Staiger) knows, parties to the GATT system are *not* permitted to raise tariffs or otherwise retaliate because of partners' low labour standards. That is what the fight has been about for years!

³³A standard reference is Drew Fudenberg and Jean Tirole, *Game Theory* 150-60 (1991)(Cambridge, MA: MIT Press). I will not be pursuing the literature on repeated games in this Chapter.

However, for present purposes I will not develop my argument with reference to the theory of repeated games.

The second strategy is to examine the behaviour of countries that adopt or ratify transnational labour standards, to see whether this behaviour is consistent with the model that treats such actions as cooperative attempts to realize gains from cooperation and prevent defection to secure short-term advantage.³⁴ Nancy H. Chau and Ravi Kanbur have examined just this relationship, by studying the time patterns of ratification of four recent ILO conventions dealing with core labour rights. They found that the crucial variable was indeed peer effects. Countries ratify agreements that their peer group has ratified. Peer group, in turn, is defined by countries' export orientation, level of development, and geographic region. There is also some influence on ratification behaviour of the origin of each country's legal system. However, economic and other political variables do not explain propensity to ratify ILO conventions.³⁵

The third strategy is to examine behavioural experiments in Stag Hunt games. This has not previously been done in discussions of transnational law. We shall see that observable attempts to create and sustain cooperative behaviour tell us a great deal about the structure of transnational labour standards.

II. Experimental Stag Hunt Games

I have been complaining of the paucity of attempts to accommodate theoretically the range of attempts to regulate labour standards. The same complaint has been made about game theory experiments.³⁶ Certainly our knowledge of cooperative behaviour in games is not adequate to design a system of transnational labour standards from the ground up. However, the behavioural literature on games is quite illuminating on the three legal scholars' problems:

³⁴See also Carraro, *supra* n.24.

³⁵Nancy H. Chau & Ravi Kanbur, *The Adoption of International Labour Standards Conventions: Who, When, and Why?*, 2001 *Brookings Trade Forum* 113-56. Chau and Kanbur do not specifically model the adoption of labour standards as a Stag Hunt, or any other formal game. However, their findings are a kind of real-world experiment that, like some models, shows the importance of peer groups or location in realizing cooperation. It is both theoretically and empirically much more likely that cooperative solutions will obtain in large groups if players bargain with neighbours and imitate their successes. Jason McKenzie Alexander & Brian Skyrms, *Bargaining With Neighbors: Is Justice Contagious?*, 96 *J.Phil.* 588-98 (1999); Skyrms, *supra* n.24, *passim* and at 23-29. We will return to this point.

³⁶Elinor Ostrom, *Toward a Behavioral Theory Linking Trust, Reciprocity, and Reputation*, in *Trust and Reciprocity: Interdisciplinary Lessons from Experimental Research* 19-79, at 20 (Elinor Ostrom and James Walker eds. 2003)(NY: Russell Sage).

understanding regulatory redundancy (that is, comparing norms that bind two parties with those that bind n parties); understanding unilaterally-imposed norms; and sanctions.

The most basic point is the most transcendently hopeful. “It is now theoretically well established that when individuals, modeled as freely rational actors with low discount rates, interact in an indefinitely repeated social-dilemma situation, it is possible for them to achieve optimal or near optimal outcomes and avoid the predicted strategies of one-shot and finitely repeated games that yield suboptimal outcomes.”³⁷ We must not lose sight of this insight. Countries need not be stuck forever in a low-level equilibrium. If decent working conditions are in their long-term interest, there will be a way of assuring that all will move together to the Pareto-optimal equilibrium, even if (as is surely true) it is difficult to know just how to do this.

Second, in experimental stag hunt games, pairs of players nearly always coordinate on the highest payoff.³⁸

Third, coordination on the Pareto-optimal equilibrium has never been observed experimentally in large groups. In groups with 14 to 16 participants, after three rounds of play all sessions converged on the lowest possible choice.³⁹ Even groups as small as 6 routinely converge on the least efficient outcome.⁴⁰

This might seem to create a role for formal legal standards. Legal scholars who write about game theory love to assert that the communication of a formal legal standard in such a

³⁷Ostrom, supra n. 36, at 23-24. (“Social-dilemma situation” is Ostrom’s general term for situations in which rational participants making individual choices will not reach Pareto-optimal outcomes). She cites Drew Fudenberg and Eric Maskin, *The Folk Theorem in Repeated Games with Discounting or with Incomplete Information*, 54(3) *Econometrica* 533-54 (1986).

