

Fisheries Conservation in an Anarchical System: A Comparison of Rational Choice and Constructivist Perspectives

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INTRODUCTION

Environmental protection and resource conservation and management in areas beyond state jurisdiction pose particularly difficult problems for international law. While it is theoretically possible to create a comprehensive web of law and policy applicable to the high seas, this requires a degree of cooperation among international actors that has thus far proven elusive. More difficult still is implementation and enforcement of legal rules on the high seas. Significant efforts are being made to develop international law and policy for the conservation and management of high seas fisheries resources, yet despite the collapse of a number of high seas fisheries and widespread acknowledgement that the long-term sustainability of these resources is in serious jeopardy,¹ international regulatory efforts remain inadequate. The anarchical structure of international society and the resulting decentralised nature of international law are often viewed as serious obstacles to accomplishing goals such as sustainable high seas fisheries, but these are fundamental features of the landscape to which we must adapt.. Recent developments in high seas fisheries law indicate that such adaptations are possible.

In this paper, I will explore international law's response to illegal, unreported and unregulated (IUU) fishing on the high seas, paying particular attention to non-flag state enforcement of regional and international fisheries law. Current developments in high seas fisheries law involve the placing of limits on two venerable principles of the law of the sea, namely the freedom of states to fish on the high seas,² and the jurisdiction of flag states over their vessels which, while not exclusive, suffers few exceptions.³ These two principles contribute to the structure of high seas fisheries as an open-access common property resource (open-access CPR), a category of resources which are notoriously difficult to conserve and manage. Certain states, along with international organisations such as the United Nations Food and Agricultural Organization (FAO), have introduced a number of innovations into high seas fisheries

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¹ See *infra* at 3.

² See discussion *infra* at 6.

³ See discussion *infra* at 9.

law that have the effect of gradually altering the open-access CPR structure of high seas fisheries, moving this resource closer to the category of club goods, which implies limitations on access to resources to members of a 'club'.⁴ Elizabeth DeSombre describes the advantages presented by the club goods structure as follows:

The main advantage that club goods have over public goods or common-pool resources for the creation of cooperative agreements is the element of exclusion. It is the possibility of free riding – actors gaining the benefits of an agreement without fully participating – that is seen as the main cause of the underprovision of collective goods. Club goods, by allowing those who do not cooperate to be kept from the benefits of the cooperative arrangement, increase the likelihood that those who would benefit from access to the advantages of the club can be persuaded to join the cooperative effort.⁵

In the case of high seas fisheries, attempts have been made to restrict access to fisheries to the vessels of states that are either members of the regional fisheries management organisation (RFMO) responsible for governance or that cooperate with the relevant RFMO and respect its rules.⁶ Members of RFMOs are bound by a series of rules and measures, both substantive and procedural, aimed at conservation and management of fish stocks and at implementation of and compliance with those rules and measures. As we will see, many states and regional organisations are experimenting with various ways of imposing penalties and disincentives on states and fishing vessels that choose to remain outside these clubs.

In this article, the shift from open-access CPR to club good is analysed from the perspective of two very different theoretical frameworks: constructivism and rational choice. Constructivists consider legal rules and systems to be constituted by shared understandings developed through iterative processes of interaction. Legal rules are not regarded as commands backed by sanctions, but rather as crystallisations of shared understandings that affect the way in which actors perceive a problem, the range of possible solutions, and their own interests and priorities.⁷ Rational choice, on

⁴ See Elizabeth DeSombre, "Fishing under Flags of Convenience: Using Market Power to Increase Participation in International Regulation" (2005) 5 *Global Environmental Politics* 73 at 88 ff.; DeSombre, *Flagging Standards: Globalization and Environmental, Safety, and Labor Regulations at Sea* (Cambridge, Mass.: MIT Press, 2006), Chapter 3.

⁵ DeSombre, *Flagging Standards*, *ibid.* at 60.

⁶ Agreement for the Implementation of the Provisions of the Convention relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks. 4 December 1995, 34 I.L.M. 1542, entered into force 2001 [FSA], art. 17.

⁷ Among the most influential constructivist works in international law and international relations are Jutta Brunnée & Stephen Toope, "International Law and Constructivism: Elements of an Interactional Theory of International Law" (2000) 39 *Columbia Journal of Transnational Law* 19; John Gerard Ruggie, "What Makes the World Hang Together? Neo-Utilitarianism and the Social Constructivist Challenge" (1998) 52 *International Organization* 855; John R. Searle, *The Construction of Social Reality* (New York: Free Press, 1995); Nicholas Greenwood Onuf, *World of Our Making: Rules and Rule in Social Theory and International Relations* (Columbia, S.C.:

the other hand, begins with the assumption that actors' behaviour can be understood in light of their preferences;⁸ changes in behaviour can be brought about through changes to incentives structures.⁹ In this paper I will move back and forth between constructivism and rational choice, considering the respective contributions of each to a better understanding of high seas fisheries and attempts to govern exploitation of this resource. I will at the same time consider how each theoretical approach can respond to the challenges put to it by the other.

HIGH SEAS FISHERIES – PROBLEMS OF GOVERNANCE

IUU fishing and its impact

Overexploitation of high seas fisheries is an immense and growing problem. The FAO estimates that

in 2005, as in recent years, around one-quarter of the stock groups monitored by FAO were underexploited or moderately exploited and could perhaps produce more, whereas about half of the stocks were fully exploited and therefore producing catches that were at, or close to, their maximum sustainable limits, with no room for further expansion. The remaining stocks were either overexploited, depleted or recovering from depletion and thus were yielding less than their maximum potential owing to excess fishing pressure.¹⁰

A recent study concludes that collapse of fisheries is accelerating, and “projects the global collapse of all taxa currently fished by the mid–21st century.”¹¹ The economic value of fisheries is enormous, with total world trade in fish and fisheries products

University of South Carolina Press, 1989); Nicholas Greenwood Onuf, “Constructivism: A User's Manual” in Vendulka Kubáľková, Nicholas Onuf & Paul Kowert eds., *International Relations in a Constructed World* (Armonk, N.Y.: Sharpe, 1998) at 58.

⁸ For particularly pithy, accessible and informative sources on the debates between constructivists and rational choice theorists, see James Fearon et al., “Rationalism v. Constructivism: A Skeptical View” in *Handbook of International Relations* (London: Sage, 2002) at 52; Duncan Snidal et al., “Rational Choice and International Relations” in *Handbook of International Relations* (London: Sage, 2002) at 73; Emanuel Adler et al., “Constructivism and International Relations” in *Handbook of International Relations* (London: Sage, 2002) at 95.

⁹ George W. Downs, David M. Rocke & Peter N. Barsoom, “Is the Good News about Compliance Good News about Cooperation?” (1996) 50 *International Organization* 379; George W. Downs, “Enforcement and the Evolution of Cooperation” (1998) 19 *Michigan Journal of International Law* 319; George W. Downs, Kyle W. Danish & Peter N. Barsoom, “The Transformational Model of International Regime Design: Triumph of Hope or Experience?” (2000) 38 *Columbia Journal of Transnational Law* 465; George W. Downs & Michael A. Jones, “Reputation, Compliance, and International Law” (2002) 31 *Journal of Legal Studies* S95.

¹⁰ Food and Agricultural Organization of the United Nations, “World Review of Fisheries and Aquaculture” in *The State of World Fisheries and Aquaculture 2006* (Rome, 2007) at 7.

¹¹ Boris Worm et al., “Impacts of Biodiversity Loss on Ocean Ecosystem Services” (2006) 314 *Science* 787 at 788, 790.

reaching an export value of US\$71.5 billion in 2004, which represents a 17.3% increase during the period 2000-04.¹²

The impact of IUU fishing on fish populations, and on the ability of interested states to manage those fisheries, can be devastating. In the Southern Ocean, it is estimated that IUU fishing for *Dissostichus* spp., better known as Patagonian toothfish or Chilean sea bass, reached 3,080 tonnes in the 2005-6 season, while the total allowable catch for the same period was 4,566 tonnes.¹³ Another fishery greatly affected by IUU fishing is the Mediterranean tuna fishery, with IUU fishing accounting for over 50% of the catch.¹⁴

A large and growing network of conventions, codes of conduct and plans of action exists to manage high seas fishing,¹⁵ but these efforts risk being compromised or even undermined by fishing in violation of applicable rules or by vessels flagged to states that are not parties to the relevant conventions, which are different aspects of the phenomenon of IUU fishing.

High seas fisheries as an open-access CPR

Mention has already been made of the challenges for resource conservation and management posed by the open-access CPR structure of high seas fisheries. Open-access CPRs are defined in light of two criteria: they are rival, meaning that harvesting of a resource by one actor leaves less of that resource for other actors; and they are non-excludable, meaning that anyone who wants to exploit these resources may do so.¹⁶

¹² "World Review of Fisheries", *supra* note 10 at 7.

¹³ Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR), Conservation Measures 41-02, -03 and -04 (2005).

¹⁴ Marine Resource Assessment Group Ltd., *IUU Fishing on the High Seas: Impacts on Ecosystems and Future Science Needs – Final Report* (London, 2005) at 14.

¹⁵ The central instruments are the FSA, *supra* note 6; the Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas [Compliance Agreement], 29 November 1993, entered into force 24 April 2003; and two non-binding instruments, the United Nations Food and Agricultural Organization (FAO), International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing [International Plan of Action], 2 March 2001, available online at <<http://www.fao.org/DOCREP/003/y1224e/y1224e00.HTM>> (consulted 23 April 2007) and the FAO Code of Conduct for Responsible Fisheries (Rome, 1995).

¹⁶ J. Samuel Barkin and George E. Shambaugh, "Hypotheses on the International Politics of Common Pool Resources" in Barkin and Shambaugh, eds., *Anarchy and the Environment: The International Relations of Common Pool Resources* (Albany: State University of New York Press, 1999) 1 at 3 ff; DeSombre, *Flagging Standards*, *supra* note 4 at 56 ff.

Table 1: Types of goods

		Excludable	
		Yes	No
Rival	Yes	Private goods (e.g.: a fishing vessel)	Common pool resources (e.g.: high seas fisheries)
	No	Club goods (e.g.: a toll highway)	Public goods (e.g.: public radio)

(Adapted from DeSombre, Flagging Standards at 57)

High seas fisheries resources are constructed as open-access CPRs in part because of geographic and physical features of the resources: their scarcity, their mobility, their location at some distance from land, etc. But the legal regime applicable to the oceans, and to fisheries resources more particularly, also plays a vital role in the way we understand this resource. This legal regime is shaped, first and foremost, by the decentralised structure of international law, and second by three fundamental principles within the law of the sea: the rule against *pacta tertiis*, or treaties binding third parties;¹⁷ freedom of the high seas, including freedom to fish;¹⁸ and flag state jurisdiction.¹⁹ None of these principles is absolute and, as I will seek to demonstrate, important limitations on the last two principles are gradually gaining acceptance.

Excludability refers to the possibility of limiting access to the resource to certain actors. Because fish move back and forth across the jurisdictional boundaries that are created for the regulation of ocean spaces, they are non-excludable by nature. This remains true regardless of where boundaries are fixed; indeed, it would be the case even if all ocean spaces were under state jurisdiction. Nevertheless, jurisdictional rules create important distinctions among ocean fisheries, the most important being that between the jurisdictional waters of states (internal waters, the territorial sea, and the exclusive economic zone (EEZ)) and the high seas. From the international point of view, fisheries resources in jurisdictional waters may be roughly assimilated to private

¹⁷ This is a fundamental principle of international law, flowing from the sovereignty of states. It has been codified in the Vienna Convention on the Law of Treaties, 23 May 1969, entered into force 27 January 1980, 1155 UNTS 331, 21 I.L.M. 1261 (1982), at art. 34. See Eric Franckx, "Pacta Tertiis and the Agreement for the Implementation of the Straddling and Highly Migratory Fish Stocks Provisions of the United Nations Convention on the Law of the Sea" (2000) 8 Tulane Journal of International and Comparative Law 49.

¹⁸ United Nations Convention on the Law of the Sea, 10 December 1982, entered into force 16 November 1994, 1833 U.N.T.S. 3, 21 I.L.M. 126 [LOSC], art. 87(e).

¹⁹ Ibid. at art. 92.

property²⁰ exclusive to coastal states, which may authorize the vessels of other states to exploit this resource but to which no right of access by such vessels obtains.²¹

High seas fisheries, on the other hand, are subject to the high seas freedom to fish.²² Public international law describes the high seas as *res communis*: no state can assert jurisdiction over these areas, and no state can be excluded from them, so access to this area and its resources is open to the vessels of all states.²³ States are bound, through customary and conventional law, to respect certain conditions in exercising high seas freedoms,²⁴ but they have access and exploitation rights.

One of the main features of international law as a decentralised system is that rules must be adopted through horizontal processes. In the absence of a central legislator with the authority to impose rules, states must consent to be bound; hence the rule against *pacta tertiis*. This rule must be qualified in various ways. First, while states may be formally free to consent or not to be bound by rules of international law, there are myriad forces – political, economic, social – that operate to constrain that choice. One of the objectives of certain recent developments in the law of high seas fisheries is to place pressure on states to cooperate with international regimes for conservation and management. Second, rules of customary international law are generally applicable. As a result, customary law forms a vital backdrop against which the various global, regional and bilateral conventions adopted by states are arrayed.

Freedom of the high seas is one of the most venerable principles of international law,²⁵ and the strength of this principle is reinforced by the vastness and inhospitability of ocean spaces and the practical difficulties of exercising authority on the high seas. Freedom to fish, one of the high seas freedoms, is the starting premise in any discussion about obligations to conserve and manage resources or to preserve

²⁰ However, when looked at from the point of view of municipal law and policy, this analogy does not hold.

