

# THE CHANGING FUNCTION AND STRUCTURE OF INTERNATIONAL LAW\*

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## I. INTRODUCTION

It is a great honor for me to have the opportunity to give the 2014 Richard B. Lillich Lecture at the Florida State University College of Law. I got to know Richard Lillich when I was beginning my career as a scholar at a time when he was at the height of his career. Lillich was a model for scholars: focused, careful, modest, and fearless. He was also a great lawyer who was involved in important cases. His legacy as a pioneering scholar-practitioner of international human rights law still has important effects today. His concerns and thoughts about the protection of aliens and about humanitarian intervention are fresh today. It is also good to see his legacy carried on at Florida State by eminent international law scholars like Fred Abbott, David Landau, and Fernando Tesón.

In 1984, Lillich published a paper entitled “Sovereignty and Humanity: Can They Converge?”<sup>1</sup> The principal thesis of that paper was that “the concept of sovereignty in international law is an idea whose time has come and gone.”<sup>2</sup> I should clarify that Lillich was rejecting a strict theory of sovereignty that would be inconsistent with most international legal obligations, not the idea of a state with certain powers.

The thoughts I am about to express are consistent with those expressed by Lillich thirty years ago. Of course, my perspective has the vantage of thirty more years of history, and my perspective

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1. Richard B. Lillich, *Sovereignty and Humanity: Can They Converge?*, in THE SPIRIT OF UPPSALA: PROCEEDINGS OF THE JOINT UNITAR-UPPSALA UNIVERSITY SEMINAR ON INTERNATIONAL LAW AND ORGANIZATION FOR A NEW WORLD ORDER 406 (Atle Grahl-Madsen & Jiri Toman eds., 1984).

2. *Id.*

is distinguished by a focus less on human rights and more on international economic matters.

## II. THE LIMITS OF INTERNATIONAL LAW

As I write in the fall of 2014, we can look back on a traumatic summer in the international legal system. If we connect the individual trees of trauma, we can begin to observe a forest of crisis in the international legal system. What do the conflict in the Ukraine, the inability to resolve the Israeli-Palestinian conflict, Syria, Iraq, the swarm of undocumented child immigrants coming to the U.S. from Central America, global warming, the spread of Ebola, the Argentine debt default, and the increasing restructuring of U.S. companies as foreign companies in order to reduce U.S. taxation, have in common? They are not isolated events, but symptoms of a broader structural weakness.

The basic structural weakness is that due to globalization, advanced technology, broad dissemination of information, and broad industrialization, many of our most important social problems can no longer be addressed at the national level. Other countries' problems, actions, and inactions affect us too. And our traditional diplomatic mechanisms, with their quaint purported avoidance of interference in the domestic affairs of other states, were built for an earlier age in which national well-being was far less dependent on the actions of foreign countries and persons.

The destruction of Malaysian Airlines Flight 17 on July 17, 2014, shows too graphically the global interconnectedness of people and policy, and how people traveling from Amsterdam to Kuala Lumpur can be affected by a conflict in the Ukraine. This gives new, and extended, meaning to Lillich's work on the protection of aliens abroad. The crisis in the Ukraine results from the inability to manage ethnic or separatist tensions within the Ukraine, and the inability to suppress foreign interference. While foreign fomentation and interference in domestic ethnic conflict is not especially new, the ability of these actions to project their effects broadly has grown. We now understand too well that domestic ethnic conflict has important effects on other states and their people.

Of course, the tragedy of Flight 17 might have been avoided if the Ukrainian state had been stronger. But many states seem no longer able to avoid secessionist or ethnic conflict. What is needed is an international mechanism to mediate and intervene effectively in these conflicts in order to manage them without bloodshed.

The Gaza conflict is just the latest in a series of conflicts between states and non-state, failed state, or semi-state entities. The land at stake between Palestine and Israel is subject to too many claims, is too small, and carries too much history to be the subject of simple state-based solutions. Compromised and shared sovereignty, and trustworthy international supervision, will be a necessary part of any durable peace: one reason for the durability of this conflict is the lack of institutional imagination about the types of solutions that might be acceptable, as well as the lack of international institutions available to reliably support peace.

It will be many years, and many deaths, before the Israelis and Palestinians will reach peace on their own. However, a strong and reliable international authority could be used to foster a transitional peace by supervising the demilitarization of Gaza until relations can be normalized. The United Nations aspired at its founding to serve this type of function; in order to do so, it needs to be rethought by serious people of vision or replaced.

Global warming, like many other environmental problems, and like the international spread of infectious disease, financial crisis, cyber insecurity, and other shared international problems, can only be addressed effectively through international cooperation. But our mechanisms of international cooperation allow for states to remain holdouts, leaving others to bear the costs of addressing the problem, or even taking competitive advantage of their own non-cooperation. We need new institutions to address the broad range of shared environmental, health, financial, tax, and cyber-security problems that have arisen in the past fifty years. These institutions will require the ability to make rules without unanimity among countries, and with democratic participation by the citizens of all countries.

