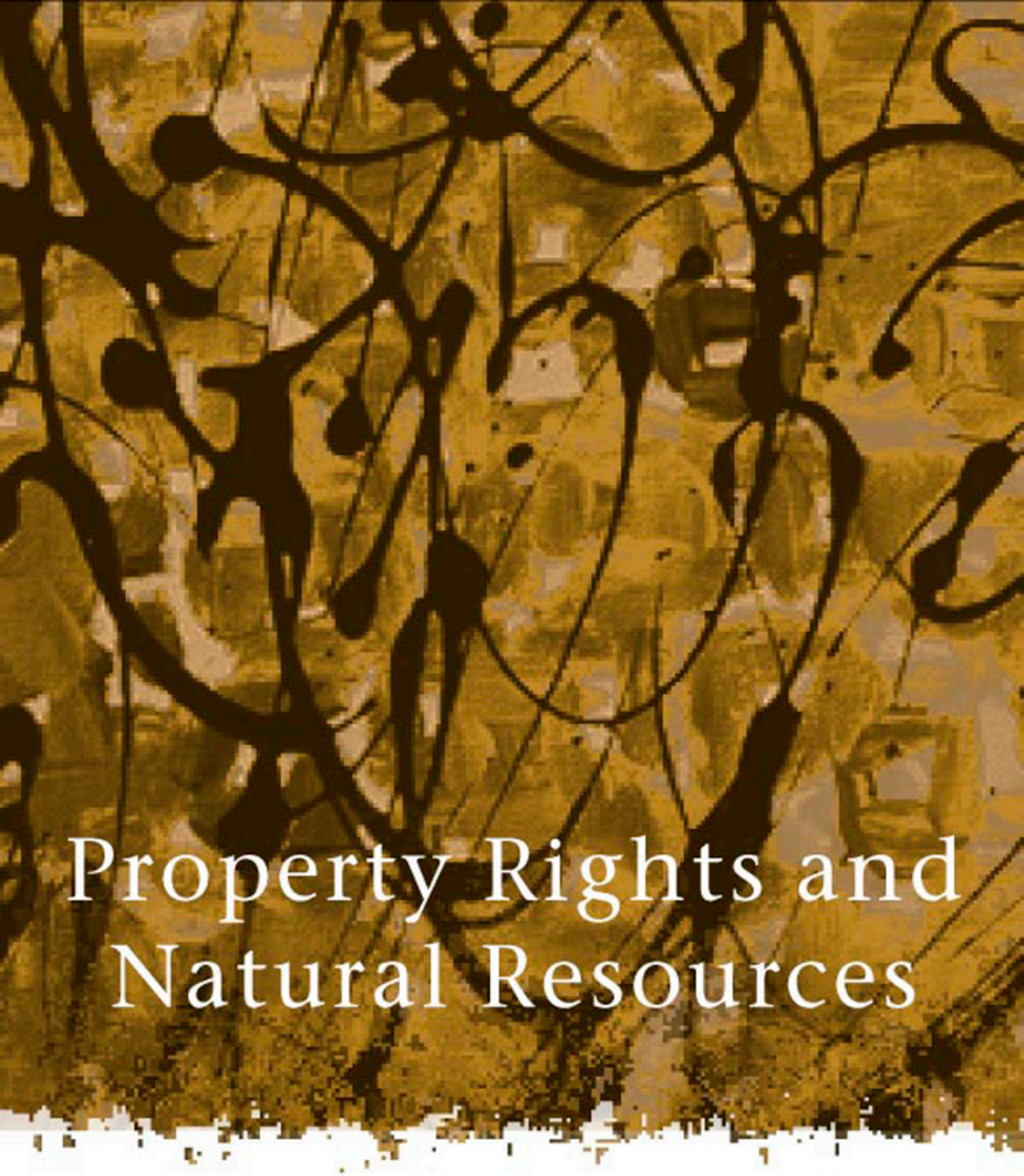

Property Rights and Natural Resources

Richard Barnes

STUDIES IN INTERNATIONAL LAW

PROPERTY RIGHTS AND NATURAL RESOURCES

The use of private property rights to regulate natural resources is a controversial topic because it touches upon two critical issues: the allocation of wealth in society and the conservation and management of limited resources. This book explores the extension of private property rights and market mechanisms to natural resources in international areas from a legal perspective. It uses marine fisheries to illustrate the issues that can arise in the design of regulatory regimes for natural resources.