³⁸John B. Van Huyck, Raymond C. Battalio, & Richard O. Beil, *Tacit Coordination Games, Strategic Uncertainty, and Coordination Failure*, 80(1) *Amer.Econ.Rev.* 234-48 at 244-46 (1990); Marc J. Knez & Colin F. Camerer, *Increasing Cooperation in Prisoner’s Dilemmas by Establishing a Precedent of Efficiency in Coordination Games*, 82(2) *Organizational Behav. & Hum. Dec. Processes* 194-216 (2000). The ability of two (but no more) players to reach the Pareto-optimal strategy is demonstrated theoretically in Hans Carlsson & Eric van Damme, *Equilibrium Selection in Stag Hunt Games*, in *Frontiers of Game Theory* 237-53 (Ken Binmore, Alan Kirman, & Piero Tani eds. 1993)(Cambridge, MA: MIT Press).

³⁹Van Huyck et al, supra n.38.

⁴⁰Marc J. Knez & Colin F. Camerer, *Creating Expectational Assets in the Laboratory: Coordination in Weakest-Link Games*, 15 *Strategic Mgt. J.* 101-19 (1994).

situation will provide a coordination point around which parties will converge.⁴¹ Unfortunately, there is no experimental support for this in the literature on Stag Hunts. When leaders are introduced into experimental games to urge parties to adopt the Pareto-optimal position, they are largely ineffective in changing payoffs. Pairs still find the optimal solution, and large groups (in this experiment, groups of 9 or 10) do not. (However, participants inaccurately attribute effects to the leaders. The pairs inaccurately attribute their success to good leadership, while the large groups inaccurately blame their failure on poor leadership).⁴²

A more promising vehicle for enabling large groups to move to Pareto-optimal cooperative solutions is the model mentioned *supra* n.34 and explored in Brian Skyrms' new book. Small subgroups of "neighbours" converge on Pareto-optimal solutions, and then, as each bargains with other neighbours, justice is "contagious."⁴³ I shall explore the implications of this model for transnational labour standards. So far as I know, however, there is no experimental support for the spreading of "justice" in just this way.

III. Working Hypotheses and Tentative Conclusions

A. Working Hypotheses

Applied to the problem of transnational labour standards, the experimental literature suggests the following working hypotheses:

1. The project of transnational labour standards is neither foolish nor hopeless. High standards can be associated with strategies of high labour productivity and do not, in general, deter trade or foreign investment.
2. Nations of the world will not, however, necessarily converge on high labour standards naturally. It is possible to become stuck at a low level equilibrium in which it is not in the interest of any one country to improve its standards unless others do, too.

⁴¹See, e.g., Cass R. Sunstein, On the Expressive Function of Law, 144 *U.Pa.L.Rev.* 2021 (1996).

⁴²Roberto Weber, Colin Camerer, Yuval Rottenstreich, & Marc Knez, The Illusion of Leadership: Misattribution of Cause in Coordination Games, 12(5) *Organizational Science* 582-98 (2001). A contrary finding may be Iris Bohnet & Robert D. Cooter, Expressive Law: Framing or Equilibrium Selection?, UC Berkeley Public Law and Legal Theory Research Paper 138 (2003), in which subjects in a coordination game with multiple Nash equilibria were induced to jump from a low-payoff equilibrium to a high-payoff equilibrium on being told that the low-payoff equilibrium was a "penalty." Perhaps transnational labour standards might have similar effect.

⁴³Sources cited *supra* n.35.

3. The most important factor in any country's improving its labour standards is the "assurance" (in Amartya Sen's word) that its trading rivals will do the same.

4. It is far more likely that such trust and assurance will be achieved in groups of two than in groups of six or more. Consequently, labour standards provisions in negotiated trade agreements (such as the North American Agreement on Labour Cooperation, or bilateral trade agreements between two countries) perform an important function and do not detract from true international standards (such as ILO conventions). In other words, multiplicity of regulatory institutions may well be functional and does not necessarily denote a weak or ineffective system.

5. International standards (such as ILO conventions) will probably not be effective in overcoming a low-level equilibrium and moving large groups of countries to a higher-level equilibrium. However, the process of defining such standards may play a role in building trust. For example, they may provide means of showing trading rivals that one is genuinely committed to lifting labour standards, or means of resisting domestic political pressures to lower standards. They may also provide coordination points that will influence bilateral and other negotiations among smaller groups.