The parents of those children traveling with coyotes and other criminals to the United States from Central America would no doubt prefer to keep their children at home, if their homes were reasonably prosperous and safe. This phenomenon demonstrates that the United States is indeed not an island, separate from Central American crime and poverty. So, if we want to reduce this undocumented immigration, we must help to ensure that these children will have safe lives at home. Humanitarian intervention by force is not appropriate, but other humanitarian action might allow these children to have a good life at home. We need new institutions to support or replace failed states and corrupt states, so that children do not have to flee.

The struggle over Argentina's debt obligations, in which a U.S. court interpreted the *pari passu* clause of Argentina's debt to

prohibit differential treatment of creditors that agree to a restructuring and sought to apply its position to the worldwide banking system,<sup>3</sup> highlights the need for an institutional capacity for international debt restructuring.

Finally, the recent wave of U.S. companies re-incorporating abroad through mergers,<sup>4</sup> like many other tax and financial problems, is a result of the increasing difficulty of regulating companies that are capable of using the corporate form to re-assign the nationality of ownership of their operations or assets. Here again, greater cooperation among countries to establish rules of nationality, to divide up the global tax base, and even to coordinate tax rates, may be necessary in order to continue to collect taxes effectively.

These diverse crises stem from a broader weakness in the international system. This weakness is partly a weakness of perception, because we have not yet fully perceived the source of our problems. As a result of this weakness of perception, we have not redesigned our institutions in a way that allows us to manage these crises and their causes effectively.

It is popular, especially among people who consider themselves hard-headed realists, to say that these events and circumstances are not our problems, and that we should not allow ourselves to be mired in other people's problems. However, it is important to understand that our destinies are much more interconnected today than they were fifty years ago, and that these problems increasingly, and often, become our problems. It is also important to act proactively to avoid crises; it is less costly and more appealing to address problems before they become crises.

In the remainder of my remarks, I want to explain the growing potential role of international law in addressing these types of problems.

### III. THE REASONS FOR INTERNATIONAL LAW

There are four general types of reasons why international cooperation through international law might enhance welfare. First, there may be external effects of national policies that are not sufficiently taken into account by the acting state. International law can serve as the mechanism to cause these effects to be taken into account. (The following three types of reasons also can be

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3. *NML Capital, Ltd. v. Republic of Argentina*, 699 F.3d 246 (2d Cir. 2012).

4. *See, e.g.*, Richard Rubin & Ian Katz, *Crackdown Targets Inversions Designed to Limit Taxes*, BLOOMBERG BUS. (Sept. 22, 2014), <http://www.bloomberg.com/news/articles/2014-09-22/treasury-unveils-anti-inversion-rules-against-tax-deals>.

considered in terms of external effects but have special structures.) Second, there may be economies of scale, economies of scope, or network externalities, causing joint action or harmonized action to be efficient. Third, international problems may have the nature of an international public good, where the non-excludible and inexhaustible nature of the benefits make international cooperation useful to induce states to act to achieve efficient international public goods. Fourth, there may be inefficient regulatory competition by virtue of which states unconstrained by international law may tend to move to an inefficiently low or high level of regulation.

These types of structures are by no means arguments that international law is appropriate to be utilized for all or even many social purposes. Rather, they are analytical templates that allow us to structure our assessment of particular facts in order to evaluate whether cooperation may be efficient from a welfare perspective. They also allow us to begin to evaluate the distributive aspects of cooperation.

Not all international law requires a discrete organization. Much, if not most, international law lacks a secretariat, dispute settlement, decision making, surveillance, and other organizational functions. One theoretical justification for international organizations is to reduce the transaction costs of international cooperation.<sup>5</sup> This is the Coasean story of the market versus the firm, with the international organization playing the role of firm.

In the Coasean theory of the firm, the reason for firms (in our case, organizations) is dependent on transaction cost reduction.<sup>6</sup> The best way to think about this model is in terms of cost-benefit analysis. There are gains to be achieved from cooperation. Where the net gains from cooperation exceed the transaction costs of cooperation, we would expect to observe cooperation. States would be expected to seek to maximize their net benefits from cooperation by utilizing the institutional structure, from case-by-case cooperation to organizationally structured cooperation (analogous to the continuum between the market and the firm), that maximizes the transaction benefits, net of transaction costs.

In connection with international cooperation, transaction costs arise from two main sources. First, they are occasioned by the cost of establishing mechanisms to promote cooperation and

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5. E.g., Robert Keohane, *The Demand for International Regimes*, 36 INT'L ORG. 325 (1982).

6. See Joel P. Trachtman, *The Theory of the Firm and the Theory of the International Economic Organization*, 17 NW. J. INT'L L. & BUS. 470 (1997).

avoid strategic behavior. If an organization can reduce these costs by, for example, supplying information, certifying information, or changing the structure of retaliation and the payoff from defection, then the organization may be justified. A second source of transaction costs is the complexity of identifying, evaluating, and negotiating a Pareto-improving transaction.