²¹ Coastal states are authorized to establish the total allowable catch (TAC) of fish stocks in the exclusive economic zone (EEZ): LOSC, *supra* note 18, art. 61(1). They are also authorized to grant access by other states, through agreement, to that portion of the catch not exploited by the coastal state (*ibid.* at art. 62(2)). The TAC is to be established in light of criteria set out in art. 61 (2) and (3), which are oriented toward conservation of the resources, but art. 62(1) obligates coastal states to “promote the objective of optimum utilisation” of those resources. It is doubtful that these provisions could be interpreted to establish a lower limit for the TAC. The discretion of the coastal state is wide, and exercises of this discretion that favour conservation over exploitation would be easily justified on the basis of the relevant provisions. Furthermore, no other state would be able to claim a right to access of any surplus. This interpretation is supported by LOSC at art. 297(3)(a), which exempts from compulsory dispute settlement disputes arising out of the “discretionary powers [of the coastal state] for determining allowable catch, its harvesting capacity, [or] the allocation of surpluses to other States ...”

²² *Ibid.* at art. 87 particularly para. (e).

²³ *Ibid.*

²⁴ See discussion *infra* at 7.

²⁵ R.R. Churchill and A.V. Lowe describe this principle as “a cornerstone of modern international law.” *The Law of the Sea*, 3rd ed. (Manchester: Manchester University Press, 1999) at 204.

ecosystems. High seas freedoms have never been without limits, the most basic coming from the obligation to respect the exercise by other states of their rights in these spaces. More specific and often very detailed rules have been adopted to impose a range of constraints on the exercise of all high seas freedoms; of particular relevance in the fisheries context are customary and conventional obligations to preserve the marine environment, to adopt and implement conservation and management measures for fisheries exploitation, and to cooperate with other states and relevant international organisations in the furtherance of both these goals.²⁶

Because open-access CPRs are so difficult to govern, the question arises whether it is possible to modify the structure of the high seas fisheries regime such that it is no longer an open-access good. Because the structure of the regime flows from the three principles of *pacta tertiis*, high seas freedom and flag state jurisdiction, which are themselves solidly anchored in international law, this seems at first glance to be a nearly impossible task. Nevertheless, current developments in international fisheries law do seem to be moving in this direction, in modest but nevertheless potentially significant ways. Innovations in global and regional fisheries conventions are being made that build on and add to existing qualifications and exceptions to the principles of high seas freedom and flag state jurisdiction. The rule against *pacta tertiis* has not been squarely addressed, but reliance is being placed on customary rules, applicable to all states, in order to make it more difficult for states and vessels to avoid altogether the impact of these innovations. While it is not possible to complain of a violation of a conventional rule if the state responsible is not a party to that convention, it is possible to point to more general customary obligations to adopt conservation and management measures and to cooperate in the adoption and implementation of such measures. In this way, the *pacta tertiis* rule is not offended, but no state can be treated as standing altogether outside the international regime for high seas fisheries.

States have adopted a large number of rules at the international and regional level to limit their high seas freedoms. The most basic limitation on the exercise of high seas freedoms is found in the need to respect the exercise of these freedoms by other states.²⁷ Beyond these basic obligations are more specific obligations geared towards the protection of the fisheries resource. The 1982 United Nations Convention on the Law of the Sea (LOS) requires states to adopt conservation measures

²⁶ See discussion *infra* at 7.

²⁷ LOS, *supra* note 18, art. 87(2). This obligation also appears in one of the predecessor agreements to the LOS, the Geneva Convention on the High Seas. 29 April 1958, 450 U.N.T.S. 82, art. 2 [High Seas Convention], entered into force 30 September 1962. The High Seas Convention attracted 62 ratifications, but it has been superseded by LOS, except with respect to those parties to the former that are not parties to the latter. As Francisco Orrego Vicuña argues, "it would be wrong to state that customary law provides for the unrestricted freedom of fishing in the high seas. It provides for freedom indeed, but subjecting its exercise to other controlling principles that have also been received in the corpus juris of customary international law:" Francisco Orrego Vicuña, *The Changing International Law of High Seas Fisheries* (Cambridge: Cambridge University Press, 1999) at 14. This corpus includes such customary principles as the requirement "to act with reasonable regard for the rights of others", abuse of rights, and equity, *ibid.* at 13.

applicable to their vessels on the high seas²⁸ and to cooperate with other states whose vessels fish the same stocks with a view to adopting conservation measures.²⁹ Under the now largely defunct Geneva Fishing Convention, coastal states were granted considerable influence over high seas conservation measures. Of particular relevance to the phenomenon of IUU fishing is the authorisation given to coastal states to adopt conservation measures applicable to high seas areas adjacent to their territorial seas,³⁰ where coastal states were deemed to have “a special interest in the maintenance of the productivity of the living resources.”³¹ This preference for coastal states all but disappears in the LOSC,³² although this must be balanced against an important gain for coastal states under the LOSC, namely the entrenchment of the EEZ.³³ Many coastal states were not satisfied with the creation of the EEZ, and sought, following the conclusion of the LOSC, for more extensive rights in high seas areas adjacent to their EEZ. These efforts culminated in the adoption of the Fish Stocks Agreement (FSA)³⁴ in 1995, but this agreement does not go nearly as far as the Geneva Fishing Convention.

²⁸ LOSC, *supra* note 18, art. 117.

²⁹ *Ibid.* at art. 118. Similar obligations were found in one of the predecessor convention to the Law of the Sea Convention, the Geneva Convention on Fishing and Conservation of the Living Resources of the High Seas [Fishing Convention], 29 April 1958, 559 U.N.T.S. 285, entered into force 20 March 1966, at arts 3 and 4. The Fishing Convention attracted only 37 ratifications and has been superseded by the LOSC, except with respect to those parties to the former which are not parties to the latter.

Duties of cooperation are also firmly anchored in customary international law, both with respect to high seas fisheries law and more generally: see Stuart M. Kaye, *International Fisheries Management* (The Hague: Kluwer, 2001) at 111 ff.

³⁰ Fishing Convention, *ibid.* at art. 7. Certain conditions apply: there must be an urgent need for these measures “in the light of the existing knowledge of the fishery” and the measures must be justified on a scientific basis; furthermore, they may not discriminate against foreign fishers. In case of a dispute, these measures remain in force pending resolution pursuant to art. 9.

³¹ Fishing Convention, *ibid.* at art. 6(1). See Kaye, *supra* note 29 at 71-2.

³² See Daniel Vignes, Giuseppe Cataldi and Rafael Casado Raigon, *Le droit international de la pêche maritime* (Brussels: Bruylant, 2000) at 129. The LOSC, *supra* note 18, art. 116, does subject the rights of states to participate in high seas fisheries to the rights, duties and interests of coastal states, but this provision is ambiguous. These rights, duties and interests are described as being “provided for, *inter alia*, in article 63, paragraph 2, and articles 64 to 67,” but these articles provide for cooperation between coastal and fishing states and do not recognise special rights or interests of coastal states in stocks adjacent to their EEZ. This series of articles thus gives rise to important ambiguities and interpretive difficulties: see Vignes, Cataldi and Casado Raigon, *ibid.* at 129-31; Francisco Orrego Vicuña, “The International Law of High Seas Fisheries: From Freedom of Fishing to Sustainable Use” in Olav Schram Stokke, ed., *Governing High Seas Fisheries: The Interplay of Global and Regional Regimes* (Oxford: Oxford University Press, 2001) 23 at 28; Kaye, *supra* note 29 at 159-62.

³³ The EEZ is defined at LOSC, *supra* note 18, arts 55-57. The coastal state is granted by art. 56(1)(a) “sovereign rights for the purpose of exploring and exploiting, conserving and managing the natural resources, whether living or non-living, of the waters superjacent to the seabed... :” *ibid.* at art. 56(1)(a).

³⁴ FSA, *supra* note 6.

Article 7 of the FSA simply provides that measures adopted by the coastal state for its EEZ must be taken into account in negotiations between coastal and fishing states for the establishment of conservation measures for the high seas.³⁵

Finally, the principle of flag state jurisdiction over vessels on the high seas holds that, as a general rule, only the state to which a vessel is flagged is entitled to exercise jurisdiction over that vessel on the high seas or with respect to activities taking place on the high seas.³⁶ Because states have no territorial sovereignty on the high seas, their jurisdiction over their ships in these spaces depends on the link of nationality between the state and the vessel. In certain limited circumstances, states may also have jurisdiction over events beyond their jurisdictional waters that have an impact on their territory,³⁷ and in an even more limited category of cases all states are entitled to exercise jurisdiction.³⁸ When we consider the way in which jurisdiction is exercised on the high seas, we are immediately confronted with one of the most

³⁵ Art. 7 of the FSA, *ibid.*, refers to the duty on the part of fishing and coastal states to negotiate conservation measures applicable to straddling stocks. Among the factors to be taken into account in these negotiations are conservation measures adopted by the coastal state (*ibid.* at para. 7(2)(a)) and by the relevant RFMO (*ibid.* at para. 7(2)(b)). Furthermore, conservation measures adopted through negotiations cannot “undermine the effectiveness” of coastal state measures (*ibid.* at para. 7(2)(a)).

³⁶ LOSC, *supra* note 18, arts 91 and 92.

Jurisdiction over vessels used to be based on an analogy between a vessel and state territory. Therefore, flag state jurisdiction was simply an extension of exclusive state jurisdiction over territory: *Lotus Case* (France v. Turkey), (1927), P.C.I.J. (Ser. A) No. 9. This is no longer the case; jurisdiction is exercised by virtue of registry of a vessel, and the relevant conventional provisions make no reference to a territorial analogy: see Rosemary Gail Rayfuse, “Enforcement of High Seas Fisheries Agreements: Observation and Inspection under the Convention on the Conservation of Antarctic Marine Living Resources” (1998) 13 *International Journal of Marine and Coastal Law* 579; Rayfuse, *Non-Flag State Enforcement in High Seas Fisheries* (Leiden: Martinus Nijhoff, 2004) at 21.

³⁷ The most common and most well-recognised basis for the exercise of state jurisdiction is territorial. Thus, states have jurisdiction over acts that take place on their territory, in whole or in part, and may also claim jurisdiction over acts that have an impact on their territory. However, since the high seas are not subject to territorial jurisdiction, this basis of jurisdiction is less important here. Coastal states have long sought to argue that there is a territorial basis in their interest in fisheries resources in high seas areas adjacent to their territorial seas and EEZs. The notion that they have an interest in these fisheries was accepted in the 1958 Fishing Convention, *supra* note 29, arts 6 and 7, in the LOSC, *supra* note 18, arts 63 and 116, and in the FSA, *supra* note 6, arts 7 and 8, but none of these texts reflect the notion that this interest is linked to jurisdiction over territory. With respect to marine environmental damage, states may rely on a territorial basis for exercising jurisdiction over acts not occurring in their jurisdictional waters in two situations. First, port states are able to exercise jurisdiction over acts in the jurisdictional waters of other states if those acts cause or threaten environmental damage in the port state’s territorial waters: LOSC, *supra* note 18, at art. 218(2). Second, coastal states may intervene when a maritime casualty threatens pollution damage to “their coastline or related interests” (*Ibid.* at art. 221).

³⁸ This is known as the universal basis for jurisdiction. The classic example is piracy: see LOSC, *ibid.* at art. 105, which gives any state jurisdiction to seize a pirate ship.

important obstacles to high seas fisheries conservation and management: the principle of exclusive flag state jurisdiction. The LOSC clear on this point: the power to prescribe and enforce rules on high seas fishing activities lies primarily with flag states, although this power is accompanied by a duty to exercise jurisdiction 'effectively'³⁹ and, furthermore, has certain exceptions.⁴⁰

As David Balton points out, a high degree of deference to flag state jurisdiction may have seemed logical at a time when ships were regarded as floating portions of the territory of the states to which they were flagged, but this attitude is harder to understand in a time of beneficial ownership, reflagging and chartering: relationships between ships and states are increasingly complex and slippery.⁴¹ Balton notes that '[t]he international community, in stages, has begun to realise that a fishing vessel is just a fishing vessel – a construct of metal, wood, plastic and rope that is outfitted for fishing – rather than a floating piece of national territory.'⁴² Nevertheless, flag state jurisdiction is proving to be a highly resilient concept. The LOSC sets out some exceptions to this principle, but only in narrow and specific terms. The most well-established are the prohibitions on the slave trade⁴³ and piracy.⁴⁴ The LOSC adds

³⁹ LOSC, *ibid.* at art. 94. A similar provision is found in the High Seas Convention, *supra* note 27 at art 5.

⁴⁰ Art. 92 of the LOSC, *supra* note 18, subjects vessels on the high seas to exclusive flag state jurisdiction, "save in exceptional cases expressly provided for in international treaties or in this Convention." Virtually identical language appears at art. 6 of the High Seas Convention, *supra* note 27. See Churchill & Lowe, *supra* note 25 at 208 ff.; Rayfuse, Non-Flag State Enforcement, *supra* note 36 at 22. Rayfuse correctly states that we should speak of "primacy" of flag state jurisdiction, the presumption being in favour of flag state jurisdiction unless a contrary rule applies:" *ibid.*

⁴¹ For discussions of the phenomenon of flags of convenience and its impact on the implementation of environmental labour, safety and other regulatory standards on the high seas, see DeSombre, "Fishing under Flags of Convenience," *supra* note 4 at 88 ff.; DeSombre, "Flags of Convenience and the Enforcement of Environmental, Safety and Labor Regulations at Sea" (2000) 37 *International Politics* 213; DeSombre, *Flagging Standards*, *supra* note 4.

⁴² David Balton, "The Compliance Agreement" in Ellen Hey, ed., *Developments in International Fisheries Law* (The Hague: Kluwer, 1999), 31 at 32.

⁴³ LOSC, *supra* note 18, art. 99; High Seas Convention, *supra* note 27 at art. 13. No powers to arrest or prosecute slave ships are granted to ships flying the flag of another state. A right of visit is provided for, but is conferred only on warships and may be exercised only when there is "a reasonable ground for suspecting" that the ship is engaged in the slave trade, is a pirate ship, or is actually flagged to the same state as the visiting ship: LOSC, *ibid.* at art. 110; High Seas Convention, *supra* note 27 at art. 22.