6. Game theory models of labour standards cannot definitively answer the question of the need for sanctions. Since a high-equilibrium state in which all countries lift labour standards is itself Pareto-optimal, sanctions are not necessary to prevent defection. (By contrast, in a Prisoner's Dilemma, players can always gain by defecting, and sanctions, or other tools for reordering incentives, are necessary). On the other hand, the chief obstacle to the growth of labour standards is low trust, or lack of assurance that others won't defect to pursue short-term advantage, as may happen if defectors themselves do not trust the group. Sanctions against defection thus may be part of a strategy of moving to a higher equilibrium, so long as they do not destroy the trust and assurance that ultimately must underlie transnational labour standards.

This is an extraordinarily difficult problem in modeling to which I will have to return in subsequent work. However, some aspects are clear. Transnational labour standards that are unilaterally imposed by one country, as the U.S. does in its GSP program, other trade legislation, banana worker litigation, and Alien Tort Claims Act, run a risk of creating justified anxiety that the U.S. will not abide by true international standards and thus that other countries would be foolish to do so. Second, it is clear that agreements on labour standards will never be self-enforcing in the manner of tariff agreements or customs unions. To threaten a trading rival that, should it lower its labour standards, you will lower yours, is neither efficacious nor attractive.

B. Tentative Conclusions on Legal Issues

However tentative, these working hypotheses suggest answers to the three questions about transnational labour standards that we have been calling the legal scholar's: regulatory redundancy; the role of unilateralism; and the problem of sanctions.

1. Regulatory redundancy

Regulatory redundancy, at least between truly international standards (like ILO Conventions) and standards in treaties (such as NAFTA or bilateral trade agreements), now appears functional. The standards in the bilateral and small-group treaties can create the assurance that trading partners will also raise labour standards, assurance that will move all parties from a suboptimal Nash equilibrium to a Pareto-optimal cooperative solution. The experimental literature suggests that such small groups can achieve such solutions. The international standards will not by themselves create such assurance, but can provide coordination points for the smaller-scale bargaining.

This emphasis on trust and assurance implies that transnational regulation may be more effective by concentrating on issues that do not evoke national pride or tradition, and therefore are better suited for building trust and assurance. For example, the ILO might be much better off adding a right to basic health and safety to its core labour values, and emphasizing it, if necessary, perhaps even over such issues as child labour or antidiscrimination, important as those are. The latter are issues on which national variation is probably inevitable, because of differing social and religious traditions. It also appears that nearly all countries voluntarily end child labour when annual family income exceeds US \$7000 in current values, so ending child labour really requires a commitment to general economic development as opposed to targeted enforcement.⁴⁴

By contrast, a proposed ILO effort on workplace toxins would have no conflict with national or religious traditions. Teams of technical experts might annually identify twenty or thirty of the most dangerous work processes or toxins in use in the world. This process would be technical, nonpolitical, and draw on expertise. Countries would then commit to the eradication of processes and chemicals appearing on the annual list. The ILO would provide technical

⁴⁴Drusilla K. Brown, A Transaction Cost Politics Analysis of International Child Labor Standards, in *Social Dimensions of U.S. Trade Policies* 246-64 (Alan V. Deardorff and Robert M. Stern eds. 2000)(Ann Arbor: U.Mich. Pr.)("Historically, the most effective strategies for reducing child labor have been the byproduct of economic growth," at 247); Avinash K. Dixit, Comment, in *Id.* at 267-70 (U.S. began to get rid of child labor when real GNP per capita reached \$7000 in current dollars); Kaushik Basu and Zafiris Tzannatos, The Global Child Labor Problem: What Do We Know and What Can We Do?, 17 *World Bank Econ.Rev.* 147, 157-60 (2003)(reviewing evidence and concluding that child labour is mainly a function of poverty; advocating incentives to make education more available and affordable, but opposing trade sanctions). Eric Edmonds and Nina Pavcnik, Does Globalization Increase Child Labor? Evidence From Vietnam, *National Bureau of Economic Research Working Paper* 8760 (February 2002), confirm the decline in child labour following the removal of price controls on rice, export of rice at world prices, and the resulting increase in income to farmers. Brown and her associates caution, however, that "the well-being of today's children and perhaps even economic growth itself may depend on getting children out of the labor force and into schools today." Brown et al, cited supra n.5, at 218 (emphasis original).

assistance in this process, for example by suggesting alternatives. The ILO's health and safety standards could then become reference points for national legislation and negotiated treaties. The point is that such a calm, technical process would itself become the means of building trust and respect for ILO standards that would carry over into more controversial efforts such as initiatives against child labour or discrimination.