It is not possible to determine in the abstract whether an international organization would have greater net transaction benefits compared to those resulting from a simple treaty without a specific organization formed around the treaty. Rather, this question can only be answered in connection with specific cooperation problems. In important dimensions, the question of which would have greater net benefits is dependent on the question of the structure of the international organization.

However, given a complex area of cooperation with many opportunities for uncertainty and defection, it is certainly possible that an organization may provide certain useful services. In particular, we might examine the possibility of strategic behavior. To the extent that the strategic context in which states find themselves maps into a prisoner's dilemma or another strategic model that could be resolved efficiently by a change in the payoffs effected through legal rules, an international organization might be useful. It would allow states to cooperate where cooperation is beneficial, and where it otherwise would not be possible.

#### IV. INTERNATIONAL LAW AS A TRANSMISSION MECHANISM BETWEEN NATIONAL POLITICAL COMMUNITIES

It is important to recognize that the motivations for international law that I have outlined are not separate from domestic politics. Indeed, these international legal and organizational mechanisms are best understood as mechanisms for linking distinct political communities within states. This is a recognition that our national politics are increasingly incapable of addressing all of our needs, but must be extended to include cooperation with the governments of other states in order to do so.

Any understanding of international cooperation through law must be infused with respect for the practical, state-based, political process by which formal cooperation occurs, and it must include a mechanism by which states would determine to create organizational structures by which to facilitate cooperation. It must develop a perspective on the interaction between multiple

domestic political processes, and it must develop a theory of the creation of international organizations.

International law will not grow to replace the state, but will grow to supplement the state as a form of government in a federal or divided powers sense. The future of international law is as a set of functional, nuanced, differentiated, and organic links between the political systems of different states. As these links grow in terms of their mandatory character, specificity, and institutional support, they will increasingly ascend the scale from a more contractual type of international law to mechanisms that appear to have more of the characteristics of government.

Mitrany observed as follows:

Our social activities are cut off arbitrarily at the limit of the state and, if at all, are allowed to be linked to the same activities across the border only by means of uncertain and cramping political ligatures. What is here proposed is simply that these political amputations should cease. Whenever useful or necessary the several activities would be released to function as one unit throughout the length of their natural course.<sup>7</sup>

Yet, Mitrany did not develop the full implications of the extension of politics across borders. International law is the formal mechanism by which such extension occurs in the modern world, and international legal rules and institutions make up the formal link between separate domestic political systems. International law may still provide uncertain and cramping political ligatures, but there is no particular reason why it cannot grow more certain and more capacious, as well as less political. Indeed, while Mitrany's functionalism relies largely on informal administrative connections, rather than formal legal and political connections, these informal administrative connections seem unrealistically removed from national politics. They seem relatively apolitical and insensitive to distributive consequences of administrative action. Today, we may recognize that even expert and technocratic decisionmaking has deep political and distributive consequences.

International relations and international law form a mechanism by which the domestic politics of different states may be linked, modifying the otherwise applicable political equilibrium in those states. The interaction of states matters for domestic politics, and in fact is simply an extension of domestic

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7. DAVID MITRANY, *A WORKING PEACE SYSTEM* 82 (1966).

politics. Yet, it is an extension that constitutes functional cross-national political equilibria, and in effect, communities. These communities often require law and increasingly require international organization.

All international law begins with the demands of a single state; all plurilateralism and multilateralism begins with unilateralism. (It may be that in the future transnational civil society will have the depth and breadth to initiate demands across states.) As a result, we must examine domestic politics to identify the roots of international law.

International law is made by strategic states willing to reduce their autonomy along certain dimensions in order to increase the satisfaction of their preferences along other dimensions; after the commensuration of these two sets of dimensions, each state's government counts itself better off. The mechanism of the state's decisionmaking regarding this tradeoff and commensuration is domestic politics. In this theory, when domestic coalition A stands to achieve a benefit greater than the loss that is expected by domestic coalition B, coalition A is able to enter the political arena and overcome coalition B, all other things being equal. Where an international transaction (one type of which is international law) could result in a political surplus, that surplus may induce a coalition to act to achieve it.

It has always been true that the domestic public policy process has formed coalitions in order to make public policy, and there have always been dissenters. The international relations context can be understood as an expansion of the possibilities for tradeoffs and agreement—and for the formation of coalitions. The set of possible coalitions is effectively increased by the ability to engage in international legal agreements.

