Fragmentation and Coherence in International Law

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1. Introduction

The breadth and depth of international law has grown in a variety of areas. A simple list will call to mind some of the areas of growth: trade law, human rights law, intellectual property law, environmental law, health law, and investment law. The international legal terrain definitely is becoming more congested. With congestion comes collision, and often friction. This article examines the occasions for collision, the meaning of collision, and the possible responses to collision. Collision of this type can occasion concern, as connoted in the pejorative term often used for this phenomenon: fragmentation. But collision is less often considered as an occasion for synergy—in which the interaction of different areas of law produces better outcomes than if there were no interaction. This article explains the sources of synergy, and of coherence, among diverse areas of international law.

Fragmentation as a descriptive concept is best understood as an artifact of the existing decentralized structure for making international law—the decentralized nature of global government. As a pejorative term, fragmentation is a critique of the failure of mechanisms for reconciliation to keep up with increasing congestion and enforceability of international law. From a normative perspective, fragmentation may be understood as a kind of inter-regime externality, dependent in some cases on supra-regime governance to appropriately prioritize across governmental functions.

For some, fragmentation raises questions about “[international law’s] stability as well as the consistency of international law and its comprehensive nature.” 1 There are good reasons for concerns regarding collision, or fragmentation. As the international legal system has developed so far, it has had little experience with fragmentation, and its rules have not evolved to deal with fragmentation in a satisfying way. In the future, we will observe increasing instances of fragmentation, but also increasing mechanisms by which to manage fragmentation.

Fragmentation may be understood as a developmental problem of the international governmental system, in which there is a lag between congestion and measures to produce coherence. It is only to be expected that early cooperation would be ad hoc, and cabined in specific subject matter contexts. But as the frequency, intensity, and cumulation of these instances of cooperation increase, it is to be expected also that economies of scale and scope, and network externalities, arising from a number of sources, would suggest some degree of movement toward coherence.

This article first provides an analytical framework by which to understand fragmentation, explaining how fragmentation relates to horizontal conflict between states, as well as how it relates to the question of vertical allocation of authority between states and international law or organization. Next, this article analyzes the existing international legal doctrine addressing

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fragmentation. I then catalog the alternative approaches to managing fragmentation, including varying types of legislative and adjudicative mechanisms. These mechanisms can lend coherence to the international legal system as the phenomenon of congestion and collision grows. Finally, this article provides a normative analysis of fragmentation. I suggest how linkages can be constructed to provide synergies: circumstances in which a better outcome is produced by linking divergent international legal rules. These synergies are derived from the possibility to make possible bargains that would not be politically feasible without linkage. They come from the fact that linkage of divergent legal rules can make the enforcement of each legal rule stronger. And they can be derived from economies of scale and scope in international law and organization.

Fragmentation arises when there are overlaps between policy measures in the international legal setting. Some general examples of policy conflict will help frame the issue. In the area of trade and environment, there are important concerns that international trade law might prevent states from acting unilaterally, or even multilaterally, to avoid “leakage” of high carbon activities from states that restrict use of carbon to states that do not. Some worry that international trade law or international investment law will be used to prevent states from taking appropriate actions for economic development, environmental protection, or human rights. Some international legal responses to terrorism have conflicted with human rights.

More specifically, formal conflicts can arise when an international body deviates from a general rule of international law on the grounds that a lex specialis rule from a different subsystem applies. A well-known example of this type of conflict occurred in the Belilos case, where the European Court of Human Rights declined to apply the general rules concerning treaty reservations and held that (i) a state’s purported reservation to a treaty was invalid and (ii) that the state was therefore bound by the treaty.² Notably, the ECHR justified its departure from the fundamentally voluntary nature of treaty obligations and established rules on treaty reservations by invoking the constitutional character of the European Convention on Human Rights.³

Furthermore, conflicts can arise when a dispute is submitted to multiple dispute resolution fora and potentially inconsistent norms from different international legal regimes are applicable. For example, the Chile-EC swordfish dispute was submitted to WTO dispute settlement and to a Special Chamber of the International Tribunal for the Law of the Sea. Notably, this form of conflict is not limited to inter-state disputes; the proliferation of human rights and investment tribunals has enabled private parties to pursue identical or related claims in multiple fora, either simultaneously or sequentially. Multiple litigations arising out of the same facts raise serious efficiency and finality concerns as well as, of course, the very real possibility of conflicting judgments.⁴

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³ See Loizidou v. Turkey, Preliminary Objections, 23 March 1995, para. 75.
⁴ For one particularly notorious example of inconsistent judgments, compare Lauder v. The Czech Republic, UNCITRAL, Final Award (Sept. 3, 2001) (London arbitral tribunal finds that state action did not constitute expropriation, not violate obligation to provide fair and equitable treatment and not breach duty to provide investor with full protection and security) with CME Czech Republic B.V. v. The Czech Republic, UNCITRAL, Final Award (Mar. 14, 2003)
Finally, conflicts can arise when bodies “located” in one specialized area of international law are asked to apply norms generated in other specialized areas of law. For example, in the *Beef-Hormones* dispute, the European Union asked the WTO’s Appellate Body (AB) to apply the “precautionary principle” in the context of the EU’s ban on beef from cattle treated with certain hormones. The AB suggested that the precautionary principle might be part of “international environmental law” but not general international law, and in any event was not applicable to the dispute. Similarly, in the *GMO* dispute, a WTO panel declined the invitation to refer in interpretation to an international environmental treaty, and in the *Soft Drinks* dispute between the U.S. and Mexico, the AB declined to determine rights and duties under NAFTA. These disputes suggest that the same case might be resolved differently in different tribunals, depending, *inter alia*, on the law that they are charged to apply.

2. Fragmentation and Allocation of Authority

Authority may be allocated in two directions: horizontally and vertically. Horizontal allocation of authority within a system of states determines which state will exercise authority over a particular person, activity, or thing. This is the main concern of international law.

Vertical allocation of authority determines at which vertical level of society authority will be exercised: (i) individual freedom, (ii) municipality, (iii) sub-state entity, (iv) state, (v) plurilateral organization, or (vi) multilateral organization. An attractive normative approach to vertical allocation of authority is expressed in the principle of subsidiarity.

International law should generally play a subsidiary role in relation to domestic law. The principle of subsidiarity in its most rational, and economic, form, is best understood as a principle of efficiency in vertical allocation of authority. It holds that the state should intervene in civil society—should regulate—only where its involvement improves welfare, and that in turn international law and organizations should be established only where they improve welfare.\(^\text{5}\) It is appropriate to adopt a subsidiarity, or efficiency, based method, examining first the circumstances in which it appears that states should regulate, and second the separate and different reasons why international law of regulation may be appropriate.

Thus, as discussed above, domestic regulation may be needed when firms do not bear all the risks of their actions or when the managers who are delegated control of firms do not bear all the risks of their actions. Building on the subsidiarity concept at a higher level of organization, international regulation is needed when states do not bear all the risks of their regulatory actions, where states acting individually would otherwise underinvest in a global public good, or where states may regulate more efficiently by working together.

The role of law in society generally is to determine allocation of formal authority: its social role is to answer the question, does the regulated person have the authority to take certain

\(^{5}\) For my more general analysis of this topic, see JOEL P. TRACHTMAN, *THE ECONOMIC STRUCTURE OF INTERNATIONAL LAW* (Harvard 2008).
action, or is the regulated person authoritatively required to take certain action? International law is an important mechanism for determining allocation of authority under circumstances where multiple states are involved. Vertical allocation of authority between states and international law or organization can be guided by the principle of subsidiarity. There is no single term for the normative principle of allocation of authority horizontally among states, although we might simply say that we seek efficiency in horizontal allocation of authority among states.