If property rights are used to regulate natural resources then it is essential that we understand how the law and values embedded within legal systems shape the development and operation of property rights in practice. The author constructs a version of property that articulates both the private and public function of property. This restores some much needed balance to property discourse. He also assesses the impact of international law on the use of property rights—a much neglected topic—and shows how different legal and socio-political values that inhere in different legal regimes fundamentally shape the construction of property rights. Despite the many claimed benefits to be had from the use of private property rights-based management systems, the author warns against an uncritical acceptance of this approach and, in particular, questions whether private property rights are the most suitable and effective arrangement of regulating of natural resources. He suggests that much more complex forms of holding, such as stewardship, may be required to meet physical, legal and moral imperatives associated with natural resources.

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RAB
Hull, Nov 2008

Contents

Abbreviations

ACE	annual catch entitlement
AFMA	Australian Fisheries Management Authority
AJIL	*American Journal of International Law*
ASIL Proc	*American Society of International Law Proceedings*
BFSP	*British and Foreign State Papers*
BYIL	*British Yearbook of International Law*
CBD	Convention on Biological Diversity
CDQ	community development quota
DFO	Department of Fisheries and Oceans (Canada)
ECHR	European Court of Human Rights
ECJ	European Court of Justice
EEZ	Exclusive Economic Zone
EFZ	Exclusive Fishing Zone
EIA	Environmental Impact Assessment
EJIL	*European Journal of International Law*
FAO	Food and Agriculture Organisation
FMP	Fishery Management Plan
FSA	United Nations Agreement relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks 1995
GYIL	*German Yearbook of International Law*
HR	*Recueil des cours de l'académie de droit international de l'Haye*
IACHR	Inter-American Court of Human Rights
ICJ	International Court of Justice
ICLQ	*International and Comparative Law Quarterly*
IDI	Institut de Droit International
IJIL	*Indian Journal of International Law*
ILC	International Law Commission
ILM	*International Legal Materials*
ILR	*International Law Reports*
ISA	International Seabed Authority
IFQ	individual fishing quota
IQ	individual quota
ITLOS	International Tribunal for the Law of the Sea
ITQ	individual transferable quota
ITSQ	individual transferable share quota
JLS	*Journal of Legal Studies*

JP Econ	*Journal of Public Economics*
LAP	limited access privilege
LQR	*Law Quarterly Review*
LNTS	*League of Nations Treaty Series*
MSY	maximum sustainable yield
NRC	National Research Council
ODIL	*Ocean Development and International Law*
OECD	Organisation for Economic Development and Cooperation
PCA	Permanent Court of Arbitration
PCIJ	Permanent Court of International Justice
QAA	Quota Appeals Authority (New Zealand)
QMS	Quota Management System (New Zealand)
RIAA	Reports of International Arbitral Awards
SFR	statutory fishing right
SURF	stock use right in fisheries
TAC	total allowable catch
TACC	total allowable commercial catch
TDSR	transferable dynamic stock right
TURF	territorial use rights in fisheries
UKTS	*United Kingdom Treaty Series*
UN	United Nations
UNCLOS	United Nations Conference on the Law of the Sea
UNGA	United Nations General Assembly
UNTS	*United Nations Treaty Series*
Ybk ILC	*Yearbook of the International Law Commission*