Formation and compliance with international law is dependent on the identification and negotiation of efficient transnational political linkages. In an important sense, the scope of domestic politics is extended by the capability of entering into international agreements. While we do not have a continuous transnational political system, international law forms a transmission mechanism that can link domestic lobbies transnationally. Indeed, by virtue of the expansion of the scope of the possibilities for Pareto-improving political transactions, the international extension of the scope of domestic politics (where it occurs) would generally be expected to increase domestic political welfare. Of course, the move from domestic political welfare to actual welfare depends on the extent to which domestic politics reflects actual welfare. In any event, a government that wishes to deliver the



most to its people, or at least to get the most political support, will be required to enter the international law market for some transactions. International law is therefore a tool for establishing functional transnational political linkages—or functional communities—to address particular issues.

This rationalist, domestic politics-based, theory of adherence and compliance provides a novel way of analyzing the possibilities for development of international law. Perhaps more importantly, it provides a useful template by which states may evaluate the possibility that their counterparties will accept and comply with international legal obligations. As states approach important international public policy issues such as global warming, state failure, and international financial crisis, this evaluative tool will allow them to be realistic regarding the possibility and utility of proposed international legal rules.

## V. THE FUTURE OF INTERNATIONAL LAW

Changes in the fields of globalization, development, and technology provide shocks to the existing equilibrium that change relative prices of different externalities, public goods, or other causes of international law.

The overall effect of these changes will often make international law more valuable. This is because the overall level of law in the world is unlikely to decline, while the ratio between international law and domestic law is likely to shift towards international law. These changes can also make it less costly to create and enforce international law. Thus, future changes will affect both the demand curve and the supply curve for international law.

Existing law does not always seem to match existing conditions because laws are generally self-conscious responses, based on analysis and ideas, to observed social conditions. That is, law often can be expected to lag social change. This type of conservatism might be understood in behavioral terms as a product of an availability bias: until we actually observe the problem, we are not motivated to act. The fundamental bias of government is conservative. This conservatism is often pragmatic, avoiding solutions to problems before they arise and thereby waiting until problems arise before devising responses.

Not all conservatism is good. It would be an exceedingly ignorant conservatism that would argue that the international law we have today or that was initiated in the 1648 Peace of Westphalia is the international law that we will have forever.

We might contrast this type of conservatism in law generally, and international law in particular, with a kind of utopian idealism that imagines that modifications to international law will themselves be the cause of a better future. Utopian idealism lacks credibility because it is not grounded in existing conditions or plausible future conditions; moreover, it has often made aggressive assumptions about future social conditions. These assumptions are not necessarily false, but we have no way of knowing if they are true. However, it may be that “the future” is arriving more rapidly today than in the past. Indeed, the pace of technological change has accelerated greatly in recent years, and other changes too may be speeding up.

In fields like environmental protection, we have already learned to think of the future and to plan for it. In other areas, international policymakers and lawyers seem like the arrogant French generals of Maginot line legend, ignorantly planning for the last war. However, one might well ask, given all the dire problems that we have to address today, why we should focus on the future. One answer, as in the environmental field, is that small adjustments today can make the future significantly better—indeed the only way to achieve a good result may be to plan ahead, and with growing complexity more issues may require us to develop a longer horizon. Longer-run planning can only be motivated by inter-generational equity, and concern for our offspring. We would not want to avoid doing something today that could have a great return in terms of benefits to future generations.

The world is experiencing a general and long-term trend (since the 1930s) toward globalization—in the sense of reduction of barriers to the movement of goods, services, money, and people.<sup>8</sup> As barriers drop, prices for all factors become more homogeneous, competition becomes more acute, economies of scale become easier to realize, and supply chains lengthen.

There is still significant enhanced welfare to be gained by extending globalization, especially in the field of migration.<sup>9</sup> Speaking in 2014—with the Doha Round of multilateral trade negotiations a stark reminder that not all efforts toward globalization succeed when expected, with states increasingly attracted to capital controls, with increasing post-financial crisis anti-immigrant sentiment, and with Russia’s growing

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8. Daron Acemoglu, *The World Our Grandchildren Will Inherit: The Rights Revolution and Beyond* (MIT Dep’t of Econ., Working Paper No. 12-09, 2012), available at <http://economics.mit.edu/files/10396>.

9. JOEL P. TRACHTMAN, *THE INTERNATIONAL LAW OF ECONOMIC MIGRATION: TOWARD THE FOURTH FREEDOM* 33-35 (2009).

isolation—we can say that globalization seems likely overall to increase, although there will be important challenges and inevitable reversals.