Nor is there a single term for the principle of allocation of authority horizontally among international legal rules or international organizations. The developing term for the problem of uncoordinated authority among international organizations, and among treaties or other sources of international legal rules, is “fragmentation.” But we also need a term that would be the horizontal counterpart to the vertical concept of subsidiarity: what shall we call the concept of efficiency in horizontal allocation of authority among international legal rules or organizations? We could simply use the term “efficiency in horizontal allocation, etc.” but a briefer term might be “coherence.” In this article, I will use the term “coherence” to refer to efficiency in horizontal allocation of authority among international legal rules or organizations.

Fragmentation problems always begin with conflicts of values. Interestingly, these conflicts of values will begin to be observed in domestic politics, and will have a particular outcome in domestic politics.

All issues of international cooperation are, first, questions of allocation of jurisdiction horizontally among states; and, second, questions of allocation of jurisdiction vertically between states and international organizations: of subsidiarity. Third, and of growing importance, is the question of fragmentation, addressing the allocation of jurisdiction horizontally among international legal rules or international organizations. However, the question of fragmentation must continually be traced back to disputes regarding horizontal allocation of authority between states, because the outcome of a fragmentation dispute will have efficiency and distributive consequences horizontally between states. The second level horizontal dispute—the fragmentation dispute—may indeed replicate the horizontal dispute between states. The diagram in Figure 1 below illustrates these relationships.

International law rules are often more durable than domestic policy positions, and so while a prior policy might subsequently be reversed within the domestic sphere, it may continue to operate in international law or organization. In fact, this is the essential role of international law: to enable states to agree today to constrain later behavior. This constraining role is a signal feature of international law—it does not necessarily change with any particular state’s domestic policy, otherwise it would be no law at all. This persistence of international law commitments is one reason for fragmentation: a particular state may enter into conflicting commitments at different times. It may enter into these commitments with varying groups of other states. But we will see below that the doctrinal essence of the fragmentation problem in international law arises from variation in the groups of states that establish international legal rules or organizations.
So, we move from domestic conflict of values to domestic policy to international law to conflict of international law. The question is how do we move from conflict of international law to a coherent global policy? To illustrate this question, let us examine a hypothetical conflict between the U.S. and Malaysia. Assume that within U.S. domestic politics on a particular issue, environmental protection has trumped free trade. This may be partly because the costs of reducing free trade are partially externalized to exporting states, but the reason is not essential. In Malaysia, the domestic politics on the same issue has had the opposite results: free trade has dominated environmental protection.

Assume that Malaysia supports free trade in this case, while the U.S. supports environmental protection. Both states have previously become party to the WTO treaties, and to, for example, the UNEP Montreal Protocol on Transboundary Movement of Hazardous Wastes. Assume a dispute between the U.S. and Malaysia, in which the international environmental law supports the U.S. position, but trade law supports the Malaysian position. Note that the minority domestic group in each state may seek a second chance to dominate in the international context—this is the domestic politics component of fragmentation: it involves a type of vertical forum shopping.

It should be noted at this stage that this dispute arises because of the incompleteness of reconciliation between the WTO treaties and the Montreal Protocol when they were written. We might say that this incompleteness could be resolved by use of formal application of the doctrinal rules of the Vienna Convention on the Law of Treaties, or alternatively by informal diplomacy, just as we might say that domestic contracts are not fully incomplete because they may be interpreted by domestic courts. So, fragmentation arises from incomplete contracts at the borders between functional areas. As discussed below, the Vienna Convention fails to provide a complete, or satisfactory, response.

The U.S. environmental interests, having won in U.S. domestic politics, and therefore the U.S., seek determination of the dispute under international environmental law—perhaps in a United Nations Environment Program (UNEP) forum. Conversely, the Malaysian trade interests, having won in Malaysian domestic politics, and therefore Malaysia, seek determination of the dispute under WTO law. (Obviously, it is a simplification to say that UNEP will always uphold environment over trade, or that WTO will do the opposite.) The formal question that arises from fragmentation is how shall this type of dispute be resolved, where the determination of which law to apply is outcome-determinative.

This question, the reader will note, is analogous to the question of choice of law in private law: the parties dispute which law to apply where the determination of applicable law will be outcome-determinative. Indeed, where the choice is one of organization, as opposed to rule, this choice is analogous to choice of forum in transjurisdictional litigation: the choice of forum determines the applicable rule (or at least the forum rules by which the applicable law will be chosen), and the applicable rule determines who wins. As in the private law field, this type of dispute arises because of the incompleteness of the rules for determining choice of law and forum in transjurisdictional cases. As in the private law field, this type of dispute may be resolved according to choice of law or choice of forum clauses, if these are negotiated, and if the law involved is considered private law. Private law is law that the parties are free to modify—it is facultative, as opposed to mandatory. With respect to public law, parties are not free to modify it because violation of public law imposes externalities to others in society. This analogy
is relevant in connection with fragmentation: one question is the extent to which states may decide, *inter se*, to modify existing law between them. It is somewhat analogous to the private law-public law distinction.

**Figure 1**

![Diagram of international law rules of hierarchy with examples of UNEP, WTO, US, and Malaysia organizations and their trade and environment policy conflicts]

Importantly, the initial allocation of authority is comparable to three-dimensional chess. A joint determination must be made regarding the vertical allocation of authority and the horizontal allocation of authority. Thus, it is not enough to determine that the state is the appropriate vertical level—we must also determine which state. Similarly, it is not enough to determine that the multilateral organization is the appropriate vertical level of authority—we must also determine which multilateral organization. This is a joint determination, not a sequential determination. That is, the choice of vertical level is also dependent on the choice of horizontal allocation among different functional rules or organizations. It is also important to note that there is a choice of legislative determination versus judicial determination within a particular organization.

3. **The Past and Future of Fragmentation**

Where there is little international law, there would be little need for cross-functional coherence. Furthermore, the international law of “coexistence” (in Wolfgang Friedmann’s framework) was internally coherent: it was only when we began to develop the international law of “cooperation” that coherence became an issue. Fragmentation is a phenomenon of congestion.

Furthermore, when customary international law was the primary means for making international law, and its products were generally universal, fragmentation was a significantly
less pressing issue. This is because, first of all, a customary international law rule had the ability to be nuanced, and to take into account varying concerns—after all, it was socially rooted in behavior. Second, to the extent that customary international law was universal, we did not experience the problem of multiple legislators: the world community was a single unified legislator. Fragmentation is largely an artifact of treaty law made in different fora, with different groups of parties.

Fragmentation may be understood as an “infant disease” of the international governmental system. It is to be expected that early international cooperation would be ad hoc, and cabined in specific subject matter contexts. It is not surprising, as Friedmann described, that international law developed first in connection with security diplomacy and war: these were the primary areas in which cooperation was desirable. Until other areas developed sufficiently to motivate international cooperation, there was no fragmentation.

Thus, it is to be expected that the mechanisms for cross-functional coherence would be rudimentary where there is seldom a need for cross-functional coherence. It is necessary to recognize, however, that incoherence is not necessarily bad, and that all international law, like all contract and all statute, is incomplete. But this does not tell us the optimal level of completeness in this area. We must be careful, then, that the drive for coherence does not override more substantive goals—that it not become a drive for foolish consistency (the hobgoblin of small minds).