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1

Natural Resources, International Law and Property

1. SOME PROBLEMS CONCERNING THE REGULATION OF NATURAL RESOURCES

The story of international and domestic attempts to manage global and domestic fisheries provides a stark illustration of the difficulties of regulating natural resources. If one traces the state of world fisheries over the last 10–15 years then the same gloomy statistics are revealed. According to the Food and Agriculture Organisation, approximately half of commercial stocks are fully exploited and producing catches at the maximum sustainable limit.[1] A further 25 per cent of stocks are overexploited, significantly depleted or recovering from depletion. Global exploitation of the most important marine fish stocks continues to follow the trends observed in previous years of increased pressure on limited resources, and it is generally acknowledged that drastic management measures are necessary to reverse this. There may be numerous and nuanced reasons for this, but at root it results from a failure to establish instruments and institutions capable of regulating the common pool nature of the oceans and their resources. This failure occurs at both international and domestic levels.

The term 'common pool' describes the quality of the resource, rather than the legal regime applying to it. Thus a common pool resource may be owned by the State, community or an individual. It may even remain beyond the remit of ownership. Marine fish stocks are a paradigmatic common pool resource, which may in turn be subject to regimes of open access, common property, collective property or private property. A common pool resource has two key attributes. First, it is costly to exclude individuals from the resource through physical or legal means. Secondly, the benefits consumed by one person are subtracted from the benefits available to others.[2] The cost of excluding access to common pool resources tends to result in them being left as open-access regimes. Historically,

[1] FAO, *The State of World Fisheries and Aquaculture 2006* (Rome, FAO, 2007) 7.

[2] Eg, an aircraft in flight will occupy airspace, which cannot be occupied at the same time by another aircraft, or clean air that one person inhales cannot simultaneously be used by another person.

most common pool fishery resources have remained so because of the practical difficulties of regulating a diffuse and fungible resource in a difficult and frequently hostile environment. Open access has also been perpetuated by the powerful ideal of freedom of the high seas and its entrenchment in law.[3] Although the influence of this doctrine has been much reduced as States assumed exclusive control over large areas of the oceans, many fisheries remain open-access. Some remain open-access by default because they cannot be physically circumscribed or fall beyond the bounds of single States. Such fisheries, including most high seas fisheries, are not susceptible to domestic property rules. Others remain open-access because of conscious political decisions to guarantee all members of society access to a resource. Yet others remain open-access because the entity assigned formal ownership of the resource cannot effectively exclude non-owners from the resource. Although strictly speaking this regime is *de jure* property, it is in practice a *de facto* open-access regime. This type of open-access regime tends to arise when States nationalise a resource absent the financial or institutional capacity to regulate it.[4]

There has been much attention to the problems of resource degradation arising from open-access regimes. In 1968, a seminal article by the economist Garrett Hardin gave rise to the phrase 'tragedy of the commons'.[5] Using the example of a common pasture, Hardin argued that individual herdsmen, as rational beings, will increase their use of a common pasture knowing that they will receive all the benefits from such use to themselves (such as increased animal stock), whilst sharing any negative costs (such as overgrazing). This scenario will eventually result in the degradation of the pasture through overuse, and can be replicated for any resource system, be it common land, forestry or fisheries. Hardin's approach has been subsumed within the wider literature on the economic inefficiency of open-access regimes. According to this literature, there are three root causes of economic inefficiency.[6] First, open access results in the dissipation of economic rent.[7] Because no-one owns the resource, there is nothing to stop anyone from capturing the benefits of a resource, which leads to

[3] See further, ch 5.

[4] See generally, D Curtis, *Beyond Government: Organisations for Common Benefit* (London, Macmillan, 1991). Such regimes have arisen in respect of nationalised inshore fisheries and forests. See, eg, D Feeny, 'Agricultural Expansion and Forest Depletion in Thailand, 1900–1975' in JF Richard and RP Tucker (eds), *World Deforestation in the Twentieth Century* (Durham, Duke University Press, 1988) 112; JC Cordell and MA McKean, 'Sea Tenure in Bahia, Brazil' in DW Bromley *et al* (eds), *Making the Commons Work: Theory Practice and Policy* (San Francisco, ICS Press, 1992) 183.