⁴⁴ LOSC, *ibid.* at arts. 100-7; High Seas Convention, *ibis.*, arts. 14-22. The warships of any state may seize a pirate ship on the high seas: LOSC, *ibid.* at art. 105; High Seas Convention, *ibid.* at art. 19.

two new categories of prohibited activity on the high seas, namely traffic in narcotics⁴⁵ and unauthorised broadcasting.⁴⁶

Issues of governance

The obstacles posed by the open-access nature of high seas fisheries resources are well known⁴⁷ but are worth outlining here. First, those exploiting open-access CPRs often have less of a stake in their long-term sustainability than, say the owner of private property would have. Because open-access CPRs belong to no one, actors may not believe that they will benefit tomorrow from any restraint they impose upon themselves today. However, for this assumption to hold true, the actors cannot be very dependent on this particular resource: they must be able to move to other resources and other areas when one particular resource is exhausted. This is often not borne out. For example, it is often argued that coastal states have a greater stake in sustainable fisheries than do others, although the economic, social and cultural reliance on a particular fishery is not necessarily determined by proximity alone.

A second characteristic of open-access CPRs relates to tensions between long- and short-term interests. The creation of rules to govern exploitation of these resources involves transaction costs that may be quite high, as well as opportunity costs in the form of foregone exploitation. Given a tendency to discount future benefits, actors may not believe that short-term restraint is in their long-term interests. This belief will be reinforced by a third characteristic of open-access CPRs, namely the impossibility (or difficulty) of excluding actors that refuse to accept the need for restraint and cooperation – so-called free riders. The problem of free riders sharpens the tension between short- and long-term interests, since their presence makes it less certain that the benefits of sustainable exploitation will be realised. Moreover, it is difficult to convince actors to exercise restraint when they see others refusing to do so and paying no cost as a result of this refusal.

In the absence of a central authority capable of imposing and enforcing rules in high seas areas, states must cooperate to create a web of conservation and management measures, as well as procedures for implementation and enforcement of those measures, that stretches across the high seas. This international structure must be complemented and reinforced by domestic rules and procedures. The degree of

⁴⁵ LOSC, *ibid.* at art. 108.

⁴⁶ *Ibid.* at art. 109. The right of visit is extended to cover unauthorised broadcasting but not trafficking in narcotics: *ibid.* at art. 110(1)(c). One might expect some pressure to include terrorism on this list, but a recent occasion to do so was passed over; the 2005 Protocol to the Convention for the Suppression of Unlawful Acts against the Safety of Maritime Navigation, 14 October 2005, [2005] A.T.N.I.F. 30, contains provisions on non-flag state boarding of ships suspected of involvement in terrorist activities, but such boarding is to take place only with the consent of the flag state: *Ibid.* at art. 8(2). The protocol added article 8bis to the Convention for the Suppression of Unlawful Acts against the Safety of Maritime Navigation, 10 March 1988, 27 I.L.M. 672, which entered into force 1 March 1992.

⁴⁷ See, e.g., Barkin and Shambaugh, *supra* note 16, particularly at 6-9.

coordination that is required for such a structure to function effectively is very high indeed. Although several strands of the web are currently in place, these strands are simply not dense enough to permit the system to operate as it needs to do in order to obtain the goal of effective conservation and management.

Numerous regional and international conventions, codes of conduct, plans of action and declarations have been produced in an attempt to develop robust and effective legal and policy regimes to alleviate pressure on fisheries resources, but these pressures continue to mount. It is difficult to avoid the conclusion that this is a classic tragedy of the commons problem, as described in Garrett Hardin's famous article.⁴⁸ Hardin describes a tragedy in the ancient sense of the world: the actors are driven inexorably to their own undoing. Unlike ancient tragic heroes, however, Hardin's shepherds on common grazing land know precisely what outcome their actions will lead to, but are unable to break out of these patterns of destructive behaviour. Hardin proposes two solutions: privatisation of commons resources or the establishment of a centralised governing authority responsible for such resources. But neither of these options is realistic in the context of high seas fisheries, and it is not apparent whether either would actually solve the problems associated with managing this resource. Privatisation of ocean areas would not eliminate the need for careful coordination among states and regions born of the interdependence of marine and terrestrial ecosystems and given the mobility of many fish stocks across boundaries. The kind of centralised governance structure that would be required would be immense, spanning vast and heterogeneous geographic expanses and being responsible for the behaviour of thousands of actors, state and non-state. Furthermore, this organisation, in order to function effectively, could not restrict its scope of concern to fish; it would need to consider broader ecosystemic factors as well, not to mention an immense range of economic, political and social issues such as world markets for fish, direct and indirect subsidies to the fisheries industry, dependence of local communities on fisheries and so forth. The question is whether an alternative is available – whether it is possible to work within the existing decentralised framework of international law to build a more robust and effective regime for high seas fisheries conservation and management.

One solution that has been proposed is to alter the structure of the high seas fisheries regime to move it closer to the category of a toll good. The best example of a toll good is a toll highway: anyone can have access to the resource upon payment of a fee. Closely related to this concept is the notion of a club good: access to the resource is conditional on membership in a club, and membership is in turn conditional on the acceptance of certain rules and procedures.⁴⁹ Transforming high seas fisheries from an open-access CPR to a club good would require acceptance by a critical mass of states of a series of important limitations on their high seas freedoms. As we will see, recent

⁴⁸ Garrett Hardin, "The Tragedy of the Commons" in Hardin and John Baden, *Managing the Commons* (San Francisco: W.H. Freeman, 1977) at 16.

⁴⁹ DeSombre, "Fishing under Flags of Convenience," *supra* note 4 at 88 ff.

developments in fisheries law, reflected in the FSA and various regional conventions, tend in this direction.⁵⁰

THEORETICAL FRAMEWORKS FOR STUDYING HIGH SEAS FISHERIES

One theoretical framework that receives a good deal of attention from international relations scholars and, more recently, from international jurists is constructivism. Constructivist approaches focus attention on the role of ideas, understandings, beliefs, attitudes, and values on international society. As Thomas Risse puts it,

processes of argumentation, deliberation, and persuasion constitute a distinct mode of social interaction to be differentiated from both strategic bargaining – the realm of rational choice – and rule-guided behaviour – the realm of sociological institutionalism. ... [H]uman actors engage in truth seeking with the aim of reaching a mutual understanding based on a reasoned consensus.⁵¹

Constructivism holds that social institutions are socially constructed, that is, based on shared understandings that develop over the course of myriad interactions among actors.⁵² Searle describes this process as involving the assignment of 'a new status to some phenomenon,' such as a portion of the ocean or the relationship between a vessel and a state, 'where that status has an accompanying function that cannot be performed solely in virtue of the intrinsic physical features of the phenomenon in question. This assignment creates a new fact, and institutional fact, a new fact created by human agreement.'⁵³ Thus, a vessel registered in a particular state becomes a national of that state, in a manner roughly analogous to the acquisition of nationality by a person, with the result that the vessel is considered to be the responsibility of that state, and other states have only very limited authority to take legal measures against it.

⁵⁰ Progress in this direction was already apparent in the LOSC. Articles 66(3)(a) and 67(2) of the LOSC, *supra* note 18, prohibit high seas fishing of, respectively, anadromous stocks such as salmon and catadromous species such as eels. See Patricia W. Birnie, "The Conservation and Management of Marine Mammals and Anadromous and Catadromous Species" in *Developments in International Fisheries Law* *supra* note 42, 357; Rayfuse, *Non-Flag State Enforcement*, *supra* note 36 at 103-104. This also represents a significant exception to the high seas freedom to fish, by simply withdrawing certain categories of fish from the category of fisheries to which this freedom applies. The provision on marine mammals does not go so far as those mentioned above, but does provide for stricter regulation by an international organisation of cetaceous species: LOSC, *supra* note 18 at art. 65. See also Birnie, *supra* note 50.

⁵¹ Thomas Risse, "Let's Argue!": Communicative Action in World Politics" (2000) 54 *International Organisation* 1 at 1-2.

⁵² Searle, *The Construction of Social Reality*, *supra* note 7, Chapter 1 – "The Building Blocks of Social Reality," particularly at 23 ff.; Alexander Wendt, *Social Theory of International Politics* (Cambridge; New York: Cambridge University Press, 1999) at 159-60; Ruggie, *supra* note 7 at 870.

⁵³ Searle, *ibid.* at 46.

While constructivists do not deny the importance of material factors – geography, distribution of resources, etc. – to outcomes in international society, they argue that much more important than the mere existence of ‘brute facts’ such as oceans and fish populations is the way in which actors interpret these facts.⁵⁴ As Alexander Wendt has argued, a brute fact such as an arms build-up in a neighbouring state will be treated as threatening or comforting depending on the context and the manner in which this context, and the arms build-up, are interpreted. He writes:

A fundamental principle of constructivist social theory is that people act toward objects, including other actors, on the basis of the meanings that the objects have for them. States act differently toward enemies than they do toward friends because enemies are threatening and friends are not. Anarchy and the distribution of power are insufficient to tell us which is which.⁵⁵

The distinction between land and water is another such brute fact, but the very different way in which state authority and jurisdiction is understood in land and on water is a social construction. The high seas are difficult to control because of their remoteness from land territory and the often inhospitable conditions in those areas, but the notions of high seas freedom and flag state jurisdiction are shared understandings based on perceptions of the difference between state authority on land and on the high seas. Similarly, distinctions among the high seas, territorial seas and the EEZ represent ways in which we have come to understand and define ocean spaces and the authority of states within them. There is nothing natural or inevitable about these categories or the way they are defined; they are social constructions, created through densely layered shared understandings and subject to change as those shared understandings begin to shift.

If social institutions, including legal rules, are constructed through shared understandings, as constructivists argue, this means that changes in shared understandings lead to changes in those institutions. At times, changes to the rules are done quite deliberately: laws are adopted, definitions are developed, legal relationships are structured and modified. Most of the time, however, these changes take place almost imperceptibly.⁵⁶ Searle argues that this is in part due to the fact that we are born and grow up in a world populated by social institutions that we come to take for granted, but that it is also due to a lack of consciousness of the shared understandings in which actors are participating.⁵⁷ Respecting grammatical and syntactical rules, using money to purchase goods, and limiting fishing operations to the high seas are all operations based on shared understandings that shore up those understandings and the institutions on which they are based. Gradual shifts in the

⁵⁴ Searle, *ibid.* at 1-2, 7 ff.

⁵⁵ Alexander Wendt, “Anarchy is what States Make of it” (1992) 46 *International Organisation* 391 at 396-7.

⁵⁶ Searle, *supra* note 7 at 47.

⁵⁷ Searle, *ibid.* at 47.

practice of individuals or states may result in the almost imperceptible modifications of those practices and of the institutions of which they form a part.

Many constructivists take an explicitly normative approach to legal rules, focusing on the interrelation between legal and moral frameworks and on the capacity of legal rules and systems to frame understandings of what ought to be done.⁵⁸ From this point of view, one of the prominent uses that can be made of legal rules and systems is persuasive:⁵⁹ the primary objective of these rules is seen not as the imposition of costs and rewards, but rather the provision of reasons that can be used to persuade actors to adopt one course of behaviour or another.⁶⁰ Similarly, Gerald Postema argues that

law regulates or guides actions of citizens by addressing reasons or norms to them. Rather than altering the social or natural environment of action, or manipulating (nonrational) psychological determinants of action, law seeks to influence behavior by influencing deliberation. It addresses norms to agents and expects them to guide their actions by those norms. Moreover, it expects those norms to figure in deliberation not as contextual features setting the environment or parameters of choice, but as reasons for deliberate choice. Thus, rules are intended to be 'internal' in two respects: (a) they figure in the deliberation of agents, and (b) they figure as reasons for, and not merely parameters of, deliberation and choice.⁶¹

As a result, constructivism is well-suited to highlight the impact of normative developments, such as increasing concern about environmental protection and resource conservation and management, on high seas fisheries.

Important inroads have been made in recent years into freedom of the high seas and freedom to fish in particular, with the result that the rights of states to exploit the resources of the high seas are now teamed with a growing network of obligations. These developments are significant. However, the fact remains that high seas fisheries presents a difficult case for a constructivist framework focused on legal and political norms relating to conservation and management of high seas resources and to marine ecosystem protection. This is in large measure due to the open-access nature of high seas fisheries, as well as the structure of the fishing industry. Vessels can avoid contact with conservation-minded states and their enforcement machinery, and certain states

⁵⁸ Brunnée and Toope, "International Law and Constructivism," *supra* note 7; Ruggie, *supra* note 7; Risse, *supra* note 51.

⁵⁹ See, in particular, Risse, *ibid.*

⁶⁰ Ruggie refers to rules as reasons and not causes for behaviour: in other words, actors conform to a rule not because the rule – and the threat of punishment that stands behind it – compels them to do so, but because the rule forms part of a normative framework, creating and reinforcing expectations about what the actor ought to do: *supra* note 7 at 869.

⁶¹ Gerald J. Postema, "Implicit Law" in Willem J. Witteveen and Wibren van der Burg, eds., *Rediscovering Fuller: Essays on Implicit Law and Institutional Design* (Amsterdam: Amsterdam University Press 1999) 255 at 262. Fuller was certainly not a constructivist, but both he and interpreters of Fuller such as Postema have had a significant influence on many constructivists.

may feel such a strong incentive to cater to those vessels that the pull of political and legal norms is not felt very strongly. As a result, it seems appropriate to consider the ways in which the incentive structure could be changed such that vessels and states alike benefited less from avoiding application of the rules or from violating them, and benefited more from cooperating in conservation and management regimes. The rational choice approach is particularly promising in this regard, focusing as it does on the interests of actors and seeking to identify ways in which policy and legal frameworks operate on those interests.

Rational choice does not take a normative approach to law. Instead, rational choice scholars focus on the function of legal rules in signalling intentions and expectations and the imposition of legal sanctions or other kinds of consequences on actors that violate the rules. Changes in the rules applicable on the high seas represent attempts to change incentive structures by making it easier to impose costs on actors for behaving in certain ways. This would also provide a stronger incentive to actors that are inclined to cooperate, since they would see that their own efforts are not made in isolation, and that actors that undermine such efforts may be made to pay costs as a result.