Increased globalization will create demand for more international law to support and stabilize liberalization; international law and globalization are complements. Opportunities for trade make law preventing barriers more valuable. As stated by Nobel Prize winner Michael Spence, “Economic growth always occurs in parallel with the development of political, legal, and regulatory institutions. One can think of this as applying to national, subnational, and international levels. It’s a continuous process in which increments in economic capacity and the effectiveness of government complement each other.”<sup>10</sup>

Globalization places important demands on international law:

1. Globalization makes the effects of one state’s regulation, or lack thereof, more likely to have an impact on other states. For example, if food travels from Chile to the United States, then the United States will have a greater interest in Chilean food safety regulation.
2. Globalization makes the effects of one state’s regulation, or lack thereof, more likely to affect the market (a pecuniary externality) in other states. For example, carbon “leakage” through the movement of carbon-intensive industries to states with less stringent regulation of carbon might hurt businesses in states with more stringent regulation.
3. Globalization will increase industrialization and development, placing greater burdens on the environment and increasing demand for goods and services.
4. Globalization may increase communications and cosmopolitan feelings of community across states.
5. While globalization provokes demand for greater international law to facilitate globalization, it also provokes comparisons between the law of globalization and regulatory areas of international law that address externalities, pecuniary externalities, and public goods. For example, increased international trade law may provoke those concerned about international environmental problems to seek increased international environmental law. Thus, comparison may lead to further development of these other types of international law.

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10. MICHAEL SPENCE, *THE NEXT CONVERGENCE: THE FUTURE OF ECONOMIC GROWTH IN A MULTISPEED WORLD* 39 (2011).

Neo-functionalists observe a feedback loop between increasing international transactions (in our context, globalization) and integration:

What has been found in empirical studies, again and again, is that European integration is largely the product of a basic kind of Haasian feedback loop: (a) increasing cross-border transactions activates (b) supranational governance (dispute resolution and rule-making), which facilitate (c) a subsequent expansion of cross-border transactions, which translates into greater social demand for new forms of supranational governance (spillover).<sup>11</sup>

Thus, to the extent that globalization proceeds, it is to be expected that greater international law will be called for in response.

Over the next several decades, the world's middle class will grow substantially, both in absolute and in relative terms.<sup>12</sup> The middle class will also be globalized, extending deeply into many states that are considered developing countries today. There will be two main drivers of growth in developing countries: knowledge transfer, and globalization. Knowledge transfer is the process whereby technology and know-how are acquired by developing countries from advanced countries. It is easier for them to acquire knowledge from advanced countries than to rely on purely indigenous knowledge-creation. Knowledge transfer is promoted by globalization, often through the mechanism of foreign investment.

Development has a synergetic relationship with globalization: greater globalization causes development, and greater development causes globalization. At some point, greater development will reduce a category of trade and globalization that is caused by price differentials between poor countries and wealthy countries, especially in labor markets.

Globalization allows developing countries to benefit from their competitive advantages. It allows them to specialize to a far greater extent than if they addressed only the domestic market. Specialization allows greater productivity, as countries

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11. Wayne Sandholtz & Alex Stone Sweet, *Neo-Functionalism and Supranational Governance*, in THE OXFORD HANDBOOK OF THE EUROPEAN UNION 18, 21 (Erik Jones et al. eds., 2012).

12. NAT'L INTELLIGENCE COUNCIL, GLOBAL TRENDS 2025: A TRANSFORMED WORLD 8 (2008) ("The number of people considered to be in the 'global middle class' is projected to grow from 440 million to 1.2 billion or from 7.6 percent of the world's population to 16.1 percent over the next few decades, according to the World Bank. Most of the new entrants will come from China and India.").

increasingly specialize in the goods and services where they have greatest efficiency. Moreover, technology and globalization have increased the scope of tradable goods and services, providing greater opportunities for development. One important example is the web-based development of the business process and software development outsourcing market in India. Additionally, as countries develop, people tend to move from the countryside to urban areas; such urbanization will contribute to pollution, democratization, and development.

What does this development—and convergence of incomes—mean for international law? First, convergence of wealth will lead to greater convergence of demand for, and capacity to fund, global public goods. Reduced asymmetry of positions will make international agreement on the provision of public goods easier. Movement to the middle class will increase domestic demand for environmental protection, human rights, political accountability, education, and other governmentally provided goods, as well as international law extensions of these goods. Today's developing countries will join with today's industrial countries in seeking greater environmental and health protection. They will find it less burdensome to accept international human rights commitments. They will seek greater legal rules facilitating free movement of goods, services, and money, and greater protection of intellectual property. Greater symmetry will come with greater opportunities for cooperation. However, in the nearer future (characterized by greater asymmetry), there will be a greater need for international law that can overcome asset specificity to allow inter-temporal exchange of commitments: consideration provided early by wealthy states in exchange for consideration provided later by currently poor states.

Second, greater sophistication, availability of information, and outward orientation will help citizens of today's developing countries to seek greater human rights and accountability in their governments, which will increasingly be required to enter the international relations "market" in order to maximize their ability to deliver the goods and services demanded of them. Generally speaking, development will result in greater demand for international law.

Technological change has accelerated in recent years, and a number of important innovations are on the horizon. Computing power has grown geometrically according to Moore's Law, and we

can expect this growth in power to continue.<sup>13</sup> By 2032, use of artificial intelligence will be widespread and workplaces will be highly automated, delegating many administrative functions to computers.<sup>14</sup> Quantum computing should be available around 2037, vastly increasing computing power.<sup>15</sup> This level of computing power, combined with advances in robotics, will eliminate the need for both manual and many types of white-collar human labor. Societies, and international society, would need to develop systems for allocation of wealth that are not necessarily linked to productivity, or even to ownership.