Also, aspirations of international law towards a nirvana image of coherence needs to be tempered by recognition that even in the municipal legal system, with its gold standard of unitary legislators, courts, and executives (apart from the effect of federalism), there is much fragmentation. While this cannot quite constitute proof that it would be inefficient, or otherwise undesirable, to eliminate or reduce fragmentation, it is at least proof that the efficient level of fragmentation is probably greater than zero. Furthermore, as we examine international fragmentation, we must recognize that international coordination or coherence will be dependent on national coordination or coherence. It is difficult to imagine that the scope of international fragmentation would be less than the average scope of domestic fragmentation.

The issue of fragmentation exists without international organizations, but it can be accentuated by the existence of international organizations. Moreover, there are three types of hierarchy: (i) normative, (ii) structural, and (iii) adjudicated. Normative hierarchy refers to an order of priority, established legislatively or through treaty provisions, for different types of norms. Structural hierarchy refers to organizational structures—including dispute settlement and enforcement mechanisms—that may de facto prioritize one norm and subordinate another. Adjudicated hierarchy refers to determinations made by courts—where courts have jurisdiction—regarding the hierarchy of particular rules.

Assuming a progressive view of international relations, with increasing demands for cooperation, and increasing congestion of international law, we would expect functional integration to take on increasing subtlety and complexity. While there would, of course, be practical difficulties of integrating the work of varying organizations with varying expertise,

epistemic communities, and formal rules, the value of functional integration will grow with the value of increasing cooperation within different functional areas.

That is, as regulation becomes more dense because of greater complexity of production, greater production externalities and consumption externalities, and increasing technology, and as globalization and economic development causes greater dissemination of regulatory density among countries, we would expect to see more collisions and synergies between functional rules, and more instances of potential cross-functional coordination, or moves to increase coherence. This occurs domestically, but it also is replicated where international cooperation is effected in these regulatory areas.

With increasing substantive interactions brought about by globalization, states would naturally find it useful to coordinate on issues of governing rules, regulatory cooperation, and regulatory competition. With increasing instances of cooperation among states, states would naturally find it useful to ensure that the interactions among diverse rules is sorted out in a productive fashion. Indeed, as the frequency, intensity, and cumulation of instances of cooperation increase, it is to be expected also that not only collisions, but also economies of scale and scope, arising from a number of sources, would suggest some degree of movement toward coherence.

This set of relationships is depicted in Figure 2.

Figure 2

Thus, as international law and organization increase, largely through treaty, and increase in functional variety, the “space” for international law becomes more congested, resulting in increased circumstances of collision between rules. As the number of international organizations, and courts, increases, we also have increased opportunities for collisions. It is well understood that collisions are inevitable, because measures that are labeled “human rights,” for example, or “finance,” will inevitable overlap with measures that are labeled “security” or “trade.” It is not possible to cabin legal rules within a particular functional label; it is a false assumption that measures within one functional area do not have effects on the achievement of

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the goals of another functional area. Therefore, some coherence in the form of rules for mediation between different subject matter rules, or institutions for mediating between different subject matter rules, would be in order.

While these mechanisms may be formal or informal, as the formal enforceability of international law increases, there may be greater need for formal mechanisms of coherence. Indeed, to the extent that cooperation in particular areas is formal, it would be doctrinally strange to have integration across areas take place informally. Formal institutions could take the form of legislative or adjudicative rules or institutions. On the other hand, to the extent that international law depends on informal methods of interpretation and enforcement, there might be reduced need for formal mechanisms for cross-functional coherence. Thus, there will also be instances in which fragmentation is left unaddressed in the formal system, and states and international organizations are called upon to address it through informal means.

4. Responses to Fragmentation: Incomplete Contracts at Functional Borders

There are no nirvana responses to fragmentation, just as there are no nirvana responses to the fact of our individual multiple concerns. Some have proposed hierarchical structures as a way to mediate among different sources of law, for example extending the concept of *jus cogens* or simply arguing that certain types of law, such as human rights, should take general precedence over other types of law, such as economic law. These hierarchical responses will be unsatisfying in most cases. Of course, *jus cogens*, like constitutionally protected rights in the domestic system, is and perhaps should be understood as a type of supervening law. However, the scope of desirable supervening law would ordinarily be rather narrow, and there would be a broad class of subordinated law, with no way to decide how to address conflicts between subordinated legal rules, or for that matter between *jus cogens* rules.

Within domestic statutory systems, some states utilize a “last in time” rule to mediate among statutes, assuming that the legislature, by legislating later, intended to override earlier inconsistent legislation. Within the international legal system, a “last in time” rule, while perhaps more appealing than no rule at all, is not as attractive as in a domestic system with a more consolidated legislative process. Furthermore, within at least the U.S. domestic *administrative* system, there is no last in time rule, and other more deliberate processes have been suggested for mediation, including “structural integration of agency functions, procedural consultation requirements, memoranda of understanding and mandated joint policymaking” between separate regulatory agencies.\(^8\)

Furthermore, incoherence benefits those with greater ability to navigate incoherence. Thus, fragmentation may have distributive consequences, insofar as states more adept at forum-shopping may benefit from incoherence.\(^9\) To the extent that they do, they would naturally resist attempts to increase coherence. For example, using Table 1 as an illustration, if the U.S. is able

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to determine, or disproportionately to influence, the choice of applicable international rule or organization (with the choice of organization serving as a proxy for the choice of rule, including the choice of procedure), then its ability to have its conduct regulated under environmental law instead of trade law can be seen as a simple exercise of power.

If we understand a particular international legal regime, such as for example the WTO, as the agent of the states party to that regime, and assuming for a moment perfect agency, we may ascribe the interests of the collective principals to the agent. Further assuming for a moment that other regimes have identical parties, and different mandates, we may understand the issue of fragmentation first as a bureaucratic problem of coordination among multiple mandates by the same principal, each represented by separate agents. The collective principal—the states party to the different legal regimes—can resolve this problem simply by determining how to prioritize its goals, albeit at some transaction costs.

So, under the assumption of identical parties, and perfect agency, fragmentation is best understood as a problem of bureaucratic coordination, or transaction costs. This does not mean that it is a simple problem, or that it lacks distributive consequences. The domestic example shows that it is both complex and contested. It is not surprising that there would be areas of overlap that either (i) are not anticipated, or (ii) are not deemed worthwhile to resolve, at the time that one or more of the regimes was created. In fact, if we understand the establishment of each regime as a kind of incomplete contract, and if we understand the interaction between the regimes as a part of this incompleteness, we can understand that there would be contention over how to “complete” the contract when an issue of overlap arises.

However, once we relax the assumption of perfect agency, we see that the bureaucratic politics of separate agents who may be in a competitive position will impose additional agency costs.

Fragmentation and its responses have welfare costs and benefits. Different organizations bring different types of expertise, and it may be that one organization’s expertise is more important in making a decision on a fragmented issue than another’s. Different states may have different degrees of influence in different areas of international law, or different organizations. Fragmentation can give rise to inter-organizational competition, which might be beneficial or might be detrimental, depending on the structure of the competition—essentially depending on whether one organization is able to advance its mission at a cost to another organization’s mission that exceeds its benefits. Fragmentation can give rise to flexibility that may be beneficial in responding to problems, but may do so at the cost of uncertainty both in advance of a dispute arising, and after a dispute arises.