In a series of articles, Downs et al. have compared constructivist (in their terminology, transformational) approaches with rational choice approaches.⁶² They question, in particular, the lack of attention paid by constructivism to punishment as a means of accomplishing policy objectives. These critiques are especially cogent in the context of high seas fisheries, where persuasion and appeals to a normative understanding of the issue-area seem, in the medium term at least, highly unlikely to bear fruit. Rational choice approaches cast a broad net when examining ways to impose undesirable consequences on actors that refuse to cooperate or that violate the rules. Downs defines punishment strategies as comprising '[a]ny threatened action or combination of actions that the designers of an enforcement strategy believe will operate to offset the net benefit that a potential violator could gain from noncompliance.'⁶³

I argue that, despite the benefits of looking at high seas fisheries through a rational choice lens, much remains to be learned about this issue-area by taking a constructivist approach. While constructivist authors often focus on the role of norms and values in international society, constructivism as a theoretical framework is in fact ideally suited to consider shared understandings, rules and institutions based not on values alone but also on more instrumental, self-interested foundations.⁶⁴ Furthermore, constructivism possesses two important advantages. First, it is capable of describing and analysing the constitution of interests, or in other words, the processes through which actors come to perceive and define their interests, and

⁶² Downs, *supra* note 9; Downs, Rocke & Barsoom, *supra* note 9; Downs & Jones, *supra* note 9; Downs, Danish & Barsoom, *supra* note 9.

⁶³ Downs, "Enforcement", *supra* note 9 at 321.

⁶⁴ See in particular Searle, *supra* note 7; Wendt, "Anarchy," *supra* note 55, and Wendt, *Social Theory*, *supra* note 52.

processes through which these perceptions and definitions can be influenced and changed. Second, constructivism is capable of analysing law not merely as a series of discrete rules backed by sanctions which function in the same manner as any other incentive structures, but as a system enjoying relative autonomy from other systems and possessing its own logic. Through constructivism we can come to a richer understanding of legal rules as forming parts of a broader institution which is understood by those who participate in it in a particular way. We can also understand the role played by constitutive rules, such as the distinction among ocean spaces such as the high seas and the EEZ, which cannot readily be understood as commands backed by sanctions.

A constructivist approach to law holds that the most important work done by rules is not to permit, prescribe or punish various types of activities. Rather, the most significant point of contact between actors and rules is at the level of understanding. Both the rules themselves and the processes of legal reasoning proper to law shape actors' understandings, allow them to communicate those understandings to one another, and lead them to hold certain positions and adopt certain courses of action. Basic concepts such as high seas freedom, flag state jurisdiction and the importance of state consent to law's validity quietly operate to shape understandings regarding the existence and nature of the high seas, the nature of the activities that can take place in this area, and the rights, duties and privileges of various categories of actors.

By moving between constructivism and rational choice, we are able to see aspects of the work that law is doing that are obscured by a rational choice approach focused on incentive structures, but that may also escape the attention of constructivists who are more concerned about normative aspects of legal reasoning. Sanctions can be used to deprive actors of the benefits of defection or to signal to actors that certain costs will be associated with particular courses of action. However, from a constructivist point of view, much of the effectiveness of sanctions is more symbolic than instrumental: one is sanctioned following a formal judgment that shared expectations as manifested in a legal rule have not been met. Sanctions represent not only a change in the prevailing incentive structure but also the judgment of a group of states that another state has failed to live up to its legal obligations.⁶⁵ By nesting sanctions in arguments about international legal rights and duties, states can present their actions as being consonant with existing legal frameworks, and may also make claims of legitimacy – for example, they can argue that they are serving community interests in protection of fisheries resources, marine ecosystems and a well-functioning international system.

RECENT DEVELOPMENTS IN HIGH SEAS FISHERIES LAW: FROM OPEN ACCESS CPR TO OPEN CLUB GOOD?

The decentralised structure of international law creates a need for creative thinking about the imposition of sanctions. The traditional legal response, involving detention,

⁶⁵ Abbott and Snidal discuss this dual role of legal sanctions: Kenneth W. Abbott & Duncan Snidal, "Values and Interests: International Legalization in the Fight against Corruption" (2002) 31 *Journal of Legal Studies* S141 at S151.

prosecution and the imposition of penalties, will remain out of the reach of non-flag states for the foreseeable future. Other means of imposing costs on vessels and states that refuse to comply or cooperate must be found. This involves identifying the needs of fishing vessels – fuel, repairs, supplies, access to markets, access to fish stocks – and determining the ways in which states other than the flag state have any influence over access by fishing vessels to means to meet these needs.

Punishment strategies based on observations about the opportunities to place pressure on non-compliant vessels and flag states have as their immediate objective to make it more costly to defect, that is, to refuse to cooperate with conservation and management measures or to violate such measures. However, if these punishment strategies are embedded in a larger framework, their effectiveness is likely to be enhanced. Thus, the punishment strategies should not be aimed solely at isolated incidents of rule violation but also at creating incentives for membership in 'clubs' or RFMOs and for respect for the panoply of rules and measures imposed by those organisations. This is, in fact, a reasonably good description of recent developments in high seas fisheries law: the incentive structure is being altered in such a way that high seas fisheries take on more attributes of a club good.

Institutional structure – Regional fisheries management organisations (RFMOs)

As we have seen, Hardin called for either the privatization of commons resources or the creation of centralized governance institutions. The creation of the EEZ represents a kind of privatization, in that coastal states were granted various powers over huge expanses of ocean spaces. In a similar vein, the Geneva Fishing Convention permitted coastal states to act unilaterally in certain circumstances to protect offshore fishing resources.⁶⁶ Since the late 1940s, states have been exploring a different option, namely the creation of regional organisations to foster coordination and cooperation in high seas fisheries management and conservation.⁶⁷ This multilateral approach is recognised, but not further developed, in the LOSC, which calls upon states to 'cooperate to establish subregional or regional fisheries organizations' to develop and implement conservation and management measures, although this obligation is attenuated by the addition of the words 'as appropriate.'⁶⁸ The FSA goes much further, recognising the central role of RFMOs in international conservation and management. The FAO also makes it clear, in its non-binding Code of Conduct for Responsible

⁶⁶ Supra at 29.

⁶⁷ A number of regional fisheries organisations were established in the late 1940s and early 1950s, including the Asia-Pacific Fishery Commission (APFIC) (1948), the General Fisheries Council for the Mediterranean (GFCM) (1949), the Northwest Atlantic Fisheries (ICNAF) (1950, superseded in 1978 by the Northwest Atlantic Fisheries Organization (NAFO)), the Inter-American Tropical Tuna Commission (IATTC) (1950), the Permanent Commission for the South Pacific (1952), and the International Pacific Halibut Commission (1953). There are currently over 30 sub-regional, regional or international RFMOs in existence: Vignes, supra note 32 at 182.

⁶⁸ LOSC, supra note 18, art. 118.

Fisheries⁶⁹ and its binding Compliance Agreement,⁷⁰ that RFMOs are to play a central role in fisheries conservation and management. States party to the FSA that do not join the RFMO responsible for managing a particular fishery do not escape the obligation to apply the conservation measures adopted by that RFMO.⁷¹ Failure to either join the RFMO or apply its measures results in exclusion from the fishery.⁷² Thus, parties to the FSA have accepted some fairly significant inroads into freedom of the high seas and flag state jurisdiction, modifying certain features of the regime to make it less like an open-access CPR and more like a club good.

In addition to making access to regional fisheries conditional upon membership in or cooperation with the relevant RFMO, the FSA establishes certain restrictions on membership in RFMOs: only states with a 'real interest' in the fisheries governed by the RFMO may become a member of that organisation.⁷³ As a matter of doctrine, this shift is perhaps even more significant than the obligation to belong to or cooperate with RFMOs in order to have access to the fishery. This latter provision is very much in line with the trend in recent decades to make the exercise of the freedom to fish conditional on the fulfilment of various obligations. The requirement of a real interest in the fisheries goes much further: regional fisheries may simply not be open to certain states, regardless of whether they agree to play by the rules or not. This is not merely a condition of the exercise of the freedom to fish; it is an exception to this venerable principle. The practical necessity of such a limitation on membership arises from the fact that many of the world's fisheries are already fully exploited or over-exploited.⁷⁴ Under such conditions, the only way in which new entrants may be admitted to a fishery is if existing members of RFMOs exit the fishery or reduce their own fishing efforts to provide room for new entrants.

As potentially significant as this provision is, in practice it may not represent a major departure from previous practice. First of all, the term 'real interest' is not defined. Francisco Orrego Vicuña argues that this term is meant to limit membership to states that 'conduct ... actual fishing operations of significance in the region concerned,' and to exclude states that had fished the stocks in the past or have an intention to do so in the future.⁷⁵ Erik Jaap Molenaar, for his part, doubts that the

⁶⁹ Code of Conduct for Responsible Fisheries, *supra* note 15, para. 7.1.3.

⁷⁰ Compliance Agreement, *supra* note 15.

⁷¹ FSA, *supra* note 6, art. 8(3).

⁷² *Ibid.* at arts 8(4) and 17(2).

⁷³ *Ibid.* at art. 8(3). While it is possible for non-members to reach agreements with RFMOs and therefore have legal access to the relevant fisheries, non-members are dependent for that access on decision-making processes from which they are excluded, since it is within the RFMO that decisions on total allowable catch and its distribution to members and cooperating states in the form of quotas will be made. Therefore, particularly in fisheries that are fully allocated to RFMO members, membership brings with it real advantages.

⁷⁴ *Supra* at 3.

⁷⁵ Vicuña, *supra* note 27 at 208.

concept can be used to exclude any state from membership.⁷⁶ The most plausible reading of these provisions is that some restriction of access to membership is contemplated, but that there is no consensus on how states entitled to membership are to be identified.⁷⁷ Indeed, it may be impossible to specify in advance how the distinction between eligible and non-eligible states is to be made. Any attempt to define real interest could create perverse incentives to begin or accelerate fishing activities in the hopes of being granted membership and a quota.⁷⁸ Vignes et al. argue that it is essential for RFMOs to promote the widest participation possible, given the essential role played by these organisations in conservation and management of high seas fisheries.⁷⁹

Analysing this provision from a rational choice perspective, we see that membership in an RFMO must confer certain advantages, or states will have no incentive to accept the limitations on their high seas freedoms that such membership entails. It is well understood that the impediments to membership can be a double-edged sword. Redistributing a regional total allowable catch (TAC) to grant access to a fishery to new entrants may well be the price to pay to win cooperation and compliance with conservation and management goals from third states.⁸⁰

Unless an RFMO is in a position to create strong disincentives to fishing by non-members and non-participants, it may well be more effective to extend both membership and quotas to states that express an interest in the fishery, thus creating an incentive for cooperation. Beyond this, means of imposing costs on states and vessels that remain outside RFMOs and continue to fish stocks governed by those organisations will need to be identified, or else non-members will be able to gain most of the benefits of membership without paying any of the costs; in other words, there will be no means to discourage free riders. This issue will be considered in greater detail below; first, we will turn to a constructivist take on the role of RFMOs.

From the perspective of a constructivist, one of the most important keys to the success of the creation of 'clubs' to which one must belong in order to have access to a particular fishery is the extent to which this innovation becomes anchored in actors' understandings of high seas fisheries. The creation of RFMOs represents a

⁷⁶ E. J. Molenaar, "The Concept of 'Real Interest' and Other Aspects of Cooperation through Fisheries Management Mechanisms" (2000) 15 *International Journal of Marine and Coastal Law* 475 at 497-99; Molenaar, "Regional Fisheries Management Organizations: Issues of Participation, Allocation and Unregulated Fishing" in Alex G. Oude Elferink and Donald R. Rothwell, eds., *Oceans Management in the 21st Century: Institutional Frameworks and Responses* (Leiden: Martinus Nijhoff, 2004), at 69.

⁷⁷ See Tore Henriksen, Geir Hønneland & Are Sydnes, *Law and Politics in Ocean Governance: The UN Fish Stocks Agreement and Regional Fisheries Management Regimes* (Leiden: Martinus Nijhoff, 2006) at 21.

⁷⁸ In any event, art. 11 of the FSA, *supra* note 6, makes it clear that new members or participants in RFMOs do not have a right to receive quotas. Contentious issues are more likely to arise around the distribution of quotas than access to membership.

⁷⁹ Vignes et al., *supra* note 32 at 185.

⁸⁰ See Molenaar, *supra* note 76 at 500.

compromise between coastal and fishing states, leaving more or less intact the high seas freedom to fish but based on a new understanding of the manner in which that freedom is to be exercised. Reference to RFMOs in the LOSC represents an attempt to anchor this development in the broader law of the sea regime, lending RFMOs legitimacy by effecting a kind of delegation of responsibility to them. This legitimacy can be further enhanced by linking this development to certain needs of international society, notably the need for effective governance structures to address overexploitation of fisheries resources. As for the introduction of the notion of 'interested state' in the FSA, this move would appear contrary to the high seas freedom to fish were it not for the demonstrated need for such limitations in the interest of more effective management of the resource. In addition, a limited consensus in favour of exceptions to high seas freedoms was already arrived at in the case of anadromous and catadromous stocks, paving the way for this more recent attempt to limit high seas freedoms.⁸¹ The vagueness of the concept 'interested state' is no doubt due to the lack of consensus as to which actors have the 'right' to membership in RFMOs and which do not, but the introduction of this admittedly vague concept into the FSA in turn prepares the ground for more ambitious and more restrictive rules that may be developed in the future.

GATHERING INFORMATION

Reporting, monitoring and surveillance

In order to have an impact on the behaviour of flag states and vessels, information on this behaviour is needed. Fisheries conventions generally contain extensive and detailed provisions on the provision of information about vessel position, fishing effort, catch and so on, but detecting violations and encouraging (or compelling) compliance remains difficult. Even more difficult is the gathering of information on vessels flagged to states not parties to relevant conventions. In either case, RFMOs must rely on more indirect means to gather information, such as monitoring and surveillance. When ships are voluntarily in port, the possibilities for gathering information are dramatically increased: port states can conduct inspections and can make access to ports and facilities conditional on the provision of certain information, documentation, declarations or reports.⁸² But even given multiple sources of

⁸¹ *Supra* at 81.