[5] G Hardin, 'Tragedy of the Commons' (1968) 162 *Science* 1243.

[6] These issues are detailed in E Ostrom, R Gardiner and JM Walker, *Rules, Games, and Common-Pool Resources* (Ann Arbor, University of Michigan Press, 1994).

[7] Economic rent is the 'surplus income derivable from certain scarcities of goods in the area, where the price of the good deviates from the exact cost of bringing them to the market': J Christman, *The Myth of Property* (Oxford, Oxford University Press, 1994) 20.

an unproductive race to capture as much of the resource as possible. In the context of fishing, no fisherman has an incentive to restrict his catch, because if he does then other fishermen will take what is left, so the incentive to catch as much as possible pushes fishing efforts beyond sustainable levels. Eventually, a point will be reached when resource exploitation is saturated and no rent is gained.[8] The second inefficiency arises due to the high transaction and enforcement costs incurred if the participants in the resource regime try to devise rules to reduce the detrimental effects of overuse.[9] In the face of increased competition for a scarce resource and in the absence of capital and labour controls fishermen will intensify their fishing effort and expend more capital in order to obtain a larger share of the catch, with the result that more capital (vessels and equipment) and effort are expended than is necessary to catch the same amount of fish. Thus the third inefficiency arises from low productivity. In an open-access regime users have no way of exclusively capturing the benefits of their own efforts. As such there is no incentive to maintain or enhance the resource pool. Economic theory shows how the introduction of private property allows for these inefficiencies to be remedied and an interest in the maintenance of the resource pool to be established. Accordingly, many economists have been strong advocates of private property systems, a point to which we shall return later.[10]

Although the nature of the common pool resource lends itself to over-exploitation, it is really the historical failure to establish effective regulatory alternatives to open access that have resulted in degradation of many fish stocks. There have been a number of reasons for this regulatory failure. The first was simple ignorance of the problem. When stocks were large and fishing fleets small there was no reason to restrict access to fisheries. The abundance of fish meant that there was more than enough for each fisherman.[11] So regulation was kept *de minimis* in accordance

[8] See F Knight, 'Some Fallacies in the Interpretation of Social Cost' (1924) 38 *Quarterly Journal of Economics* 582; HS Gordon, 'The Economic Theory of a Common Property Resource: The Fishery' (1954) 62 *Journal of Political Economy* 124.

[9] See RH Coase, 'The Problems of Social Cost' (1960) 3 *Journal of Law and Economics* 1; H Demetz, 'Toward a Theory of Property Rights' (1967) *American Economic Review* 347.

[10] Private property gained more general recognition as the best (most efficient) means of regulating resources largely as a result of the seminal work of Alchian and Demetz. AA Alchian, 'Some Economics of Property Rights' (1961) *Rand Paper No 2316*. See also Demetz, *Ibid*. More particular to fisheries was the influential works of Gordon and Scott. See Gordon, n 8 above, and AD Scott, 'The Fishery: The Objectives of Sole Ownership' (1955) 63 *Journal of Political Economy* 116. For useful review of the emergence of economics as a key factor in fisheries management systems, see S Cunningham, 'The Increasing Importance of Economics in Fisheries Regulation' (1983) 34 *Journal of Agricultural Economics* 69.

[11] In 1497 Raimondo di Soncino, the Duke of Milans's envoy in London, reported John Cabot's return from North America, recounting stories of men catching fish by the mere lowering of a basket into the sea. See M Kurlanski, *Cod. A Biography of the Fish that Changed the World* (London, Vintage, 1999) 48–9.

with the regime of the freedom of the high seas. As no change was perceived in the amount of fish available for capture and no reliable scientific data existed to show that stocks were being depleted, this approach to regulation continued with few significant changes until the 20th century. Indeed, as recently as 1969 it was still acceptable to consider as alarmist that collapse of fish stocks was due to overfishing.[12]