Fragmentation in the sense of increasing numbers of rules can have important beneficial effects—there may be economies of scale and network externalities from the proliferation of international law. Although Daniel Drezner suggests that increasing congestion of international law, giving rise to increasing opportunities for the powerful to avoid compliance by virtue of forum shopping, demeans the force of international law, an opposite effect might arise and could be greater. The opposite effect arises from the expanded opportunities for barter and the

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10 Freeman & Rossi, *supra* note 6.
creation of opportunities to create efficiency-enhancing international law that would not otherwise be created, and the expanded possibilities for cross-issue retaliation that could create greater incentives to comply with, and therefore to create, international law.12

i) Informal Mechanisms

Of course, there are multiple institutional options for allocating jurisdiction among international legal rules or international organizations. The default option is simply to leave these organizations in a state of nature, and thereby to allow informal mechanisms to deal with fragmentation. Under these circumstances, where organizations exist, they would negotiate with one another regarding particular instances of conflict, and in addition negotiations would take place among constituent states, reaching varying degrees of resolution. This approach may be less than satisfactory, because the international organizations most likely would not have a mandate for compromise: they could discuss and coordinate, but they could not on their own provide exceptions from or modifications of their rules. If there were a mandate, or a motive, for compromise, it might be useful to devise systems for inter-organizational coordination, in order to limit conflicts and resolve as many as possible through more informal means.13 Where organizations do not exist, states would take the leading role.

ii) Judicial Response under Existing Vienna Convention Rules: Conflict

A second institutional option is simply to refer fragmentation disputes to dispute settlement under the general rules of public international law. These general rules of international law are specific enough to constitute “rules” along the rules versus standards continuum described below.14 However, these rules lack substantive content, and while they may be predictable enough in their application, they may result in outcomes that seem inefficient or otherwise normatively unattractive.

Consider the existing doctrinal response to fragmentation, as expressed in Article 41 (modification) of the Vienna Convention on the Law of Treaties (VCLT). In order to sharpen the discussion, I will address the application of Art. 41 in the context of the WTO and its relationship with other international treaties.

Art. 41 allows inter se modifications where they (i) are not prohibited by the multilateral treaty, (ii) do not “affect the enjoyment by the other parties of their rights under the treaty or the performance of their obligations” and (iii) do “not relate to a provision, derogation from which is incompatible with the effective execution of the object and purpose of the treaty as a whole.”

We must preliminarily recognize that any treaty is capable of contracting out of these rules of customary international law, so the policy question is whether it is useful to do so in any particular case, and furthermore, whether other generally applicable rules would be superior. In any specific existing context, such as that of the WTO, we must investigate whether the relevant treaty did contract out of the generally applicable international law rules. It appears that Articles IX and X of the WTO Charter, possibly combined with Article XVI:4, are best understood as

13 See Freeman & Rossi, supra note 6.
contracting out of any possible permission for *inter se* modification under Article 41 of the VCLT. These provisions do not explicitly prohibit *inter se* modification. But they seem intended to provide an exclusive and preemptive means of modification, and Article XVI:4 seems to provide a continuing obligation for a state to conform its laws, including arguably its international legal obligations, to its WTO obligations.

But even assuming that Article 41 of the VCLT applies, *inter se* modifications would only be permitted if they were not prohibited by the treaty. As discussed above, there is a strong argument that *inter se* modification or waiver is implicitly prohibited by the WTO treaty.

With respect to the last two conditions of Article 41—effects on third party rights and consistency with the object and purpose of the treaty—there are strong arguments that many of the kinds of *inter se* modifications we are likely to see would violate these conditions. We may even understand Articles IX and X of the WTO Charter—providing third party rights to approve waivers and amendments—as themselves violated by any *inter se* modifications or waivers. Importantly, as noted above, Article X:2 specifies that these provisions may only be amended by unanimous decision, making it clear that the member states of the WTO did not think it appropriate to avoid these provisions even by a majority. If the provisions for amendment and waiver cannot be amended by a subgroup, how can it be argued that there is room left for amendment or waiver to be effected by the means specified in Articles 41 and 58, respectively, of the Vienna Convention?

Furthermore, there are other third party rights and treaty purposes that would be prejudiced by *inter se* modification or waiver. First, the WTO Charter recites that its purposes include not just bilateral trade relations, but the increase in global standards of living, employment and demand. If states were to agree *inter se* to violate WTO law in a manner inconsistent with this goal, it would adversely affect the enjoyment by third parties of their rights. Second, economic analysis shows that import restraints in one country may have important trade effects in third countries. An example of a dispute of this nature is the *Semiconductor* case, where the European Communities complained about a U.S.-Japan voluntary restraint agreement. Article 3.5 of the DSU requires that any solutions to matters raised thereunder, even if consensual, must be consistent with the covered agreements. Third, the *Bananas* decision of the Appellate Body recognizes a broad scope of state interest in violations by other states of their obligations. Article 3.8 of the DSU similarly expresses broad scope of *prima facie* nullification or impairment arising from violation.

Some commentators suggest that WTO law is best understood as “reciprocal” as opposed to “integral,” and from this distinction draw important conclusions to the effect that WTO law can be modified by *inter se* agreements. The implication of this argument is that *inter se* environmental or human rights or other international law would always supervene WTO law. This position is not necessarily efficient or normatively attractive. Doctrinally, the reciprocal-integral distinction should be understood as merely a shorthand description of other features, and must defer to the more specific analysis of the Vienna Convention provided above, as well as to the exclusive provisions for amendment and waiver contained in Articles IX and X. So, neither

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16 JOOST PAUWELYN, CONFLICT OF NORMS IN PUBLIC INTERNATIONAL LAW: HOW WTO LAW RELATES TO OTHER NORMS OF INTERNATIONAL LAW (2003).
normative nor doctrinal consequences flow from the mere characterization of an agreement as reciprocal versus integral. Second, I have suggested why it is a mistake to characterize WTO law generally as “reciprocal.”

So, to conclude this argument about what happens in cases of conflict between WTO law and other international law, it seems quite incorrect to say that WTO law is generally trumped by international environmental, human rights or labor agreements.

Rather, in the general international legal system, we are stuck with the messy and often normatively incoherent rules of *lex posterior*, as reflected in Art. 30 of the Vienna Convention, and questions about how multilateral treaties may be modified by custom or by other multilateral treaties with different membership under Arts. 41 and 58 of the Vienna Convention. It is not easy to think of a general rule that would be superior to the Vienna Convention rules, but that does not mean that the Vienna Convention rules are satisfactory. The general rules may be modified by more specific rules, fashioned in response to particular contexts, as discussed further below.

iii) Judicial Response under Existing Vienna Convention Rules: Interpretation

Article 31.3(c) of the VCLT specifically instructs that interpreters shall “take into account . . . any relevant rules of international law applicable in the relations between the parties.” This provision itself has been interpreted in recent jurisprudence at the WTO.

In the *EC-Biotech* case, a WTO Panel determined that “Article 31(3)(c) should be interpreted to mandate consideration of rules of international law which are applicable in the relations between all parties to the treaty which is being interpreted.” Since the complainants (as well as many other WTO Members) had not ratified the Biosafety Protocol, the panel found that the language of Article 31.3(c) did not require it to take the Biosafety Protocol into account in the interpretation of the WTO treaty. Therefore, only those international legal rules to which all WTO Members are party, such as general customary international law or treaties that include all WTO Members, would be required to be taken into account. The panel thus limited the extent to which a WTO panel can take into account other international law, a position that was subsequently criticized in a report of the International Law Commission.