⁸² The information-gathering processes used by the CCAMLR and the International Commission for the Conservation of Atlantic Tuna (ICCAT) in the compilation of their IUU lists, and, in the case of ICCAT, in the imposition of trade sanctions, are revelatory in two respects: first, in the breadth of sources that are mined; and second, in the care that is taken to verify the information and give flag states opportunities for input: see CCAMLR, Scheme to Promote Compliance by Non-Contracting Party Vessels with CCAMLR Conservation Measures, 2005, CCAMLR Conservation Measure 10-07 [CCAMLR Non-Party Compliance Scheme]; CCAMLR, Port Inspections of Vessels Carrying Toothfish, 2005, CCAMLR Conservation Measure 10-05 [CCAMLR Port Inspections]; CCAMLR, Catch Documentation Scheme for *Dissostichus* spp., 2005, CCAMLR Conservation Measure 10-03 [CCAMLR Catch Documentation Scheme]; ICCAT,

information, accuracy remains a problem, and thus RFMOs that seek to have an impact on non-member behaviour generally use presumptions to assist the process of making a case: non-member vessels sighted fishing in the regulatory area will be presumed to be undermining the effectiveness of conservation measures.⁸³

The FSA contains some general provisions on the provision of information by vessels to RFMOs, but is essentially a framework agreement spelling out the mechanisms for gathering information that flag states and RFMOs must put in place. There is a series of provisions on the duties and responsibilities of flag states, which include the imposition of requirements on vessels flying their flag to provide information to the flag state and to relevant RFMOs on various aspects of their fishing activity.⁸⁴ Other provisions describe in broad outline the responsibilities of RFMOs with respect to creating reporting obligations and carrying out monitoring and surveillance.⁸⁵ Reporting obligations applicable to fishing vessels⁸⁶ and flag states⁸⁷ are to be further specified by RFMOs.⁸⁸

Resolution Concerning Trade Measures, 19 December 2003, GEN 03-15 [ICCAT Trade Resolution].

⁸³ See, e.g., NAFO Conservation and Enforcement Measures, NAFO/FC Doc. 07/1 at art. 42(1) [NAFO Measures]; CCAMLR Non-Party Compliance Scheme, *supra* note 82 at para. 4; ICCAT, Recommendation Concerning the Ban on Landings and Transshipments of Vessels from Non-Contracting Parties Identified as Having Committed a Serious Infringement, entered into force June 21 1999, GEN 90-11 [ICCAT Landing and Transshipment Recommendation] at para. 1; ICCAT, Recommendation to establish a List of Vessels Presumed to have carried out Illegal, Unreported and Unregulated Fishing Activities in the ICCAT Convention Area, 4 June 2003 (date of entry into force), GEN 02-23 [ICCAT Vessel List Recommendation] at para. 1.

⁸⁴ FSA *supra* note 6, art.14(1) obligates states to “ensure that fishing vessels flying their flag provide such information as may be necessary in order to fulfil their obligations under this Agreement.” Article 18(e) requires flag states to establish “requirements for recording and timely reporting of vessel position, catch ..., fishing effort and other relevant fisheries data in accordance with subregional, regional and global standards” Article 19(1)(c) requires flag states to “require [their vessels] to give information to the investigating authority regarding vessel position, catches, fishing gear, fishing operations and related activities in the area of an alleged violation.”

⁸⁵ FSA, *ibid.* at art. 10, which sets out the functions of RFMOs, calls on these organisations to “agree on standards for collection, reporting, verification and exchange of data on fisheries for the stocks (para. (e)). Article 14(2)(a) calls on states to work through RFMOs “to agree on the specification of data and the format in which they are to be provided... .”

⁸⁶ See, e.g., Northwest Atlantic Fisheries Organization Conservation and Enforcement Measures, NAFO/FC Doc. 07/1 (NAFO Measures), art. 20 – Recording of catch and stowage (obligations imposed on fishing vessels to keep records of fishing activity); North-East Atlantic Fisheries Commission (NEAFC), Scheme of Control and Enforcement [NEAFC Scheme], adopted November 2006, to enter into force 1 May 2007, art. 9.

⁸⁷ See, e.g., NAFO Measures, art. 21 – Reporting of Catch and Fishing Effort, which requires NAFO members to make monthly reports on fishing activity to the Executive Secretary of NAFO. A similar provision appears in NEAFC’s Scheme of Control and Enforcement, *ibid.* at art. 10.

⁸⁸ Some RFMOs call for the use of satellite monitoring devices, which send various types of data directly to a central agency such as the Secretariat of the RFMO: See, e.g., NAFO Measures, art. 22 – Vessel Monitoring System. Under this scheme, information on vessel identification, position,

Boarding and inspection at sea

The FSA tackles the exclusivity of flag state jurisdiction in its provision on boarding and inspection of ships on the high seas by non-flag states. It has been argued that this provision also takes on the *pacta tertiis* principle, but in fact it is not opposable to states that are not parties to the FSA.⁸⁹ The provision in question, art. 21, states at para. 1 that members of RFMOs may board and inspect vessels of other FSA parties in the area covered by the RFMO in order to ensure compliance with the RFMO's conservation measures. As Rayfuse points out, there are several precedents for provision in a convention for non-flag state enforcement on the high seas.⁹⁰ However, the FSA is unique in that it permits inspections by RFMO members of fishing vessels flagged to non-members of that RFMO; in other words, the FSA incorporates by reference the boarding and inspection provisions of regional conventions into the FSA.⁹¹ The FSA thus does break some new ground regarding non-flag state

and date and time are automatically transmitted to a monitoring centre of the flag state. In addition, under art. 23 – Communication of Catches, fishing vessels are required to transmit electronically to the monitoring centre information on catch on entry into and exit from the NAFO regulatory area, transshipments made within the regulatory area, and information on species. A similar provision appears in NEAFC's Scheme of Control and Enforcement, *ibid.* at art. 11. The information on the position of fishing vessels can be used to gather a good deal of information on fishing activity, as discussed by Erik Jaap Molenaar & Martin Tsamenyi in "Satellite-Based Vessel Monitoring Systems: International Legal Aspects and Developments in State Practice" *FAO Legal Papers Online* #7, April 2000. The speed and navigation of vessels change when they are engaged in fishing, producing a 'fishing signature.' Fishing for different species produces different signatures, so this positional information can in fact be used to generate information on fishing activities: pp. 3-4.

⁸⁹ See Franckx, *supra* note 17; Rosemary Gail Rayfuse, "The United Nations Agreement on Straddling and Highly Migratory Fish Stocks as an Objective Regime: A Case of Wishful Thinking?" (1999) 20 *Australian Yearbook of International Law* 253.

⁹⁰ Rayfuse, *Non-Flag State Enforcement*, *supra* note 36 at 71 ff. The earliest example she cites is a fisheries convention adopted in 1882: Convention for Regulating the Police of the North Sea Fisheries, 6 May 1882, 9 *Martens Nouveau Recueil Général des Traités* (Ser. 2) 556. See also Kaare Bangert, "The Effective Enforcement of High Seas Fishing Regimes: The Case of the Convention for the Regulation of the Policing of the North Sea Fisheries of 6 May 1882" in Guy S. Goodwin-Gil & Stefan Talmon eds., *The Reality of International Law: Essays in Honour of Ian Brownlie* (Oxford: Clarendon Press, 1999) 1. There are many contemporary examples as well. Rayfuse mentions in particular the Convention on Future Multilateral Cooperation in the Northwest Atlantic Fisheries, 24 October 1978, 1135 *U.N.T.S.* 369; Convention on the Conservation and Management of Antarctic Marine Living Resources, 5 May 1980, 9 *A.T.S.* 1982 [Anadromous Stocks Convention]; Convention for the Conservation of Anadromous Stocks in the North Pacific Ocean, 11 February 1992, 22 *Law of the Sea Bulletin* 21 (1993); Convention on the Conservation and Management of Pollock Resources in the Central Bering Sea, 16 June 1994, 34 *I.L.M.* 67.

⁹¹ It is often thought that this provision is more ground-breaking than it is, in that it is frequently understood to create an exception to the *pacta tertiis* rule. However, only states parties to the FSA – in other words, states that have accepted the provision that effects the incorporation by reference described above – are bound by it. This is the conclusion reached by Rayfuse after a thorough examination of several possible arguments for the contrary position: Rayfuse, *Non-Flag State*, *supra* note 36 at 82 ff.

enforcement,⁹² but it is perhaps more appropriate to regard it as another step in a trend departing from the exclusivity principle rather than a major break from that principle. And while this provision certainly represents progress toward flag state accountability, it remains limited. Beyond boarding, inspection and securing evidence of non-compliance,⁹³ the coastal state has few powers: the matter must be turned over to the flag state, which is obligated to investigate and, where warranted, prosecute, or to authorize the coastal state to carry out an investigation.⁹⁴

Another effort toward innovation was made within the FSA regarding actions to be taken if the flag state is unable or fails to carry out its duties.⁹⁵ However, the final text on the matter is highly ambiguous. Under certain conditions, an inspecting vessel may escort a ship to port.⁹⁶ It is not clear what exactly the coastal state may do once the foreign-flagged vessel is in its port. The FSA simply states, at art. 21(16), that '[a]ction taken by States other than the flag State having engaged in activities contrary to subregional or regional conservation and management measures shall be proportionate to the seriousness of the violation.' We might conclude that if the coastal state were meant to have jurisdiction to prosecute, this would have been explicitly stated in the FSA, since this would be an exceptional measure.⁹⁷ Rayfuse and Orrego Vicuña reach the opposite conclusion: since port state enforcement is not ruled out, and indeed is even hinted at, it must be permitted.⁹⁸

Consideration of the travaux préparatoires seems to support the more conservative position that non-flag state arrest and prosecution can be permitted only with explicit flag state consent. A number of proposals to grant inspecting states more extensive powers were circulated.⁹⁹ The final text is certainly ambiguous, but the

⁹² Ibid. at 74. Hayashi describes it as an "entirely new exception to [the] principle of exclusive flag state jurisdiction." Moritaka Hayashi, "The Straddling and Highly Migratory Fish Stocks Agreement" in *Developments in International Fisheries Law*, supra note 9, 55 at 68.

⁹³ Securing of evidence may only be carried out if there are clear grounds for believing that a vessel has engaged in any activity contrary to ... conservation and management measures." FSA, supra note 6, art. 21(5).

⁹⁴ Ibid. at art. 21(6).

⁹⁵ Ibid., art. 21(8).

⁹⁶ The flag state is given three working days from notification of an inspection to respond to the inspecting state: *ibid.*, at art. 21(6). If it fails to do so, and if there "are clear grounds for believing that a serious violation has taken place," the coastal state may escort the ship to port: *ibid.* at art. 21(8). Serious violations are defined at art. 21(11), *ibid.*, and include fishing without a valid licence, fishing contrary to a moratorium, using prohibited gear, and failing to keep records or falsifying records. It bears emphasising that at this point the inspectors would have been on board the vessel for at least three days.

⁹⁷ See José A. Yturriaga, *The International Regime of Fisheries: From LOSC 1982 to the Presential Sea* (The Hague: Martinus Nijhoff, 1997) at 213-15.

⁹⁸ Rayfuse, *Non-Flag State Enforcement*, supra note 36 at 331; Vicuña, supra note 27 at 253.

⁹⁹ For example, it was proposed that the inspecting state be empowered in certain circumstances to detain the vessel until the flag and the inspecting state agree on the action to be taken: *Draft Convention on the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks on the High Seas* (submitted by the delegations of Argentina, Canada, Chile, Iceland

negotiating history does not support an interpretation that would give powers of arrest and prosecution to either the inspecting or the port state.

The ambiguity of art. 21 of the FSA suggests that this provision is a placeholder, awaiting the emergence of consensus. It cannot at present serve to ground a credible argument that the inspecting or port state may arrest or detain a vessel without permission of the flag state. However, if the underlying consensus among states begins to move towards non-flag state powers of arrest and prosecution, the plausibility of this generous interpretation of art. 21 may be enhanced. Furthermore, the fact that the provision leaves the door open to non-flag state enforcement, including prosecution, may encourage states to push for greater powers for inspecting states and port states in the context of regional agreements. At the very least, this provision does not operate as a brake on such developments.

The most recently adopted regional inspection regime is that of the North-East Atlantic Fisheries Commission (NEAFC), which entered into force in May 2007. This regime is closely modelled on the FSA regime, but there are some important distinctions. First of all, it is not possible for a non-flag state to order a vessel to port.

and New Zealand), 14 July 1993, A/Conf.164/L.11 at art. 11, in Jean-Pierre Lévy & Gunnar G. Schram, *United Nations Conference on Straddling Fish Stocks and Highly Migratory Fish Stocks: Selected Documents* (The Hague: Martinus Nijhoff, 1993) at 148. See also Draft Convention on the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks on the High Seas (submitted by the delegations of Argentina, Canada, Chile, Iceland and New Zealand), 28 July 1993, A/Conf.164/L.11/Rev.1 at art. 11, reproduced in Lévy & Schram, *ibid.* at 163. Another proposal would have given even greater power to the inspecting state: 48 hours after notification of the flag state, its consent to proceed with arrest and prosecution would be presumed: Moritaka Hayashi, "Enforcement by Non-flag States on the High Seas under the 1995 Agreement on Straddling and Highly Migratory Fish Stocks" (1996) 9 *Georgetown International Environmental Law Journal* 1 at 16.