Communications has kept pace, allowing computing power to be linked—and information to be shared—through increasingly large and powerful networks. By 2032, internet connection speeds, including wireless connections, may be as great as one terabit (a trillion bits) in many places.<sup>16</sup> The connectivity brought by these networks has had significant effects on productivity, largely through transaction cost reductions. According to the National Intelligence Council, “[t]hese technologies could radically accelerate a range of enhanced efficiencies, leading to integration of closed societies into the information age and security monitoring of almost all places. Supply chains would be streamlined with savings in costs and efficiencies that would reduce dependence upon human labor.”<sup>17</sup>

Technological advances will increase globalization by reducing costs of transportation and communication, which will promote democratization. They will allow citizens of one state to see how others live and how other states govern, and to measure their own government’s performance by comparison. This enhances government accountability and can also lead to greater use of international law to maximize delivery of government services.

The effects of these types of technologies on international law could be dramatic. They would give impetus to development and to globalization because of their facilitation of global supply chain management. Greater globalization of this type—intensive networked production—may also reduce the possibility of conflict by raising the productivity costs of conflict.

These technologies (including a wide array of sensing devices and enhanced abilities to share information) would provide the

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13. See Editorial, *Moore and More and More: How Long Can IT Growth Continue?*, PARISTECH REV. (July 20, 2011), <http://www.paristechreview.com/2011/07/20/moore-how-long-can-it-growth-continue/>.

14. *2030-2039 Timeline Contents*, FUTURETIMELINE.NET, <http://www.futuretimeline.net/21stcentury/2030-2039.htm#ai> (last visited Mar. 3, 2015).

15. *Id.*

16. *Id.*

17. NAT’L INTELLIGENCE COUNCIL, *supra* note 12, at 47.

power for much greater monitoring of compliance with varying types of international law.<sup>18</sup> A particular example is international law relating to pollution, which can be tracked much more accurately by remote sensing devices. The transaction costs of producing and enforcing international law would be greatly reduced. A range of legal rules that are today impractical because violations cannot be detected or ascertained would become more viable.

However, enhanced technology will present increased dangers. Consider, for example, the rise of nano-technology and robots. These dangers will often be shared or will allow one state to threaten another. As a result, enhanced technology will have greater global effects; there will be greater externalities and greater public goods problems.

On the other hand, the greatly increased power of the state would require mediation by constitutional rules, which may demand international human rights rules for support. Indeed, some might predict a dystopian future based on abuse of technology, and this is indeed possible. Great threats will come from ready access by individuals and terrorist groups to the most destructive technologies. This access will challenge individual freedoms and democracy and may even challenge the dissemination of technology.

Further international legal rules will be useful to manage the coming technologies. Greater harmonization and more reliable compliance will be necessary to ensure states that others are taking appropriate care.

Anticipated future developments will have important impacts on the demand and supply of international law. Development and demographic change will increase demands for the global public goods and other benefits that international law can deliver. Democratization will increase the pressure on national governments to respond to these demands. Technological change will cause a greater demand for international law, but it will also reduce the transaction costs of international law by making it easier to negotiate and enforce.

## VI. CONCLUSION

Crises are not new to human experience. But we often use law, international law, and even international organizations to avoid or to reduce the severity of crises. Just as scientists can extrapolate

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18. Jennifer Shkabatur, *A Global Panopticon? The Changing Role of International Organizations in the Information Age*, 33 MICH. J. INT'L L. 159 (2011).

from changing weather patterns that future weather events will be increasingly severe, we might anticipate on the basis of the crises we observe that there will be increasing and more severe crises in the international system in the future. It is also true that increasing globalization, wealth, and technology may provide the conditions for, and tools with which we may establish, international legal rules (and in appropriate cases, organizational structures) that can prevent or ameliorate crises or that can simply enhance our standard of living.

Each international cooperation issue is a complex, multifaceted issue. Moreover, once a particular cooperation issue is linked with another, whether within or without the same subject heading, it becomes a blend that displays a different profile with different emphases among these elements. The future of international society bodes an increase in the quantity and complexity of international cooperation issues, which will require an increase in the density, variety, and complexity of international legal responses.

Furthermore, our need is not just for more of the same. In important areas such as monetary policy and global warming, we will also need a more powerful variant of international law: international law that will be reliable across long periods of time. This type of long-term contracting capability, and strong enforceability, will be required by particular types of cooperation problems that have great amounts at stake over extended periods.