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18 Argentina and Canada had signed the Biosafety Protocol but not ratified it, while the United States had not signed it. Argentina and Canada had signed and ratified the underlying Convention on Biodiversity, while the United States had signed it but not ratified it.
19 See Study Group of the Int'l Law Comm'n, Fragmentation of International Law: Difficulties Arising from the Diversification and Expansion of International Law, U.N. Doc. A/CN.4/L.682, at 226-28 & 237-239 (Apr. 13, 2006) (finalized by Martti Koskenniemi) (“The panel buys what it calls the “consistency” of its interpretation of the WTO Treaty at the cost of the consistency of the multilateral treaty system as a whole. It aims to mitigate this consequence by accepting that other treaties may nevertheless be taken into account as facts elucidating the ordinary meaning of certain terms in the relevant WTO treaty. This is of course always possible and, as pointed out above, has been done in the past as well. However, taking “other treaties” into account as evidence of “ordinary meaning” appears a rather contrived way of preventing the “clinical isolation” as emphasized by the Appellate Body . . . A better solution is to permit reference to another treaty provided that the parties in dispute are also parties to that other treaty. In addition, it might also be useful to take into account the extent to which that other treaty relied upon can be said to have been “implicitly” accepted or at least tolerated by the other parties “in the sense
The Panel in the EC-Biotech case nonetheless left open the possibility that a panel would have discretion to take into account another international treaty where the parties to the dispute had each ratified that other treaty. In addition, it recognized that other rules of international law might inform the interpretation of WTO law as applied to a particular factual context, rather than as rules of law. The Appellate Body in the early U.S.-Gasoline report memorably wrote that the GATT “is not to be read in clinical isolation from public international law.” Similarly, in the U.S.-Shrimp-Turtle case, the Appellate Body referred to “modern conventions and declarations” in order to interpret the terms “exhaustible” and “natural resources” in Article XX(g) of GATT. The Appellate Body did not mention that it was doing so pursuant to Article 31.3(c) of the VCLT, but its decision clearly took into account other international law. The EC-Biotech Panel also maintained, although in a more circumscribed manner, that “other relevant rules of international law may in some cases aid a treaty interpreter in establishing, or confirming, the ordinary meaning of treaty terms in the specific context in which they are used. Such rules would not be considered because they are legal rules, but rather because they may provide evidence of the ordinary meaning of terms in the same way that dictionaries do.”

From a rationalist perspective, an international judicial body wishes to avoid conflict with other international bodies that could spur challenges to its legitimacy and authority. It thus has incentives to interpret and apply legal provisions in a way that accommodates conflicting provisions in another regime when it can, even while it explicitly writes that it is not doing so, especially in high-stakes disputes that generate significant publicity and possibly mass protests.

In this way, the WTO Appellate Body can limit the tension between the WTO and other regimes in a fragmented international law system and seek to limit political backlash against its decisions that touch on environmental, social, or other political issues, the potential of which is reinforced and signaled by such other regimes. From this perspective, WTO jurists may be persuaded by and internalize principles and norms from neighboring international law regimes, and incorporate those principles and norms into their reading and application of WTO texts. But there are significant limits on the extent to which an international judicial body can achieve accommodation, without seeming to exceed its mandate.

While it is clear that a limited mandate for the Appellate Body’s and panels’ jurisdiction accentuates fragmentation, it is also possible that states would prefer different types of dispute settlement mechanisms for different types of international law. Thus, the acceptance of this type that it can reasonably be considered to express the common intentions or understanding of all members as to the meaning of the . . . term concerned”.

Id., ¶ 7.72 (“it is important to note that the present case is not one in which relevant rules of international law are applicable in the relations between all parties to the dispute, but not between all WTO Members, and in which all parties to the dispute argue that a multilateral WTO agreement should be interpreted in the light of these other rules of international law. Therefore, we need not, and do not, take a position on whether in such a situation we would be entitled to take the relevant other rules of international law into account”).


See Teitel & Howse, supra note 7.
of fragmentation could be viewed as an acceptance of an institutional choice made by states: a choice to differentiate among different types of international law in terms of the available institutional infrastructure—to create a structural hierarchy among different types of international law.

iv) Implicit Legislative Response: Structural Subordination

Today, because of the relative softness of their law and the weakness of their dispute resolution, as well as the imbalance between adjudicative capacity and legislative capacity in the international system as a whole, the WTO’s competitors do not seem to be contesting strongly the WTO’s authority, at least in formal terms. Informally, and in the world of nongovernmental organizations and public opinion, of course, the WTO’s authority is strenuously debated. However, we might say that in the formal system, non-WTO law is “structurally subordinated” to WTO law: WTO law generally has greater mechanisms for dispute settlement and enforcement. A similar point might apply to investment tribunals under bilateral investment treaties.

Structural subordination is an implicit response to fragmentation. Yet as greater commitments are made in other areas, and international cooperation requires greater institutional infrastructure by way of adjudication and enforcement, this structural subordination will diminish. When it diminishes, it will leave greater problems of conflict to address. So in the future, we can expect more demand for conflict clauses and other more direct means by which to address conflict.

Another possible technique of structural subordination, and one with some foundation in existing international legal doctrine, is based on the conflict rule of *lex specialis*, which gives priority to the more specific rule. Assuming the operation of this rule, states could determine hierarchy through differential specificity. The problem is that specificity is a rather incoherent concept, because each competing legal rule would give an equally specific disposition of any particular case. So, a *lex specialis* rule depends on the ability of judges to distinguish between different levels of ex ante specificity, presumably by counting the number of words, or measuring the narrowness of the applicable rules. A second problem, and a circular one, is that states do not seem to use relative specificity as a technique by which to denote hierarchy, so this rule has little normative attraction.

v) Explicit Legislative Response: Allocating Authority Between International Legal Rules or Organizations

Another type of response to fragmentation is explicitly to legislate norms that address fragmentation—that reconcile different functional rules in specific circumstances. This can be done with greater or lesser specificity.

Recall the relationship between interstate conflict, as in the Malaysia-U.S. dispute, on the one hand, and inter-functional dispute as between trade law and environmental law, described at the beginning of this article. Although as discussed, horizontal conflict between international legal rules always replicates horizontal conflict between states, it is not the same for the United States and Malaysia to dispute jurisdiction over Malaysian shrimp trawlers as it is for the WTO and the UNEP to contend over the same thing, but these two types of contention have some
dynamics in common. Both sets of organizations, after all, represent people seeking to achieve certain trade and environmental goals, albeit at different vertical levels.

Of course, the allocative options are somewhat different from those in the case of interstate conflict. For example, in the context of functional, as opposed to regional, international organizations, there is no “territoriality.” Furthermore, an analysis of “effects” would be somewhat different from that anticipated in the interstate setting. However, as with states, we might evaluate effects in terms of the impairment or facilitation of the entity’s ability to achieve the preferences sought to be achieved (by people) through that entity: of its mission. In private international law, Baxter developed the “comparative impairment” test for determining choice of law: apply the law of the territory whose policy would be impaired the most by failure to apply its law. We may imagine a similar test in the context of allocation of authority between international legal rules or organizations: in the case of conflict, apply the rule the disapplication of which would cause the greatest harm.

We might also postulate that recognition could be applied in inter-organizational allocation: one organization may recognize a norm or status developed by another, within the other’s field of greater expertise or dominance. The GATT-WTO system has informally deferred on occasion to the International Labor Organization and to the World Health Organization, and has relationships of limited formal deference to the IMF. The WTO Agreement on the Application of Sanitary and Phytosanitary Measures specifically allocates a measure of jurisdiction to Codex Alimentarius, the International Office of Epizootics, and the International Plant Protection Convention. These are more subtle and variegated mechanisms than across-the-board deference or across-the-board ignorance.