These proposals regarding the inspecting state were not incorporated into drafts of the FSA, but certain of these drafts would have given some powers to detain vessels to the port state. It was contemplated up until the 5th (penultimate) session that the port state would be entitled to detain the vessel until the flag state took control of it: Negotiating Text Prepared by the Chairman, 2nd Sess., United Nations Conference on Straddling Fish Stocks and Highly Migratory Fish Stocks, 23 November 1993, A/Conf.164/13 at art. 33, reproduced in Lévy & Schram, *ibid.* at 73; Revised Negotiating Text Prepared by the Chairman, 3rd Sess., United Nations Conference on Straddling Fish Stocks and Highly Migratory Fish Stock, 30 March 1994, A/CONF. 164/INF/7 at art. 38, in Lévy & Schram, *ibid.* at 437; Draft Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks, 23 August 1994, A/CONF.164/22 at art. 21(3), in Lévy & Schram, *ibid.* at 621. This language disappeared by the 5th session: Draft Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks, 11 April 1995, A/CONF.164/22/Rev.1 at art. 22, in Lévy & Schram, *ibid.* at 671.

Discovery of evidence of a serious violation¹⁰⁰ results in notification of the flag state,¹⁰¹ which must have an inspection of the vessel carried out within 72 hours¹⁰² and may order the ship to port.¹⁰³ If the flag state fails to order the vessel to port, it must justify this decision.¹⁰⁴ This approach is fairly typical of inspection provisions adopted by RFMOs,¹⁰⁵ although not all RFMOs require flag states to provide justification for failing to take action in the face of a violation.

Port state inspections

There are many ways in which port states can enhance the effectiveness of regional and global measures to combat IUU fishing. Port states exercise jurisdiction on the basis of territoriality: ports are part of the territory of states, and ships voluntarily in port come under port state jurisdiction in the same way as an individual in a foreign state is subject to the laws of that state.¹⁰⁶ It is on this basis that port states may inspect vessels, including those not flagged to them. The FSA recognises this right, and adds that states have a duty to take measures to promote the effectiveness of conservation and management measures.¹⁰⁷ No obligation to carry out inspections is created; however, the port state “may” conduct an inspection.¹⁰⁸

Obligations to inspect do exist under certain RFMOs. For example, the NAFO Measures require port states to have inspectors present when a fishing vessel that has been fishing in the NAFO area makes a port call, but no obligation to inspect the vessel is imposed unless the catch is offloaded.¹⁰⁹ The CCAMLR requires port states to conduct inspections of all vessels carrying *Dissostichus* spp.¹¹⁰ Under the

¹⁰⁰ Serious violations are defined at art. 29, and include fishing without a valid license, fishing without a quota or exceeding a quota; use of prohibited fishing gear; serious mis-recording of catches; fishing for stocks for which a moratorium has been imposed; and concealing vessel markings, to name a number of examples.

¹⁰¹ NEAFC, *supra* note 86, art. 30(1).

¹⁰² *Ibid.* at art. 30(2).

¹⁰³ *Ibid.* at art. 30(5) and (6).

¹⁰⁴ *Ibid.* at art. 30(7).

¹⁰⁵ CCAMLR System of Inspection, adopted at the 7th Meeting of CCAMLR, 1988 (Report of the 7th Meeting of the Commission, amended in 1993, 1994, 1995, 1996, 1996, 1999 and 2006, available at <http://www.ccamlr.org/pu/e/e_pubs/bd/pt9.pdf> (consulted 23 April 2007); NAFO Measures, *supra* note 83, arts 34 and 35.

¹⁰⁶ See Ted L. McDorman, “Port State Enforcement: A Comment on Article 218 of the 1982 Law of the Sea Convention” (1997) 28 *Journal of Maritime Law and Commerce* 305; DeSombre, *Flagging Standards*, *supra* note 4 at 87-91.

¹⁰⁷ FSA, *supra* note 6 at art. 23(1).

¹⁰⁸ FSA, *ibid.* at art. 23(2) & (3).

¹⁰⁹ NAFO Measures, *supra* note 83, art. 39(1).

¹¹⁰ CCAMLR Catch Documentation Scheme, *supra* note 82, para. 1.

NEAFC Scheme, 15% of vessels engaged in landings or transshipments of fish are to be inspected annually,¹¹¹ whereas all non-party vessels are to be inspected upon entering port.¹¹²

The FAO has been working on its own and in conjunction with the International Maritime Organization (IMO) to develop and strengthen port state duties to take measures to discourage IUU fishing. This initiative is inspired by the rather successful model developed by the IMO with respect to merchant vessels' compliance with rules regarding construction, equipment, crewing and operation standards.¹¹³ Through a series of memoranda of understanding,¹¹⁴ various groups of states have reached agreements regarding the exercise of port state jurisdiction to carry out inspections on vessels visiting their ports. The Paris Memorandum of Understanding (Paris MOU),¹¹⁵ concluded under the auspices of the IMO, provides a good example of how this coordinated exercise of jurisdiction functions. Its first important feature is a certain restraint: it does not call upon states to exercise enforcement jurisdiction against vessels in violation of applicable standards, even though they have the right to do so under general principles of law of the sea and public international law.¹¹⁶ Port states party to the MOU must inspect a certain percentage of ships calling at their ports,¹¹⁷ must not allow sub-standard vessels to continue their voyage until deficiencies have been rectified,¹¹⁸ and must close their ports to ships that have previously failed inspections and are flagged to states on a black list.¹¹⁹

¹¹¹ NEAFC Scheme, *supra* note 86, art. 25(1).

¹¹² *Ibid.* at art. 40(1).

¹¹³ See Ted L. McDorman, "Regional Port State Control Agreements: Some Issues of International Law" (2000) 5 *Ocean and Coastal Law Journal* 207 at 216.

¹¹⁴ See *ibid.* For a list of these memoranda of understanding. See also Richard W.J. Shiferli, "Regional Concepts of Port State Control: A Regional Effort with Global Effects" (1994) 11 *Ocean Yearbook* 202; Ted L. McDorman, "Port State Control: A Comment on the Tokyo MOU and Issues of International Law" (1997) 7 *Asian Yearbook of International Law* 229; DeSombre, *Flagging Standards*, *supra* note 4 at 91 ff.

¹¹⁵ Paris Memorandum of Understanding on Port State Control, 1 July 1982, 21 I.L.M. 1 [Paris MOU]. The current version of the MOU, as amended in 2005, is available at <<http://www.parismou.org>> (accessed 15 March 2006).

¹¹⁶ Nor does it prevent them from doing so: the Paris MOU, *ibid.*, contains a saving clause at art. 3.4. McDorman describes this as a limitation on state authority that is found in practice, but not in law: McDorman, "Port State Enforcement", *supra* note 97 at 309. In other words, states refrain from exercising this jurisdiction as a matter of convenience or comity, but do not recognise that this restraint flows from a lack of authority at international law.

¹¹⁷ Paris MOU, *supra* note 115, art. 1.3. Inspection procedures are provided for at section 3, and include obligations to conduct inspections on ships with certain risk factors: art. 3.2 and 3.3; Annex 1, s. 8.

¹¹⁸ *Ibid.* at arts. 3.9.1 ff.

¹¹⁹ *Ibid.* at art. 3.10.5. The obligation to prevent access also applies where vessels have not rectified deficiencies as required by the inspecting port state: art. 3.12.1. Of the 21 ships on the

By agreeing to this common set of obligations, port states have reduced the incentive not to exercise their jurisdiction with respect to the standards in question because they are assured that other states in the region are also exercising their jurisdiction, allowing no one to gain an unfair competitive advantage. Foreign vessels and the states to which they are flagged are in turn given a potentially powerful incentive to comply with these rules and meet the relevant standards, as there is a greater likelihood that violations will be detected and sanctions imposed.

Port state obligations under the Paris MOU and other such IMO initiatives on port state control do not generally apply with respect to fishing vessels,¹²⁰ but a series of new obligations and instruments are being developed to enhance port state control of fishing vessels.¹²¹ The FAO's Model Scheme on Port State Measures, for example, recommends a number of port state measures, including an inspection regime.¹²² This model scheme, like the IMO MOUs on port state control, proposes that a certain percentage of foreign vessels be inspected.¹²³

Changing the incentive structure: sanctions and other consequences of violations

We have seen that non-flag states, acting individually and through RFMOs, have various sources of information about fishing activity and apparent violations of conservation measures on which to draw. The question now arises what use may be made of this information.

Because of the limited capacity of non-flag states to carry out prosecutions or impose sanctions, one possible response to the discovery of an apparent violation is to turn the information over to the flag state for investigation and possible prosecution. Interestingly, this approach has proven effective on many occasions, with flag states

2004 black list, four are parties and one is a signatory: Black/Grey/White List, online: Paris Memorandum of Understanding on Port State Control <<http://www.parismou.org/>>.

¹²⁰ Report of the Joint FAO/IMO Ad Hoc Working Group on Illegal, Unreported and Unregulated Fishing and Related Matters, Rome, 9-11 October 2000, FAO Fisheries Report No. 637, FIIT/R637 (En). The report notes that many IMO instruments on port state control specifically exclude fishing vessels; in other cases, many fishing vessels are excluded because of size limitations contained in those instruments: *ibid.* para. 36. See also Terje Lobach, "Port State Control of Foreign Fishing Vessels" May 2002, FAO Legal Papers Online #29 at 10.

¹²¹ On the utility of a coordinated approach to port state measures to combat IUU fishing, see Terje Lobach, "Measure to be Adopted by the Port State in Combating IUU Fishing," Document AUS:IUU/2000/15 (2000), available at <<http://www.fao.org/DOCREP/005/Y3274E/y3274e0h.htm>> (consulted 24 April 2007), paras 34 ff.

¹²² Food and Agriculture Organization of the United Nations, Model Scheme on Port State Measures to Combat Illegal, Unreported and Unregulated Fishing, in Report of the Technical Consultation to Review Port State Measures to Combat Illegal, Unreported and Unregulated Fishing, 2 September 2004, FAO Fisheries Report No. 759 FIPL/R759 (En) [FAO Model Scheme]. Inspections are provided for in s. 3; port closures in s. 4.

¹²³ *Ibid.* at App. E at art. 2.8, n. 2.

responding either by prosecuting the vessel master or by deregistering the vessel.¹²⁴ In the latter case, the vessel is deemed to be stateless ('assimilated to stateless' in law of the sea parlance) and the inspecting state is free to take enforcement action.

In cases where, for various reasons, actors – vessels or flag states – are less vulnerable to the simple dissemination of information on their non-compliant behaviour, but an expectation has been created that punishment will be imposed on defectors, the mere knowledge that defection has been identified can lead to changes in behaviour. Indeed, the knowledge that various means of information-gathering are at work and that defections could be identified may operate as a deterrent. This deterrent effect can be greatly enhanced if information-gathering and -disseminating systems operate in a rigorous, systematic and coordinated way.

In order to make these kinds of threats credible, however, non-flag states have to be able to impose some kinds of consequences on vessels and flag states that violate rules. Non-flag states may have little ability to carry out prosecutions themselves, but there are various ways in which they can use the jurisdiction that they do have over foreign-flagged vessels to impose costs on those vessels.

The state in the best position to impose consequences on vessels and flag states in violation of applicable customary and conventional rules is the port state, which, while it cannot prosecute for violations that occurred outside its jurisdictional waters, can impose a range of consequences on vessels found to have violated conservation measures. This has been referred to as 'justifiable discrimination'.¹²⁵ These include prohibitions on landings and transshipments of catch, port closures, denial of port services¹²⁶ and trade-related measures.¹²⁷ The effectiveness of these measures can be greatly enhanced if port states act in concert, for example by constituting black lists of vessels found to have engaged in IUU fishing, as well as black lists of the states to which they are flagged. Sanctions can then be imposed by all members of RFMOs against black-listed vessels and flag states.

¹²⁴ Rayfuse, *Non-Flag State Enforcement*, supra note 36 at 124, 131. These incidents occurred in the North Pacific. On similar cases in the North-East Atlantic, see Henriksen et al., supra note 77 at 95.

¹²⁵ High Seas Task Force, *Promoting Responsible Ports: Final Report* (2006), para. 10. The High Seas Task Force is composed of ministerial-level representatives of the Governments of Australia, Canada, Chile, Namibia, New Zealand, and the United Kingdom, as well as representatives of the World Wildlife Fund, World Conservation Union (IUCN) and the Earth Institute at Columbia University and was organized under the auspices of the Organization for Economic Cooperation and Development (OECD).

¹²⁶ *Ibid.* at para. 11.

¹²⁷ Cathy A. Roheim and Jon G. Sutinen, "Trade and Marketplace Measures to Promote Sustainable Fishing Practices" (Geneva and Paris: International Centre for Trade and Sustainable Development and High Seas Task Force, 2006) at ss. 2.3 and 2.4. One of the recommendations flowing from the review conference of the FSA was for states to implement these measures: Report of the Review Conference on the Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks, A/CONF.210/2006/15, 5 July 2006, para. 43(d).

As noted above, the FSA creates an obligation on port states 'to take measures ... to promote the effectiveness of ... conservation and management schemes.'¹²⁸ Among the measures the port state may take are inspections (as already mentioned)¹²⁹ and prohibitions of landings and transshipments.¹³⁰ The FAO's non-binding International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing also calls upon states to take these measures to deter IUU fishing.¹³¹

Use of black lists

Black lists of vessels discovered engaging in IUU fishing constitute an excellent means of coordinating and systematizing the imposition of sanctions on those vessels and their flag states. A number of regional conventions make use of black lists. These lists are compiled with great care, based on a variety of sources of information on the fishing activities of identified vessels and finalised only after the flag state concerned has had an opportunity to review the evidence against its vessel and make representations.¹³² In the case of the CCAMLR, whose scheme extends to members as well as non-members, a difficulty is presented by the fact that Commission members adopt the final IUU list by consensus, which means that a state whose vessel has been placed on the provisional list effectively holds a veto over its inclusion on the final list.¹³³ However, member states that seek to exercise this privilege expose themselves to strong criticism by other Commission members, and the vessel remains on the provisional list.¹³⁴

¹²⁸ FSA, *supra* note 6, art. 23(1).

¹²⁹ *Ibid.* at art. 23(2).

¹³⁰ *Ibid.* at art. 23(3).

¹³¹ International Plan of Action, *supra* note 15 at para. 52.

¹³² NAFO Measures, *supra* note 83, paras 43 ff; NEAFC Scheme, *supra* note 86, arts 44 ff.; CCAMLR Non-Party Compliance Scheme, *supra* note 82; CCAMLR, Scheme to Promote Compliance by Contracting Party Vessels with CCAMLR Conservation Measures, 2006, CCAMLR Conservation Measure 10-06 [CCAMLR Party Compliance Scheme].