The model also implies that the real negotiations over labour standards for developing countries should probably be among those countries themselves. If powerful countries impose labour standards on developing countries, these will probably reflect in many, though not all, cases an agenda of protecting standards in the developed country. This objection cannot be raised when the developing countries themselves are encouraged to set the standards that overcome collective action problems and punish defectors. As we have seen, even when standards are international, such as ILO conventions, peer group effects will play a large role in determining which countries ratify them.⁴⁵

Under the model presented here, transnational labour standards are basically pacts among developing countries, or countries at similar levels of development and with similar export orientation.⁴⁶ However, there is a mismatch between this feature of labour standards and the existing institutions for their promulgation. The latter are either international institutions dominated by the more powerful countries, or, worse yet, standards propounded unilaterally by those countries, to which we now turn.

2. Unilateralism

We can now say precisely what is potentially wrong with the unilateral imposition by a country of its own standards for the transnational labour standards of its own corporations, as has been true of the U.S. Congress in trade legislation such as the Trade Act of 2002⁴⁷, the U.S.

⁴⁵Nancy H. Chau & Ravi Kanbur, *supra* n.35.

⁴⁶See also Kaushik Basu, *Globalization and Marginalization: A Re-examination of Development Policy*, Bureau for Research in Economic Analysis of Development (BREAD) Working Paper no. 026 (April 2003); Nancy H. Chau & Ravi Kanbur, *The Race to the Bottom, From the Bottom*, Centre for Economic Policy Research Discussion Paper 2687 (Feb. 2001)(forthcoming *Economica* (2005)).

⁴⁷*supra* nn. 14 and 16.

version of the Generalized System of Preferences⁴⁸, Caribbean Basin Economic Recovery Act⁴⁹, and African Growth and Opportunity Act⁵⁰. Such unilateralism has similarly characterized courts in the U.S. holding banana growers to domestic safety standards⁵¹ or U.S employers to U.S. antidiscrimination laws.⁵² As a mode of transnational labour regulation, such American unilateralism offers many attractive features to the advocate for workers abroad. These cases take place in U.S. courts, with efficient procedures for trying class actions and compensating advocates. The most ardent free-trader cannot object to them, for they do not destroy any comparative advantage of Mexico or Honduras. In fact, free-traders who oppose labour standards, as restrictions on trade, have instead advocated precisely the imposition by importing nations of their own standards on the overseas operations of their own employers.⁵³ Objection to such unilateralism should be based on something more substantial than a taste for the global or a distaste for American unilateralism, however common and indeed defensible (indeed, shared by this American author) are such attitudes.⁵⁴

⁴⁸19 U.S.C. §2462(b)(2)(G) & (H)(country not eligible for GSP treatment if : “(G) Such country has not taken or is not taking steps to afford internationally recognized worker rights to workers in the country (including any designated zone in that country)” or “(H) Such country has not implemented its commitments to eliminate the worst forms of child labor.”).

⁴⁹19 U.S.C. §2702(b)(7) (countries not eligible for favorable tariff treatment unless “taking steps to afford internationally recognized worker rights (as defined in section 507(4) of the Trade Act of 1974 [19 USCS § 2467(4)]) to workers in the country (including any designated zone in that country).”

⁵⁰19 U.S.C. §3703(a)(1)(F)(country eligible if it “has established, or is making continual progress toward establishing, protection of internationally recognized worker rights, including the right of association, the right to organize and bargain collectively, a prohibition on the use of any form of forced or compulsory labor, a minimum age for the employment of children, and acceptable conditions of work with respect to minimum wages, hours of work, and occupational safety and health”.)

⁵¹Cases cited supra n. 18.

⁵²Cases cited supra n. 13.

⁵³Jagdish Bhagwati, The Demands to Reduce Domestic Diversity among Trading Nations, in 1 *Fair Trade and Harmonization: Prerequisites to Free Trade?* 9-40 (Jagdish Bhagwati & Robert Hudec eds. 1996)(Cambridge, MA: MIT Press), at 33.