In this context, constitutionalization can be seen as a way of introducing hierarchy and order, or at least a set of coordinating mechanisms, into a chaotic system otherwise marked by proliferating institutions and norms. Hierarchically superior norms and coordinating mechanisms can manage or resolve legal conflicts and thereby produce greater predictability and certainty for actors subject to the rules.

vi) Explicit Legislative Response II: Specific Rules versus General Standards

Of course, a concept of “comparative impairment,” such as that discussed above, is not self-executing. Baxter developed it for application by courts. Alternatively, it could be a guide to legislative or treaty-making action, which would solve the problem of determining the value of the interests at stake by simply having legislators or treaty-writers use it as guidance to decide which policy is to have priority.

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29 See RULING THE WORLD: CONSTITUTIONALISM, INTERNATIONAL LAW, AND GLOBAL GOVERNANCE (Jeffrey L. Dunoff & Joel P. Trachtman, eds. 2009).
Perhaps the most direct type of response to fragmentation is to specifically agree to conflict clauses addressing the hierarchy among international legal rules. For example, if states wish to make an arrangement permitting, definitively, compliance with the Montreal Protocol on Transboundary Movement of Hazardous Waste, even where such compliance may violate WTO law, the most effective way to do so is to include in WTO law a specific reference to, and exception for, compliance with the Montreal Protocol. The effect of such an amendment would be to establish a particular kind of response to fragmentation claims: one of integration of the relevant environmental norms with the relevant trade norms. The North American Free Trade Agreement’s (NAFTA) provision stating that certain multilateral environmental agreements trump NAFTA’s norms provides a precedent for a specific “carveout” or “conflict clause.”

When negotiators agree to conflict clauses, or even to exceptional clauses, they have a choice of how specific to make the clause. By making the clause perfectly specific, they determine in advance all cases of conflict between different rules. By making the clause imperfectly specific, they implicitly defer to later informal processes or possibly to later adjudication. In the case of adjudication, the degree of generality of the clause may be understood as setting the terms of an implicit delegation of decision-making authority to courts. How would we expect negotiators to determine how specific to make the conflict clause or exception?

In the rules versus standards literature, a law is a “rule” to the extent that it is specified in advance of the conduct to which it is applied. Thus, a law against littering is a rule to the extent that “littering” is well-defined. Must there be an intent not to pick up the discarded item; are organic or readily bio-degradable substances covered; is littering on private property covered; is the distribution of leaflets by air covered? Any lawyer knows that there are always questions to ask, so that every law is incompletely specified in advance, and therefore incompletely a rule.

A standard, on the other hand, is a law that is farther toward the other end of the spectrum, in relative terms. It establishes general guidance to both the person governed and the person charged with applying the law, but does not specify in detail in advance the conduct required or proscribed. Incompleteness of specification may not simply be a result of conservation of resources. It may be a more explicitly political decision to either agree to disagree for the moment, to avoid the political price that may arise from immediate hard decisions, or to cloak the hard decisions in the false inevitability of judicial interpretation. It is important also to recognize that the incompleteness of specification may represent a failure to decide how the policy expressed relates to other policies. This is critical in the trade area, where often the incompleteness of a trade rule relates to its failure to address, or incorporate, non-trade policies.

Rules are more expensive to develop than standards, ex ante, because rules entail specification costs, including drafting costs and negotiation costs, as well as the strategic costs.

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involved in *ex ante* specification. In order to reach agreement on specification— in order to legislate specifically—there may be greater costs in public choice terms.\(^{32}\)

Rules are generally thought to provide greater predictability. There are two moments at which to consider predictability. First, is the ability of persons subject to the law to be able to plan and conform their conduct *ex ante*, sometimes known as “primary predictability”.\(^{33}\) The second moment in which predictability is important is *ex post*, after the relevant conduct has taken place. Where the parties can predict the outcome of dispute resolution—where they can predict the tribunal’s determination of their respective rights and duties— they will spend less money on litigation. This type of predictability is “secondary predictability.” Both types of predictability can reduce costs. While rules appear to provide primary and secondary predictability, tribunals may construct exceptions in order to do what is, by their lights, substantial justice, and thereby reduce predictability. It may be difficult to constrain the ability of tribunals to do this. Furthermore, as noted below, game theory predicts that some degree of uncertainty—of unpredictability—may enhance the ability of the parties to bargain to a lower cost solution. Thus, simple predictability is not the only measure of a legal norm; rather, we must also be concerned with the ability of the legal norm to provide satisfactory outcomes. In economic terms, we must be concerned with the allocative efficiency of the outcome. We consider allocative efficiency below as we consider the institutional dimension of rules and standards.

As we consider the relative allocative efficiency of potential outcomes, we must recognize that there is a temporal distinction between rules and standards. Standards may be used earlier in the development of a field of law, before sufficient experience to form a basis for more complete specification is acquired. In many areas of law, courts develop a jurisprudence that forms the basis for codification— or even rejection— by legislatures. With this in mind, legislatures may set standards at an early point in time, and determine to establish rules at a later point in time.\(^{34}\)

Kaplow points out that where instances of the relevant behavior are more frequent, economies of scale will indicate that rules become relatively more efficient. For circumstances that arise only infrequently, it is more difficult to justify promulgation of specific rules. In addition, rules provide compliance benefits: they are cheaper to obey, because the cost of determining the required behavior is lower. Rules are also cheaper to apply by a court: the court must only determine the facts and compare them to the rule.

Another distinction between rules and standards, often de-emphasized in this literature, is the institutional distinction: with rules, the legislature often “makes” the decision, while with standards, the adjudicator determines the application of the standard, thereby “making” the decision. Again, it is obvious that these terms are used in a relative sense (this caveat will not be repeated). Economists and even lawyer-economists seem to assume that the tribunal simply “finds” the law, and does not make it. Of course, courts can make rules pursuant to statutory or


constitutional authority: the hallmark of a rule is that it is specified \textit{ex ante}, not that it is specified by a legislature. However, at least in the international trade system, rules are largely made by treaty, and standards are largely applied by tribunals.

But the difference between legislators and courts is an important one, and may affect the outcome.\textsuperscript{35} The choice of legislators or courts to make particular decisions should be made using cost-benefit analysis. Such a cost-benefit analysis would include, as a critical factor, the degree of representativeness of constituents: which institution will most accurately reflect citizens' desires? There are good reasons why such cost-benefit analysis does not always select legislatures. First, there is a public choice critique of legislatures. Second, even under a public interest analysis, legislatures may not be efficient at specifying \textit{ex ante} all of the details of treatment of particular cases. Third, the rate of change of circumstances over time may favor the ability of courts to adjust. Finally, we must analyze the strategic relationship between legislators and courts. Thus, in order fully to understand the relationship between rules and standards, the tools of public choice or positive political theory\textsuperscript{36} should be brought to bear to analyze the relationship between legislative and judicial decision-making.

It is not possible to consider the costs and benefits of rules and standards separately from the strategic considerations that would cause states to select a rule as opposed to a standard. Johnston analyzes rules and standards from a strategic perspective, finding that, under a standard, bargaining may yield immediate efficient agreement, whereas under a rule, this condition may not obtain.\textsuperscript{37} Johnston considers a rule a “definite, \textit{ex ante} entitlement” and a standard a “contingent, \textit{ex post} entitlement.” Like Kaplow, he does not here consider the source of the rule, whether legislature or tribunal.