¹³³ There is little in the way of concrete consequences flowing from inclusion on the provisional list, beyond a certain stigma attached both to the vessel and to the flag state: see CCAMLR Contracting Party Compliance Scheme, *ibid.* at para. 8.

¹³⁴ At the XXVth Meeting of the CCAMLR (2006), a Russian vessel, the *Volna*, was placed on the provisions IUU list. Russia disputed various aspects of the evidence against this vessel and refused to consent to its inclusion in the final IUU list. A number of members – the UK, New Zealand, Australia, France, the European Community and the USA – challenged Russia's assessment of the evidence and expressed regret over Russia's veto: Report of the XXVth Meeting of the Commission (2006), paras 9.18-33. The UK representative stated that "Russia appeared to be in a state of self-denial over the illegal activities of the *Volna*." *Ibid.* at para. 9.18.

The consequences that can be imposed on vessels on black lists include ineligibility for licenses to fish¹³⁵ or for registration in RFMO member states;¹³⁶ prohibitions on chartering blacklisted vessels;¹³⁷ prohibitions to land, tranship, refuel or re-supply;¹³⁸ prohibitions applicable to other vessels flagged to RFMO members on accepting transshipments or refuelling or supplying blacklisted vessels;¹³⁹ and, in some cases, port closures.¹⁴⁰

It is interesting to note that blacklisting is applied not only to members of RFMOs but to non-members as well. Indeed, some RFMOs, such as NAFO, maintain black lists only of non-NAFO members.¹⁴¹ Others, such as CCAMLR, apply blacklisting and related penalties to member and non-member vessels alike. At first glance, this is puzzling, since by definition non-members are not legally bound to respect the conservation measures of RFMOs, unless, of course, they are parties to the FSA. Although these RFMOs do not explicitly name the basis on which they take such measures against non-member states and their vessels, it is apparent that they are operating on a combination of port state jurisdiction and customary international obligations to establish and implement conservation measures and to cooperate in so doing, as well as the responsibilities of flag states found in customary law.

Trade-related measures

The FAO, in its International Plan of Action, not only recommends that states take trade measures to deter IUU fishing but in fact calls on them to do so:

States should take all steps necessary, consistent with international law, to prevent fish caught by vessels identified by the relevant regional fisheries management organization to have been engaged in IUU fishing being traded or imported into their territories. The

¹³⁵ NAFO Measures, *supra* note 83, art. 48(c); CCAMLR Contracting Party Compliance Scheme, *supra* note 82, para. 18(i) and (ii); CCALMR Non-Contracting Party Compliance Scheme, *supra* note 82, para. 22(i); NEAFC Scheme, *supra* note 86, art. 45(2)(b).

¹³⁶ NAFO Measures, *ibid.* at art. 48(e); CCAMLR Contracting Party Compliance Scheme, *ibid.* at para. 18(vii); CCAMLR Non-Contracting Party Compliance Scheme, *ibid.* at para. 22(vi); NEAFC Scheme, *ibid.* at art. 45(2)(d).

¹³⁷ NAFO Measures, *ibid.* at art. 48(d); CCAMLR Contracting Party Compliance Scheme, *ibid.* at para. 18(vi); CCAMLR Non-Contracting Party Compliance Scheme, *ibid.* at para. 22(v); NEAFC Scheme, *ibid.* at art. 45(2)(c).

¹³⁸ The CCAMLR compliance schemes, by denying access to ports to IUU vessels, effectively deny them access to these services.

¹³⁹ NAFO Measures, *supra* note 83, art. 48(b); CCAMLR Contracting Party Compliance Scheme, *supra* note 82, para. 18(iii); CCAMLR Non-Contracting Party Compliance Scheme, *supra* note 82, para. 22(ii).

¹⁴⁰ CCAMLR Contracting Party Compliance Scheme, *ibid.* at para. 18(iv); CCAMLR Non-Contracting Party Compliance Scheme, *ibid.* at para. 22(iii); NEAFC Scheme, *supra* note 86, art. 45(2)(a).

¹⁴¹ The provisions for the constitution of IUU lists are contained in Chapter VI of the NAFO Measures, *supra* note 83.

identification of the vessels by the regional fisheries management organization should be made through agreed procedures in a fair, transparent and non-discriminatory manner. Trade-related measures should be adopted and implemented in accordance with international law, including principles, rights and obligations established in WTO Agreements, and implemented in a fair, transparent and non-discriminatory manner. Trade-related measures should only be used in exceptional circumstances, where other measures have proven unsuccessful to prevent, deter and eliminate IUU fishing, and only after prior consultation with interested States. Unilateral trade-related measures should be avoided.¹⁴²

The measures in question can be grouped into three categories: the requirement of documentation on catch as a condition for transshipment and landing, as well as import and re-export of catch; prohibitions on landings and transshipments by certain vessels; and trade-restrictive measures.¹⁴³

A small group of RFMOs have taken up this call. The International Commission for the Conservation of Atlantic Tuna (ICCAT) and the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR), maintain programmes for the documentation of southern bluefin tuna¹⁴⁴ and *Dissostichus* spp.,¹⁴⁵ respectively. Import or re-export of these fish is permitted only when a validated document accompanies the shipment.¹⁴⁶

It appears that these programmes are having some impact. An estimated 90% of *Dissostichus* in trade are documented, and there is some evidence that

¹⁴² International Plan of Action, *supra* note 15, para. 66. This recommendation was also made by the FSA Review Conference, *supra* note 127, para. 43(i).

See also Marcus Haward, "IUU Fishing: Contemporary Practice" in Elferink and Rothwell, *supra* note 76, at 94. .

¹⁴³ Roheim and Sutinen, *supra* note 127 at 2.

¹⁴⁴ This programme was created through Recommendation by ICCAT concerning the ICCAT Bluefin Tuna Statistical Document Program [ICCAT Bluefin Document Program], 1992-01 and has been modified subsequently by Recommendations 1992-03, 1997-04 and 1998-12. ICCAT called in 2000 for the extension of the programme to swordfish and bigeye tuna: ICCAT, Recommendation on Establishing Statistical Document Programs for Swordfish, Bigeye Tuna, and Other Species managed by ICCAT, 00-22, entered into force 26 June 2001. Effect was given to this recommendation for swordfish (ICCAT, Recommendation establishing a Swordfish Statistical Documentation Program, 01-22, entered into force 21 September 2002) and respecting bigeye tuna (ICCAT, Recommendation concerning the ICCAT Bigeye Tuna Statistical Documentation Programme, 01-21, entered into force 21 September 2002) in 2001.

¹⁴⁵ CCAMLR Catch Documentation Scheme, *supra* note 82, art. 2.

¹⁴⁶ ICCAT Bluefin Document Program, *supra* note 144; CCAMLR Catch Documentation Scheme, *ibid.* See Haward, *supra* note 142 at 95 ff.; FAO, Implementation of the International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing (Rome, 2002) [Implementation of the IPOA] at 50 ff.; Roheim and Sutinen, *supra* note 127 at s. 2.1. Other catch documentation programmes exist, under the Commission for the Conservation of Southern Bluefin Tuna and the Indian Ocean Tuna Commission: see Roheim and Sutinen, *supra* note 127 at 3.

uncertified stocks fetch a lower price than certified stocks.¹⁴⁷ Furthermore, estimated IUU catches of *Dissostichus* have fallen significantly in recent years.¹⁴⁸

A proposal has been placed before the CCAMLR to impose trade restrictions on states whose vessels are involved in IUU fishing for *Dissostichus*.¹⁴⁹ This additional step has already been taken, somewhat gingerly, by the International Commission for the Conservation of Atlantic Tuna (ICCAT).¹⁵⁰ Under ICCAT's Resolution concerning Trade-Related Measures, the Commission examines information on IUU fishing activities by members and non-members from a wide variety of sources¹⁵¹ and, after giving the state concerned an opportunity to respond to the evidence,¹⁵² the matter is turned over to the Compliance Committee, which can propose to the Commission the imposition of trade measures. If the Commission decides to go this route, it makes a recommendation to its members to take such measures.¹⁵³

¹⁴⁷ Rachel Baird, "CCAMLR Initiatives to counter Flag State Non-Enforcement in Southern Ocean Fisheries" (2005) 36 *Victoria U. Wellington L. Rev.* 733 at 735-6.

¹⁴⁸ Report of the Standing Committee on Implementation and Compliance, Report of the 25th Meeting of the CCAMLR (2006), Annex 5, para. 2.2. But see Roheim and Sutinen for a discussion of problems and weaknesses in the programme: *supra* note 127 at 3-4.

In a study conducted by Judith Swan, RFMOs were asked to report on, among other things, the effectiveness of measures to combat IUU fishing. Swan summarises the CCAMLR's response as follows: "In general, IUU fishing activities have been localized and dealt with effectively on a case-by-case basis. ... [M]ost perceived offenders have been identified" "International action and Responses by Regional Fishery Bodies or Arrangements to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing" FAO Fisheries Circular No. 996 (2004) at 36. Similarly, the CCSBT reported that "[t]he trade documentation scheme has eliminated flag of convenience vessels from a number of countries ... because the market has been made inaccessible:" *ibid.*

¹⁴⁹ Proposal for a Conservation Measure concerning the Adoption of a Trade Measure to Promote Compliance, Report of the 25th Meeting of the CCAMLR (2006), Annex 9.

¹⁵⁰ Resolution by ICCAT concerning Trade Measures, 03-15, 19 December 2003 [ICCAT Trade Measures]. See Implementation of the IPOA, *supra* note 146 at 49 ff.

Trade measures have been taken, under these Trade Measures and predecessor measures, against Cambodia (ICCAT, Recommendation concerning the Lifting of Bigeye Tuna Trade Restrictive Measures against Cambodia, 2004, ICCAT SANC 04-15), Sierra Leone (ICCAT, Recommendation for Trade Restrictive Measures on Sierra Leone, 2002, ICCAT 02-19), Georgia (ICCAT, Recommendation for Bigeye Tuna Trade Restrictive Measures on Georgia, 2003, ICCAT 03-18 [ICCAT Georgia Measures]) and Saint Vincent and the Grenadines (ICCAT, Recommendation concerning the Trade Sanction against St. Vincent and the Grenadines, 200, ICCAT 02-20).

¹⁵¹ Parties and cooperating states have obligations to collect and transmit data on landings and imports of tuna: ICCAT Trade Measures, *ibid.* at para. 1. In addition, the Commission gathers data on compliance with conservation and enforcement measures and obligations to promote compliance with such measures: *ibid.* at para. 2. Additional information includes "the catch data compiled by the Commission; trade information on these species obtained from National Statistics; the ICCAT statistical document programs; the list of the IUU vessels adopted by ICCAT, as well as any other information obtained in the ports and on the fishing grounds:" *ibid.* at para. 2(b).

¹⁵² *Ibid.* at para. 3.

¹⁵³ *Ibid.* at para. 7.

As with IUU vessel lists, trade measures may be imposed by ICCAT against member and non-member states alike. In the provision referring to non-members, reference is made to non-compliance with obligations under international law to co-operate with ICCAT in the conservation and management of tuna and tuna-like species, in particular, by not taking measures or exercising effective control to ensure that their vessels do not engage in any activity that undermines the effectiveness of ICCAT conservation and management measures.¹⁵⁴ These 'obligations under international law' refer, no doubt, to obligations contained in the LOSC and in customary law to establish conservation and management measures and to cooperate with other states in their establishment.

Trade measures are not a perfect instrument, of course. The task of gathering information sufficient to establish violations of international obligations and/or activities that undermine the effectiveness of conservation measures requires a good deal of diligence and collaboration. This information is inevitably incomplete, and presumptions must be relied on. As a result, such conclusions are open to challenge by the states concerned. Furthermore, it is difficult to ensure that contracting parties will impose trade measures consistently and rigorously. They may face their own incentives not to follow through on punishment strategies. Trade disputes involve a number of costs, the expense of international negotiations and arbitral procedures and damage to economic and political relationships being the two most obvious ones. Indeed, under ICCAT, the Commission can only recommend to contracting parties that measures be imposed. Furthermore, the possibility of challenges before the WTO is ever-present.

The question of the legality of multilateral trade measures under the WTO is a complex and fascinating one, and the issue cannot receive comprehensive treatment here. Nevertheless, it is important to try to understand the seriousness of these concerns by focusing on multilateral trade measures taken in virtue of an international convention. Related issues of unilateral measures¹⁵⁵ and ad hoc measures which states seek to justify as counter-measures will not be discussed here.¹⁵⁶

¹⁵⁴ Ibid. at para. 2(a)(ii).

¹⁵⁵ A trade dispute developed between Chile and the EC regarding port closures pursuant to domestic law. The dispute was submitted to both the International Tribunal for the Law of the Sea and the World Trade Organisation, but a settlement was reached between the two countries. This case is different from those discussed above in that it involved the unilateral imposition of port closures. See Andrew Serdy, "See You in Port: Australia and New Zealand as Third Parties in the Dispute between Chile and the European Community over Chile's Denial of Port Access to Spanish Vessels Fishing for Swordfish on the High Seas" (2002) 3 *Melbourne Journal of International Law* 79.

¹⁵⁶ McDorman concludes that "[t]rade measures as a reprisal while rare, are countenanced in international law" but goes on to note that "[t]his statement is not free of controversy:" Ted L. McDorman, "Fisheries Conservation and Management and International Trade Law" in *Developments in International Fisheries Law*, supra note 42, 501 at 518.