⁵⁴For strong critiques of U.S. unilateralism, see Philip Alston, Labour Rights as Human Rights: The Not So Happy State of the Art, in *Labour Rights as Human Rights* 3-5 (Philip Alston ed. 2005)(Oxford: Oxford Univ. Pr.); Bob Hepple, *Labour Laws and Global Trade* 89-122 (2005)(Oxford: Hart Publishing).

The Stag Hunt model permits us to explain exactly what might be the cost of such unilateralism, by Americans or others. The game theory perspective of this Chapter suggests that the main obstacle to countries' lifting their own standards is the fear that their trading rivals will not, leaving them with the sucker's payoff (a hare). Overcoming this fear does not require fundamental reordering of motivation, but rather the building of the trust and assurance needed to overcome short-term advantage (the hare within reach) in favor of longer-term cooperation (bringing down a stag). Unilateralism of the kind seen recently in America potentially destroys this trust and assurance, for it graphically suggests that all countries would be wise to pursue their own labour standards since everyone else, particularly the biggest player, is doing the same. This has certainly been true of the administration of Generalized Systems of Preference, not merely in theory but in practice, and, apparently, in legal findings as well.⁵⁵

Dan Danielsen and Karl Klare have recently explored a recent example of US unilateralism that seems to exemplify the costs of unilateralism.⁵⁶ US growers of commercial catfish have recently succeeded in obtaining anti-dumping tariffs against Vietnamese catfish

⁵⁵Under a recognized exception to the General Agreement on Trade and Tariffs, importing countries may create "Generalized Systems of Preference" under which imports from developing countries may enter free of duties if the exporting country agrees to a list of conditions. The United States, European Union, Canada, and Australia all have such GSP programs. Importing countries have almost total discretion whether to create such a GSP program and, if so, what conditions to place on it. Heavy political interference has always characterized the administration of the US GSP program generally, James M. DeVault, Political Pressure and the U.S. Generalized System of Preferences, 22 *Eastern Econ. J.* 35-46 (1996), and the labor provisions added in 1984, see generally Lance Compa and Jeffrey S. Vogt, Labor Rights in the Generalized System of Preferences: A 20-Year Review, 22 *Comp.Lab.L. & Policy J.* No. 2/3 (2002).

The Appellate Body of the World Trade Organization recently upheld India's complaint that the European Communities' GSP program was discriminatorily applied, establishing the principle that extension of GSP preferences will not escape review under the WTO dispute resolution procedure. India's complaint focused specifically on the EC's special benefits for fighting drug trafficking. India did not pursue its original complaint that the EC's labour and environmental standards were similarly discriminatory, and the potential application of the Appellate Body's ruling to those standards is of considerable interest. See Lorand Bartels, The Appellate Body Report in *European Communities Conditions for the Granting of Tariff Preference to Developing Countries*, WT/DS246/AB/R and Its Implications for Conditionality in GSP Programs, in *Human Rights and International Trade* (Thomas Cottier, Joost Pauwelyn & Elisabeth Bürgi eds., Oxford: Oxford University Press, forthcoming 2006); Robert W. Howse, Back to Court After Shrimp/Turtle? Almost but Not Quite Yet: India's Short Lived Challenge to the Labour and Environmental Exceptions in the European Union's Generalized System of Preferences, 18 *Am.U.Int'l L.Rev.* 1133 (2003).

⁵⁶Dan Danielsen & Karl Klare, Trade, Labor & Catfish: A Case Study, presented at INTELL 7, Kyoto, Japan, March 26-29, 2004.

filets. Since the tariffs are prohibitive, Vietnamese catfish is effectively barred from the US market. The successive finding by the US Department of Commerce and US International Trade Commission, that Vietnam was “dumping” catfish, rested entirely on the finding that Vietnam is a “nonmarket economy”. This permitted the US authorities to ignore the inability of the US catfish producers to show that catfish in fact are sold for less in the US than in Vietnam. This is a unilateral imposition by the US of its own version of labour standards. It plainly merely protects a politically powerful domestic industry and will do nothing to raise labour standards in Vietnam. Such unilateral linking of trade benefits to labour or other standards potentially accomplishes little for labour standards and seriously undermines transnational institutions and multinational trust. It is entirely different from a hypothetical proceeding in which the ILO, or some other transnational authority, or, preferably, Vietnam’s peers, actually found Vietnam to be out of compliance with core labour standards and permitted countries to invoke trade remedies. Under the model presented in this Chapter, it is possible to imagine how such targeted invocation of trade remedies might induce Vietnam to permit free trade unions, or end some other specified labour practice. By contrast, the US approach is linked to no specific labour practice and effectively punishes Vietnam for its entire economic system. It will result in no change in Vietnam and reinforces the perception that the US does not and will not play by the rules of free trade that it imposes on others.