Johnston notes the “standard supposition in the law and economics literature . . . that private bargaining between [two parties] over the allocation of [a] legal entitlement . . . is most likely to be efficient if the entitlement is clearly defined and assigned \textit{ex ante} according to a rule, rather than made contingent upon a judge’s \textit{ex post} balancing of relative value and harm.”\textsuperscript{38} Johnston suggests this supposition may be incorrect: \textsuperscript{39} “[w]hen the parties bargain over the entitlement when there is private information about value and harm, bargaining may be more efficient under a blurry balancing test than under a certain rule.”\textsuperscript{40} This is because under a certain rule, the holder of the entitlement will have incentives to “hold out” and decline to provide information about the value to him of the entitlement. Under a standard, where presumably it cannot be known with certainty \textit{ex ante} who owns the entitlement, the person not possessing the entitlement may credibly threaten to take it, providing incentives for the other person to bargain. Johnston points out that this result obtains only when the \textit{ex post} balancing test is imperfect, because if the balancing were perfect, the threat would not be credible. This provides a counter-

\begin{itemize}
  \item \textsuperscript{35} See \textsc{Neil Komesar}, \textsc{Imperfect Alternatives} (1994).
  \item \textsuperscript{36} See, e.g., John Ferejohn \& Barry Weingast, \textsc{A Positive Theory of Statutory Interpretation}, \textsc{12 Int’l Rev. L. \& Econ.} 263 (1992).
  \item \textsuperscript{37} Jason Scott Johnston, \textsc{Bargaining under Rules versus Standards}, \textsc{11 J. L. Econ. \& Org.} 256 (1995).
  \item \textsuperscript{38} Id. (citations omitted).
  \item \textsuperscript{39} See also \textsc{Carol Rose}, \textsc{Crystals and Mud in Property Law}, \textsc{40 Stan. L. Rev.} 577 (1988); Joel P. Trachtman, \textsc{Externalities and Extraterritoriality}, in \textsc{Jagdeep Bhandari \& Alan O. Sykes, Economic Dimensions of International Law} (1998).
  \item \textsuperscript{40} Johnston, \textsc{supra} note 37, at 257.
\end{itemize}
intuitive argument for inaccuracy of application of standards.\textsuperscript{41} Interestingly, further research as to the magnitude of strategic costs under rules and under standards might suggest that over time, rules provide some of the strategic benefits of standards. This might be so if tribunals develop exceptions to rules in a way that introduces uncertainty to their application. This increased benefit would of course be countervailed to some extent by the reduction of predictability that the development of exceptions would entail.

It is easy to see a standard as a way to complete incomplete contracts, ex ante, in a way that can under particular circumstances minimize costs of contracting. Product market conditions faced by such sellers in their markets.

Horn, Maggi and Staiger examine the GATT, finding that it includes an interesting combination of “rigidity, in the sense that contractual obligations are largely insensitive to changes in economic (and political) conditions, and discretion, in the sense that governments have substantial leeway in the setting of many policies.\textsuperscript{42} They observe that “there is a wide array of policy instruments—border measures and especially ‘domestic’ measures—that should be constrained to keep in check each government’s incentives to act opportunistically.”\textsuperscript{43}

Under significant uncertainty as to the future state of affairs, states would wish to establish complex state-contingent contracts. For example, the magnitudes of (i) the benefits of environmental protection, and (ii) the benefits of unimpeded free trade in particular products that may violate environmental rules, are uncertain. However, contracting is costly, limiting the ability to specify state-contingencies. On the other hand, by specifying general “standards,” and delegating to dispute settlement bodies the responsibility to apply these standards, states are able to include complex state-contingency in their contracts, with significantly less variable contracting costs.

5. Defragmentation: Linkage and Synergy

Part 4 has discussed the methods available to states by which to respond to fragmentation. This section evaluates some of the possible normative consequences of fragmentation and linkage. Issues of linkage exist as a factual matter, regardless of our institutional response. If we must rely only on existing single-issue institutions, then the scope of our institutional choice—of our available responses to international problems—will be constrained. It is therefore useful, as an exercise in institutional imagination, to explore the establishment of other institutional devices. To the extent there is a community of interests, there will be reasons to consider what institutional devices may improve the ability of states to realize joint gains.

a. Compliance Enhancements

Furthermore, formal or informal linkage among different rules may promote compliance with any particular rule. International cooperation in different sectors may be mutually supportive, and there may be a kind of network effect that makes each additional instance of cooperation more attractive than it would be absent existing instances. This game-theoretic

\textsuperscript{41} Id. at 272.
\textsuperscript{42} Henrik Horn, Giovanni Maggi, & Robert Staiger, Trade Agreements as Endogenously Incomplete Contracts, 100:1 AMERICAN ECONOMIC REVIEW 394-419, 406 (2010).
\textsuperscript{43} Id. at 394.
perspective provides support for the early neofunctionalist hypotheses regarding international economic integration and suggests the potential value of cooperation “for its own sake” or in order to facilitate further cooperation.  

In game theory studies of cooperation over time, one of the critical factors that can cause cooperation is “the shadow of the future.” The shadow of the future refers to the possibility that non-cooperation today will produce retaliation in the future. The power of the shadow of the future is affected by the degree of linkage among issues, and the frequency and magnitude of future opportunities for retaliation. The frequency may be increased—and its power thereby magnified—by expanding the scope of issues that are linked to one another. Thus, for example, if the game is not the narrower game of prescriptive jurisdiction in antitrust, but the broader game of prescriptive jurisdiction more generally, or the even broader game of international law compliance, the play is repeated more frequently, allowing greater opportunities for retaliation and greater incentives for compliance.

One of the assumptions underlying the prisoner’s dilemma is that the game is self-contained. Casual observation of international society suggests that there are many linkages, however, with the result that few issues can be isolated. Players can bind one another in a variety of ways, including by linking the present game to other games in a “supergame.”

Firms—and states—operate in multiple markets and encounter other firms, or states, in multiple contexts: as competitor here, as supplier there, as coconspirator elsewhere. Industrial organization economists studying the effect of multimarket contact have found that this cross-sectoral activity may support cooperation. For example, Giancarlo Spagnolo has noted that in the case of multimarket contact, cooperation “can be viable in a set of markets even when in the absence of multimarket contact it could not be supported in any of these markets.”

One important difference between the commercial context and the international relations context is that state relations in the international context almost always cross a number of

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48 Spagnolo, supra note 47, at 128.
sectors. States relate to one another in a variety of contexts, with varying roles in each context. In one context, a particular state may be concerned about the scope of its prescriptive jurisdiction, whereas in another context it may be concerned about the scope of its responsibilities to protect foreign diplomats. As a result, while there may be a “carbon reduction game” that is separate from the “trade liberalization game,” these games can be linked. In fact, states regularly link issues in international relations, with the result that it is not possible to establish precise boundaries for any particular game.

Defection in one area may therefore have consequences in another, with the possibility of cross-sectoral punishment. Thus, it is not enough to examine whether states have sufficient incentives for compliance within a particular sector or arrangement; one must also analyze the effect of activity in other sectors. Matsushima argues that multimarket contact can take the place of perfect information as a basis for a stable equilibrium of implicit cooperation. He shows that with multimarket contact, cooperation can take place even under circumstances of relatively high discount factors.