The functionalist perspective that I have described has accurately predicted the growth of the European Union, and the same type of dynamic applies to global society, *mutatis mutandis*. Despite recent reversals on the monetary front, the European Union has found it useful to cooperate in a range of additional areas, using majority voting and centralized mandatory adjudication. It looks like government to me. Robert Schuman and Jean Monnet promoted the early European Community with more than an economic welfare goal in mind: they hoped to eliminate the possibility of war between France and Germany. So far, so good.

Most futurist proposals about international law, since at least Kant's 1795 *Perpetual Peace*, have as their goals the end of war, and perhaps the end of poverty—they predict a movement toward the end of war and suggest rules or institutions that will put an end to war.<sup>19</sup> No one can predict what institutions the future will

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19. See generally PROMOTING PEACE THROUGH INTERNATIONAL LAW (Cecilia Marcela Bailliet & Kjetil Mujezinovic Larsen eds., 2015) (exploring the role of peace in various dimensions of international law).



bring, or whether or when they will put an end to war. For this reason, I have avoided addressing this issue.

However, we can point to a long historical trend of ever-greater social units, where war within the greater social unit seems to become less likely. Indeed, there are social scientific reasons for this, in terms of growing feelings of solidarity, growing understanding, growing networks of interrelation among national governments, growing integration of production and growing commerce with the attendant growth in the expected costs of war, and growing roles of international organizations such as the UN, the WTO, the IMF in serving to manage and resolve international disputes. This, too, provides support to the functionalist vision. Most speculatively, and idealistically, “Mitrany argued that the successful growth of functional international organizations, fulfilling many of the welfare responsibilities previously reserved to the state, would create positive incentives for states to maintain the peace.”<sup>20</sup> What is the source of these incentives? What is the mechanism by which functionalism causes peace?

Mitrany's argument that the successful functional organization of services will reduce the use of force between participants is based upon an appreciation of enlightened self-interest. If state authorities come increasingly to rely on the technical and welfare services of international functional organizations in order to satisfy the aspirations of their citizens, then each government will become vulnerable to the dislocation of those services, insofar as it wishes to fulfill domestic political objectives.<sup>21</sup> So, Mitrany's argument regarding peace is also based on a social scientific, cost-benefit analysis perspective: functional integration increases the costs of war by virtue of lost opportunities for cooperation. Of course, additional mechanisms may be important. Economic integration provides opportunities for specialization which can enhance welfare significantly. Greater specialization results in greater interdependence. These forces will reduce incentives for war.

Is this argument borne out empirically? In the evolution of ever broader social units, we see examples of a seeming decline of armed conflict between internal constituent units. If we observe the growth of the United States or the European Union, we might see in their suppression of internal warfare evidence for Mitrany's proposition. Yet, there are possible counterexamples in the violent break-up of federal states such as Yugoslavia, and in the domestic

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20. Mark F. Imber, *Re-Reading Mitrany: A Pragmatic Assessment of Sovereignty*, 10 *REV. INT'L STUD.* 103, 106 (1984).

21. *Id.* at 111.

ethnic violence of Rwanda, the Congo, Somalia, Syria, Iraq, and unfortunately so on.

So, it is difficult to speculate about a future in which war has been eliminated. It is likely that international law specifically restricting the use of force will soon be required finally to confess its impotence to eliminate war,<sup>22</sup> although this body of international law may make some marginal contribution to this outcome by increasing the costs and reducing the benefits of going to war. Rather, social change will be the far more important instrument of the elimination of international war, to some extent facilitated by other types of international law (the intensification of the international law of cooperation predicted herein). Again, the functionalist vision seems more appropriate than the *deus ex machina* vision of an international law that, if only we could formulate the right rules and build the right institutions, could eliminate war.

The structure of international legal rules and organizations will often be dictated by the type of cooperation problem the rules or organizations are intended to address. Parameters include the magnitude of externality, the degree of asymmetry between states, the extent of excludability, the extent of non-rivalry in consumption, and the aggregation technology for public goods. Once we have answers to these questions, the next step is to identify the likely payoffs and evaluate the likely incentives of states. Frequently, this can be done using existing game theory models, such as the prisoner's dilemma. If we see that likely behavior will differ from the most efficient behavior, there may be a role for international law to modify the payoffs, either through explicit penalties or by linking behavior in this game to behavior in other games.

It is important to note that each international law setting is likely to have a different profile, so the type of international law and organization that results will differ for each rule. Furthermore, each state is likely to enter the international law market with different needs and demands. That market is characterized by asymmetry in virtually every field. It is often necessary to make side payments of various kinds or to link different types of commitments in order to reach agreement. Often times this asymmetry must be addressed in connection with enforcement: states that are unconcerned with a particular issue are also likely to be unconcerned with respect to retaliation or

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22. See MICHAEL GLENNON, *THE FOG OF LAW: PRAGMATISM, SECURITY, AND INTERNATIONAL LAW* 21 (2010) ("International rules that purport to prevent the use of force have not worked.").

reversion to a Nash equilibrium (of no international legal rule) with respect to that same issue.