As with all other claims in this paper, this one, too, is ultimately empirical. One would need to study the relationship between unilateral imposition of standards and later ability to reach cooperative solutions.⁵⁷

3. The Problem of Sanctions

While a game theory perspective may illuminate the problem of sanctions in transnational labour regulation, it cannot answer this question without much more precise empirical specification of the costs and benefits. From a game theory perspective, we can certainly see a case for, and a case against, tougher sanctions.

The case for sanctions is that they can increase the assurance that other countries will indeed comply with negotiated standards and thus increase voluntary compliance by all the others. The case against sanctions is that sanctions that are seen as harsh or arbitrary may

⁵⁷Chau & Kanbur, *supra* n.46, model other circumstances in which a unilateral trade sanction by an importing country destroys any incentive in developing countries to improve labour standards, and contrast them with scenarios in which a requirement by the importing country instead enables exporting countries to form a pact in which all will abide by the standard and none undercut it. The crucial variables are assumed to be the demand function of the importers, and the comparative weight, within the group of exporters, of small exporters who take prices as given, versus large exporters who take into account the consequences for trade when they set standards.

destroy the very trust and cooperation that is the only long-term hope for labour standards.⁵⁸

The empirical and experimental literature on games does not answer this question. In a Prisoner's Dilemma, optimal solutions can be achieved by cooperating until a partner defects and then sanctioning him or her.⁵⁹ Some problems of transnational labour regulation, as we have mentioned, are probably at best Prisoner's Dilemmas, not Stag Hunts. This is true when the regulated solution cannot genuinely be shown to be Pareto-optimal. An example is the international right to form unions and bargain collectively. This is one of the ILO's core labour standards, for years the only one that the ILO maintained was binding on all ILO members simply by virtue of their membership.⁶⁰ Nevertheless, our current state of empirical knowledge does not permit the strong claim that all states are really better off when they enforce collective bargaining rights, and that there are never gains from defection, or comparative advantage, in maintaining nonunion sectors, for example an Export Processing Zone that bans unions.⁶¹ Effective maintenance of a transnational freedom of association standard thus probably requires either sanctions, or application of the Folk Theorem in which repeat players gravitate toward cooperative solutions.

However, for reasons we have explored, transnational labour regulation should probably

⁵⁸We set aside sanctions that are simply irrational, such as trade sanctions that tax the export sector, force labor into the informal or nontraded sector, and increase poor families' propensity to have children work or put them into bondage. Arnab K. Basu & Nancy H. Chau, *Exploitation of Child Labour and the Dynamics of Debt Bondage*, 9 *J.Econ.Growth* 209, 228 (2004).

⁵⁹Robert Axelrod, *The Evolution of Cooperation* (1985)(NY: Basic); Camerer, *supra* n.24, at 221-23.

⁶⁰The ILO investigates violations of freedom of association through a distinct committee, the Committee on Freedom of Association, and that committee, uniquely, does not limit its jurisdiction to states that have ratified the relevant ILO conventions. Bob Hepple, *supra* n.54, at 52.

⁶¹Richard Freeman is a strong advocate both of transnational labour standards, and the proposition that unions often or typically are positive for productivity, yet even he admits that the effects of unionization on comparative advantage "are indeterminate a priori," Kimberly Ann Elliott and Richard B. Freeman, *supra* n.2, at 18. We can certainly make the weaker claim that unionization is compatible with free trade, and that countries more open to trade have fewer violations of collective bargaining rights, Eric Neumayer and Indra de Soysa, *supra* n.28. But that is not the same thing as showing that universal freedom of association is necessarily in the interests of all, which would be necessary for the Stag Hunt analysis. For discussion of a highly productive but essentially non-union labour market, see Alan Hyde, *Working in Silicon Valley: Economic and Political Analysis of a High-Velocity Labour Market* (2003)(Armonk, NY: M.E. Sharpe Publishing).

take as its first priority, not these Prisoner's Dilemmas, but Stag Hunts with Pareto-optimal cooperative solutions. There has been little or no experimental inquiry into the role of sanctions in overcoming the low trust that often prevents large groups from reaching Pareto-optimal cooperative solutions to Stag Hunt games. This is a question to which I hope to return in future work.