McDorman, in discussing the legality of trade measures taken in virtue of an international convention, concludes that such measures pose no difficulties between parties, but raises questions about their legality when imposed against non-parties.¹⁵⁷ McDorman's discussion points to a further distinction: he contemplates the case in which the trade measures target fish taken in violation of a particular rule and notes that the exception in GATT concerning measures for the management of an exhaustible resource could be invoked. However, this raises doubts about the legality of a more aggressive strategy that targets not only fish caught in violation of relevant measures but all fish caught under the flags of states whose vessels have been involved in IUU fishing. The justification would be that, given the failure of the flag state to live up to its responsibilities, all fish caught by that state's vessels are suspect.¹⁵⁸ Elizabeth DeSombre is fairly optimistic about the chances of carefully crafted multilateral environmental measures passing WTO muster: she notes that WTO dispute resolution panels have demonstrated 'an increasing acceptance of environmental protection as a legitimate reason for restricting trade, as long as restrictions on trade are applied in a non-discriminatory way, are designed specifically for environmental protection, and are accompanied by multilateral attempts to address the environmental issue.'¹⁵⁹

DeSombre's conclusions on the effectiveness of trade and related measures are also cautiously optimistic, particularly with respect to their impact on the behaviour of flag states. She acknowledges that there is strong evidence that vessels are simply reflagging in response to more rigorous enforcement by these states, and notes that the impact on estimated rates of IUU fishing has been uneven and in some cases not particularly significant.¹⁶⁰ However, even these rather limited measures can have some impact, at least at the level of states. It may never be the case that all the port states of the world exploit their jurisdictional powers to reduce IUU fishing, but as individual states and RFMOs gain experience working with these measures, they may come to be more widespread. It will thus become increasingly difficult and costly – though probably never impossible or unfeasible – for vessels to land IUU catches.

¹⁵⁷ Ibid. at 522.

¹⁵⁸ This approach has been taken by ICCAT: see the discussion in DeSombre, "Fishing under Flags of Convenience", *supra* note 4 at 79 ff. For a recent example of such a measures, see ICCAT's trade measures against Georgia: ICCAT Georgia Measures, *supra* note 150.

¹⁵⁹ DeSombre, *ibid.* at 89; McDorman echoes this: McDorman, *supra* note 156 at 523, as does Haward, *supra* note 142 at 94. The Committee on Trade and Environment of the WTO wrote, with respect to trade measures under ICCAT and CCAMLR: "Both are considered to provide examples of appropriate and WTO-consistent (i.e. non-discriminatory) use of trade measures in multilateral environmental agreements." World Trade Organization, *Environmental Benefits of Removing Trade Restrictions and Distortions: The Fisheries Sector*, WT/CTE/W/167 at 9.

¹⁶⁰ DeSombre, "Fishing under Flags of Convenience," *supra* note 4 at 89-90.

COMBATING IUU FISHING – RATIONAL CHOICE AND CONSTRUCTIVIST PERSPECTIVES

Attempts to modify the regime of high seas fishing to give it some of the characteristics of a club good are relatively easy to analyse using a rational choice approach. Given the limited jurisdiction of non-flag states over vessels fishing on the high seas, there is only a small number of points of contact between those vessels and states wishing to enforce conservation measures. Nevertheless, these points of contact exist, and recent developments in high seas fisheries law demonstrate a growing willingness on the part of states belonging to RFMOs to exploit these points of contact and impose costs both on the vessels themselves and on the states that flag them. Simply put, the vessels require fuel, supplies, maintenance, facilities for landing catch and, of course, markets. The point of the measures examined above is, equally simply, to deny IUU vessels access to these facilities and services. Similarly, by imposing restrictions on port access, trade measures and other penalties not only on vessels actually engaged in IUU fishing but on all vessels flagged to states that tolerate IUU fishing, the benefits that flag-of-convenience states gain from remaining outside fisheries conventions and failing to exercise their flag state responsibilities are diminished. Furthermore, by applying these measures in systematic and coordinated ways across whole regions, increasingly strong signals are sent both to IUU vessels and the states that flag them that there will be costs associated with this behaviour.

When sanctions constitute a credible threat and are carefully crafted, they can have a significant impact on incentive structures and on the behaviour of actors. As we have sought to demonstrate in the above discussion, neither the horizontal structure of international law nor the open-access nature of high seas fisheries need pose insurmountable obstacles to the establishment of potentially effective punishment strategies. However, rational choice approaches encounter difficulties in explaining how to convince relevant actors to put incentive-shifting punishment strategies in place to begin with. It surely did not escape the attention of members of RFMOs that the use of port state jurisdiction combined with trade measures could be an effective deterrent to IUU fishing activities. Their reasons for failing for so long to move in this direction, and their eventual decision to begin experimenting with such measures, must be explained in some other way. After all, the choice of a regime that establishes general objectives rather than specific obligations and avoids the imposition of sanctions for non-compliance is generally not made because it is believed that such a regime will prove more effective, but rather because the regime's member states have not yet developed the kind of deep consensus about the issue-area that would permit a more rigorous regime. As Brunnée and Toope argue:

The effectiveness of formal mechanisms is likely to depend upon the degree to which they are embedded in contextual regimes where shared perspectives have evolved – and political and legal legitimacy has been recognized and accepted. ... Now it may be that over time a contextual regime will harden in such a way that

binding mechanisms of dispute resolution become useful. But such mechanisms are best defined at that point, so that they are truly appropriate to the level of cooperation present within the regime.¹⁶¹

Rational choice theorists such as Downs are of course interested in a much broader array of strategies than the lawyerly approach of creating binding dispute settlement mechanisms with sanctioning authority. Nevertheless, effective punishment strategies do not arise *ex nihilo*, and constructivist approaches in particular can help describe how they evolve and come to be accepted, and how language and discourse contribute to the operation of punishment strategies and their effectiveness.

As we have seen, many rational choice scholars see the use of language as important: in addition to actually imposing sanctions, actors can signal their willingness and capacity to do so. The difference between constructivist and rational choice approaches is that the latter do not posit that normative understanding or consensus is reached through these communications: they serve to transmit information, on the basis of which actors can make rational decisions balancing costs against benefits.

Some rational choice theorists have responded to constructivist challenges by acknowledging that actors' preferences may include promotion of certain values or conformity with legal or moral norms. Abbott and Snidal conclude that

[t]he coordinating value of law as cheap talk in the rationalist account depends solely on its ability to signal ends (equilibria) and not at all on the substantive content of the talk. Thus, a purely rational account can explain neither why "legal" as opposed to some other language is used nor why international legal language so commonly includes extensive normative content.¹⁶²

They note that, along with law's capacity to change incentive structures and to coordinate behaviour – both well-understood in rationalist accounts of law – it is also able to engage 'processes of persuasion, education, socialization, and legitimation.'¹⁶³

Constructivist approaches do not necessarily contradict many of the central insights of rational choice theory into the question of incentives, but they do present these issues in a theoretical framework that has a greater capacity to evoke and explain the role of language and understandings in these transactions. Constructivism permits the identification of linkages between

¹⁶¹ Jutta Brunnée and Stephen J. Toope, "Environmental Security and Freshwater Resources: Ecosystem Regime Building" (1997) 91 *American Journal of International Law* 26 at 47.

¹⁶² Abbott & Snidal, *supra* note 65 at 152.

¹⁶³ *Ibid.* at 151. This approach seems to be a departure from an earlier position taken in Kenneth W. Abbott et al., "The Concept of Legalization" (2000) 54 *International Organization* 401, and possibly a response to the constructivist critique of "Legalization" by Finnemore and Toope: Martha Finnemore & Stephen Toope, "Alternatives to 'Legalization': Richer Views of Law and Politics" (2001) 55 *International Organization* 743, which is cited in Abbott & Snidal, *supra* note 65 at n. 2.

these isolated communications and broader networks of meaning, including legal systems. Actors' interactions with legal systems may be instrumental or normative; generally speaking, they are a bit of both, depending on the actor and the context.

Let us now turn to the more specifically discursive aspects of punishment strategies. Rational choice theorists would accept that punishment strategies can be more effective if not only actual incentive structures but also expectations about costs and benefits are changed, and promulgating legal rules is one way to do this.¹⁶⁴ Discursive activity such as the identification of IUU vessels, communications between RFMO member and non-member states regarding such vessels, and various other precursor activities to the imposition of penalties can strengthen these signals. At the same time, this sort of discursive activity can weaken these signals if it becomes apparent that evidence of IUU activity is endlessly discussed but no decisions or action are ever taken.

If we accept that most vessel owners and masters will not be susceptible to accepting responsibilities and obligations in the name of ecosystem protection alone, we need not make the same assumption about the states to which they are actually or potentially flagged. These states may be more susceptible to persuasion, and punishment strategies may be relied on if they are not. But even where persuasion is likely to be ineffective, appeals to the objectives of the legal regime and to normativity in general will hardly be out of place.

When RFMOs seek to impose costs on non-member states, they do well to embed these punishment strategies in the language of law and legitimacy. A non-cooperating state that faces punishment by an RFMO of which it is not a member is likely to include a legal element in its response to the RFMO: the defector will invoke rules related to the principles of high seas freedom, exclusive flag state jurisdiction and *pacta tertiis*, among others. If the RFMO cannot in turn invoke legal rules in defence of its action, it will suddenly find itself in the role of defector. This may weaken the system of rules on which the RFMO seeks to rely. Of course, the RFMO need not remain mute in the face of charges that it is violating rules of international law; it can invoke the principle of territorial sovereignty as it applies to ports, as well as the network of obligations in customary and conventional law regarding conservation, cooperation and the exercise of flag state responsibilities. It can also appeal to a series of principles of a moral or quasi-legal order that inform international fisheries law, notably sustainable use and the ecosystem approach. After all, RFMOs cannot ignore the fact that it is the sovereign right of states to choose whether or not to enter into international conventions. Furthermore, states' refusal to become parties to conventions is not necessarily done in bad faith; there may be perfectly legitimate objections to a convention or certain of its provisions. RFMOs therefore need to justify their decision to take action against non-parties. If the RFMO cannot in turn invoke legal rules in defence of its action, it will suddenly be cast in the role of violator of international law.

¹⁶⁴ See Downs, "Enforcement", *supra* note 9 at 325.

RFMOs seeking to impose costs on non-cooperating third states can invoke the overarching objectives of sustainable exploitation of fisheries resources to support their actions, but ultimately they require a legal basis as well, which can be provided with reference to general principles of the law of the sea, including obligations to cooperate in the conservation and management of high seas fisheries resources and obligations to adopt conservation and management measures. They can also point to the principle of territorial sovereignty as it applies to ports.

If utterances by the RFMO about the legitimacy of its actions and the illegitimacy of non-cooperation are not effective in bringing about changes in behaviour, then the punishment strategy informed by a rational choice perspective remains. However, it is unlikely that these utterances will be mere cheap talk, at least not from the point of view of all relevant actors. It must be recalled that these exchanges take place before a wide and varied audience made up of states, vessel owners and masters, fishing communities, international organisations, and the many and varied actors that make up civil society.

Constructivists in particular understand that the series of utterances that comprise the kinds of claims and counter-claims described above are far from isolated events; they take place against a backdrop of shared understandings and social institutions that give them meaning and anchor them in the shared reality of the various interested actors. These actors may not agree, for example, on all the implications of a principle such as freedom of the high seas, but they do agree that the principle exists and also agree to a great extent on its core meaning. If one actor argues with greater skill and persuasiveness than another, making one interpretation seem more compelling, then the other actor is forced either to concede or to try to shift the debate onto different terrain. As shared understandings about the meaning of freedom of high seas fisheries begin to shift towards a conception of freedom sharply conditioned by responsibility and obligation, it becomes much more difficult to justify avoidance of and failure to implement conservation and management obligations. Defectors thus have an increasingly difficult time standing on their sovereign rights.

CONCLUSION

This paper has outlined some emerging trends that affect the high seas freedom to fish and the principle of flag state jurisdiction and pointed to changes to existing rules that could be implemented without significant difficulty. I have also sought to draw attention to the discursive power of law while at the same time taking seriously the challenges that IUU fishing poses to constructivist approaches.

Action on at least three fronts is warranted. To begin with, important changes are slowly taking place at the level of conceptual frameworks applicable to the law of the seas. The content of the high seas freedom to fish, for example, has changed significantly in recent decades, and the notion that non-flag states should have authority to carry out measures such as boarding and inspection is gaining ground. It remains to be seen whether the more significant inroads made into this freedom by the FSA will take hold, but the notion that the vessels of all states have unconditional access to all high seas fisheries no longer obtains. It may be argued that, without the power to enforce these limitations on high seas freedoms, coastal states will be at the

mercy of recalcitrant flag states. However, this conclusion does not take into sufficient account the discursive power of international law: if it becomes generally recognised that vessels of non-parties do not have access to regulatory areas, then those states will no longer be able to invoke the high seas freedom to fish as a justification for their vessel's actions and their own inaction.

On a second front, more extensive use of surveillance and monitoring and, where conventions provide for it, boarding and inspection could make the oceans a much more transparent arena. Flows of information about levels of compliance are essential to the success of a regulatory regime. States whose vessels are routinely observed engaging in illegal fishing will be aware that their lack of diligence is being observed and reported throughout the region and, potentially, around the world. The incentive of maintaining a good reputation, as well as good relations with other fishing states, may well be sufficient – along, in appropriate circumstances, with diplomatic and political pressure – to bring about better compliance.

Third, even if it is not possible in the short term to grant coastal and port states the right to detain, arrest and prosecute vessels for high seas violations, there are various ways in which the incentive structure within which those vessels operate can be altered. Denial of port access is one possibility, and, if done in a coordinated fashion, as it is in the CCAMLR regime, it could impose significant costs on non-complying vessels. Denial of market access is another. Of course, when this issue is raised, concerns about compliance with WTO rules inevitably arise, and these concerns may well be grounded. However, it should not be assumed that such measures constitute WTO violations, or that they cannot be constructed in such a way as to be in compliance with such measures.

There is a fourth front on which significant progress must be made: the salience of fisheries conservation and management, and marine ecosystem protection more generally, must be significantly increased within the machinery of governments and in the public imagination. It is striking that government representatives and citizens reacted quickly and strongly to dolphin mortality in tuna fisheries, and equally striking that the fate of tuna themselves is simply not showing up on political and public radar. If citizens and politicians cannot be made to care about this issue, all the monitoring technology, port inspections and trade measures in the world will not make a significant difference. Law cannot bear the burden of fisheries conservation and management alone.