Therefore, the future of international law will require lots of capacity for side payments and linkage. Inter-functional linkage is critical to making and enforcing international law. Explicit linkage may become less important to enforcement of an international legal rule by virtue of implicit linkage of any particular rule of international law to all other areas of international law.

Some of the world's most difficult problems, such as global warming and the relative values of currencies, will require rather long-term contracting, with states making substantial concessions in early years in expectation of reciprocity much later. This extremely high level of asset specificity will put great pressure on the reliability of international law. States will only enter into the needed long-term contracts if they are enforceable.

Not only will long-term contracting be required, but greater constitutionalization will also be required. As international law becomes more extensive, and as the demand for international law increases, additional international legal mechanisms will be required. These mechanisms will be desirable to produce greater coherence and address fragmentation. A related group of mechanisms will be desirable to make it easier to make international law and to impose needed constraints on the production of international law. These are "constitutional" mechanisms.

As the demand grows for international law, facilitating constitutionalization will be necessary to allow for easier law-making. Facilitating constitutionalization is also a kind of very broad reciprocity under a Harsanyiian veil of uncertainty:<sup>23</sup> states are willing reciprocally to accept law-making structures where they are uncertain regarding the distributive impact of the structures. That is, where states can see broadly that new law-making structures are beneficial, and where the distribution of the benefits is uncertain enough for each state to feel that it has a fair chance to share appropriately in the benefits, it is possible to make a constitutional agreement in the facilitating constitutionalization vein.

With facilitating constitutionalization comes a need for constraining constitutionalization: it is not contradictory to say that new powers require new limits. With increasing globalization, supplemental constitutionalization will also become more important. Constitutionalization as a response to fragmentation

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23. See John Harsanyi, *Cardinal Welfare, Individualistic Ethics, and Interpersonal Comparisons of Utility*, 63 J. POL. ECON. 309 (1955).

will also grow in importance due to the growth of international law and the consequent congestion in international law. This type of constitutionalization may help to provide coherence to a fragmented field.

The approach taken in this lecture is social scientific, and methodologically individualist. How does the individual exert influence in international law? The basis for international law is to be found in domestic politics, where, especially under increasing democratization, the individual expresses his preferences through the domestic political system. The individual still largely expresses preferences in the international political and legal system through the agency of his national government. Accordingly, we must examine domestic politics to determine how international law is made and enforced.

The understanding of the state as agent or trustee of the people is anti-monarchic and democratic. It seems increasingly reasonable (and common) to view states this way. Within this democratic model, individuals and groups will advocate policies that promote their own preferences. With globalization and the increasing global impact of all sorts of policies heretofore seen as domestic, these preferences will include action or inaction by other states, or by the citizens of other states. Citizens in domestic politics will have preferences regarding international law. Moreover, the possibility of international agreements provides the possibility not only for greater welfare, as suggested above, but also for political coalitions that could not exist if the international arena did not exist. The possibility of international agreement can be seen as a shock to otherwise-existing domestic political equilibria.

In an important sense, the scope of domestic politics is extended by the capability of entering into international agreements. How else can we expect to engage in discourse regarding international externalities and public goods? International law and international organizations are the formal mechanisms for dealing with governmental issues that extend beyond the state. Informal mechanisms, including "soft law," provide some measure of response, but have significant limitations in many circumstances. Soft law can be workable where there are not significant enforcement issues, as in cases in which the cooperation problem has the characteristics of a coordination game. Soft law can also be workable where there are significant enforcement issues, but where the conditions for a self-enforcing contract are met. However, there will be important international issues that entail significant enforcement issues in which no self-enforcing contract can be established. Under these circumstances,

international law that links performance on one matter to performance on other matters, and that can provide remedies that overcome significant asymmetry or asset specificity, is necessary.

As technology, demography, globalization, and democracy grow, they tend to increase the scope and magnitude of international externalities and public goods. This process inevitably makes the formal bounds of the state insufficient to efficiently govern important matters. International law and organization are the exclusive formal response. So, it seems that international law and organization will inevitably grow.

Thus, the availability of international law as a general tool is important to each government; for this reason, each government will have at least some interest in supporting the international legal system. Indeed, there is a network externality effect with respect to international legal compliance. As international law becomes more extensive and intensive, and more important to the delivery of government services, the interest of government in maintaining the international legal system will increase: as international law grows, it grows stronger. Furthermore, as it grows stronger, it will be more useful for a wider range of tasks, causing the scope of international law to become more extensive. Formation and compliance with international law is dependent on the identification and negotiation of efficient transnational political linkages. Moreover, international law is the link between domestic political systems, allowing the creation of ad hoc international political systems through international legal contracting.

With the increasing density and complexity of international law (and international organization), we will see the functional growth of an international political system. This is the prediction of functionalism, based on cooperation needs that already exist and that will arise in the future. This international political system is shaped by functional needs. It will not be designed as a system from the top down but will be designed organically and gradually by social need.