In their study of the behavior of medieval merchants, Milgrom, North, and Weingast, explain that “if the relationship itself is a valuable asset that a party could lose by dishonest behavior, then the relationship serves as a bond.” Thus the shadow of the future effect is intensified by multimarket contact and perfect information. The broader this effect, the greater the likelihood that individual states will respect particular rules. The greater the likelihood of compliance, in turn, the greater the likelihood that states will use international law to achieve goals that are important to them. The result is a benevolent cycle of more international law producing greater compliance with individual rules which in turn induces the creation of more international law.

This discussion suggests that international cooperation in different sectors may be mutually supportive, and that there may be a kind of network effect that makes each additional instance of cooperation more attractive than it would be absent existing instances. This game-theoretic perspective provides support for the early neofunctionalist hypotheses regarding international economic integration.

b. Synergetic Bargains

Considering again the domestic political framework for entering into and complying with international law, there is the intriguing possibility that two efficient policy changes that do not

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50 Matsushima, supra note 47, at 164–65.
have the political support to be effected alone, may be viable together under linkage. This is similar to what is believed to have happened within the trade field, where mercantilism balances mercantilism. Indeed, now that wealthy states have few tariff barriers or explicit barriers to trade in services, while developing states still have substantial tariff barriers and barriers to trade in services, the outlines of a “grand bargain” between migration and trade toward a virtuous cycle of efficiency may be identified: wealthy states allow greater immigration of skilled and unskilled workers, perhaps also agreeing to enforce a Bhagwati tax, while poor states reduce tariffs and barriers to investment and high value-added services.

We might make a similar suggestion in the case of intellectual property and the linkage of the TRIPS Agreement to liberalization in agriculture and textiles in what has come to be called the “grand bargain” that concluded the 1994 Uruguay Round. Assuming for a moment that some states might have incentives to apply a globally inefficiently low level of intellectual property protection, it was not possible to induce them to increase their intellectual property protection by offering incentives within the intellectual property field. But by offering them incentives in liberalization of trade, it was possible to cause them to move to more efficient intellectual property laws, while causing their counterparties to move to more efficient liberalization in agriculture and textiles. While it is technically possible for these types of bargains to be perverse instead of benevolent, and while the TRIPS (and perhaps this bargain seen as a whole) has perversely reduced welfare in poor countries, the choice between welfare gains and welfare losses would be expected to be made more often in the correct direction, barring unaccountable governments and bargaining problems in the international setting.

c. Broader Economies of Scale and Scope

Broader organizations may offer economies of scale and scope. On the other hand, broader organizations could reduce the domain of interorganizational competition. A Ronald Coase or Herbert Simon perspective recognizes the essential fungibility between internal organizational arrangements and contractual arrangements in a market. In the present context, this means that it does not necessarily matter whether functions are separated in function-specific international organizations or are integrated within a single organization, such as the United Nations or perhaps the WTO. Within a single organization, the critical question will be how these different concerns or functions are integrated. We live in a world of path dependence: given that the WTO exists, and no World Environmental Organization yet exists, there may be actions, such as adding functional environmental responsibility to the WTO, that make sense today yet would not make sense were the starting point different. Aaditya Mattoo and Arvind Subramanian have recently suggested that certain obligations under the IMF Articles of Agreement be subjected to dispute settlement under the WTO.

Negotiations in the WTO context may provide an advantage over negotiations in a multilateral environmental agreement, in UNEP, in the ILO, or in another functional context: the greater possibility of linked package deals. While institutional linkages may be made between

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discrete functional organizations, under some circumstances doing so within a single organization may enhance administration and legitimacy.56 The WTO already contains much scope for package deals: for side payments. “With all side payments prohibited, there is no assurance that collective action will be taken in the most productive way.”57 However, it is worth noting that the WTO system, with its effective requirements of unanimity for amendment, results in greater requirements for “package deals” than a system that relies on majority voting for new “legislative” rules.

Surely, it is appropriate at least in some circumstances for international organizations to be subjected to competitive pressure,58 but international organizations must also cooperate with one another in appropriate circumstances. Moreover, international organizations exist in a context of both horizontal and vertical competition. That is, international organizations like the European Union compete for political or regulatory authority not only with organizations like the North Atlantic Treaty Organization, the Basle Committee on Banking Regulation, or the WTO, but also with their member states. The European Union also cooperates with these other organizations in various ways. In aspirational theoretical terms, this competition and cooperation constitute a search for the optimal jurisdictional area: what vertical and horizontal governance satisfies the constituents’ preferences most?59

d. Competition Among Legal Rules and Organizations

As suggested above, in order to allow regulatory competition to develop a stable and efficient equilibrium, it is, inter alia, necessary to develop a structure that can reduce interjurisdictional externalities. In the interstate setting, we think of a “hegemon” or a central government that can intervene as necessary to require the internalization of externalities. What structure would play this role in interorganizational competition? Perhaps the United Nations, or perhaps the International Court of Justice (ICJ), if granted appropriate jurisdiction, could fulfill this role. In order to induce states to provide the United Nations or the ICJ with this power, it would be necessary to convince states that they would individually benefit. It would take a “constitutional moment” to do so. It appears that such a constitutional moment would require greater historical experience of the need for this role to be fulfilled than exists today. Some facets of the United Nations, including the role of the Security Council and Article 103 of the United Nations Charter, suggest that it plays a partial role as “superior” international organization.

e. Redistributive Linkage: Embedded Liberalism

In the “embedded liberalism” sense explained by Karl Polanyi and John Ruggie,\textsuperscript{60} liberalization has distributive effects that make it necessary, in order for liberalization to be sustained, to effect redistributive regulation. This may be seen as a special type of linkage—in effect a particular case of the idea that in international society, agreement on a matter may have differential distributive effects, and require some side payment in order to be accepted. Under this concept, mechanisms for redistribution through regulation are a price to be paid to those who would otherwise lose from liberalization, in order to ensure the continuity of the benefits of liberalization. The WTO is both a result and a cause of greater global interdependence, and of the development of global society. To avoid disruption of this global society, by démarches in trade, economic catastrophes or violent upheavals in member states, or terrorism, it is morally and politically necessary to develop mechanisms to enhance the position of the poor.\textsuperscript{61}

Conclusion: The Future of Fragmentation

With the increasing scope and density of international law, we will observe increasing instances of fragmentation. Fragmentation is not necessarily a problem, insofar as there may be no need for coordination among different legal regimes. But where it does raise issues of conflict, or presents opportunities for synergy, it is useful to inquire whether fragmentation might be managed in a way that would reduce inefficient conflict, or harvest synergies. The existing formal system for management, provided in the VCLT, is quite limited in its response, and the outcomes that it produces would not necessarily be substantively satisfactory. This article has reviewed a number of types of responses that states might determine to use, in order to increase coherence. States can establish informal coordination mechanisms, and perhaps provide a mandate to international organizations to coordinate with one another. They can establish enforcement institutions for one regime that effectively structurally subordinates the law included in another regime. They can establish specific rules or general standards for the relationship between different rules. These rules or standards can constitute varying degrees of delegation to courts that may be established to address these issues.

Importantly, the growing congestion of international law, and the relation of different international legal rules to one another, provides some opportunities for synergy. Different rules of international law may be linked with one another in order to facilitate the making of law, and in order to improve the enforcement of law. There may be economies of scale and scope that can be harvested by appropriate linkages between rules and organizations. It is possible to construct beneficial competition among international legal rules or organizations. Finally, different regimes may be linked in order to use one regime to compensate those harmed by another.