The second reason was the basic lack of authority of States to regulate most marine resources. As a general rule, States only enjoy authority under international law to regulate activities within the scope of their territorial sovereignty or for their nationals, and until the mid-20th century States simply lacked authority to regulate ocean space or resources beyond a small belt of contiguous waters. The *Behring Fur Seals Arbitration* of 1893 illustrates the basic difficulty here. In a dispute concerning the right of America to establish and enforce conservation measures over seals in the Behring Sea against the United Kingdom, the tribunal held that America could not enforce any rights of property or protection over seals outside the three-mile zone of territorial waters in the absence of any agreement by other States.[13] Of course, States could impose obligations on nationals and vessels flying their flag on the high seas, or enter into agreements with other States to adopt conservation measures, and there is evidence of this in practice.[14] However, such conservation measures were quite limited and *ad hoc* in their treatment of resources. Moreover, they were quite dependant for their effectiveness on States accepting voluntary and anti-commercial restrictions on their freedom to fish. It was not until the adoption of the United Nations Convention on the Law of the Sea 1982 (hereinafter 'Law of the Sea Convention') that this position changed.[15]

The Law of the Sea Convention established a global framework for the regulation of ocean space. Crucially, it marked the culmination of a process of gradual recognition of exclusive coastal State authority over maritime space. Indeed, one of the assumptions underpinning the Law

[12] Scheiber cites William S Chapman, as an internationally accepted expert on fishery science and policy, who predicted huge increases in the size of harvests by the year 2000: HN Scheiber, 'Ocean Governance and the Marine Fisheries Crisis. Two Decades of Innovation—and Frustration' (2001) 20 *Virginia Environmental Law Journal* 119, 120, referring to WS Chapman, *Seafood and World Famine—A Positive Approach* (Address to the Symposium on Food from the Sea, 23 Sept 1969).

[13] Award of the Tribunal of Arbitration Constituted Under the Treaty Concluded at Washington, the 29th of February 1892, Between the United States of America and her Majesty the Queen of the United Kingdom of Great Britain and Ireland. Reproduced in (1912) 6 *AJIL* 233–41.

[14] For example, the principle of abstention, which recognised the need to stabilise a fishery at the level of its maximum yield, was embodied in several conventions including: Pelagic Sealing Convention 1911, 104 *BFSP* 175; US/Canada Halibut Fisheries Convention 1923, 32 *LNTS* 94; the US/Canada Convention on Sockeye Salmon 1930, 184 *LNTS* 305.

[15] United Nations Convention on the Law of the Sea, 1833 *UNTS* 3; (1982) 21 *ILM* 1261.

of the Sea Convention was that exclusive coastal State jurisdiction was a necessary pre-requisite for conservation measures aimed at limiting access and preventing over-exploitation of fish stocks.[16] Notably, the scholarship of economists, such as Francis Christy, advocates the extension of private property type regimes into fisheries, provided strong intellectual support for the enclosure movement represented by the exclusive economic zone (EEZ).[17] If States enjoyed exclusive authority, they could limit access to and use of fisheries as 'owners' of the resource, thereby preventing the tragedy of the commons. Indeed, many States were quick to use this power of 'ownership' to exclude foreign fishermen from their coastal waters.[18] However, although this was intended to address the tragedy, all that resulted was the expansion of domestic fishing effort to fill the gaps left by foreign fishermen and the relocation of distant water fishing effort onto the high seas. Thus the tragedy of the commons was perpetuated by domestic fishermen in the EEZ, and intensified on the high seas by foreign fishing fleets dislocated from traditional fishing grounds.[19] Although the enclosure of ocean space allowed domestic fisheries regulation to be applied over significant areas of ocean space, the period since the adoption of the Law of the Sea Convention is marked by the failure of coastal States to adopt effective regulatory controls on fishing activities within domestic jurisdiction, and the inability of States to agree effective international controls over residual high seas fisheries.[20]

[16] D Christie, 'The Conservation and Management of Stocks Located Solely Within the Exclusive Economic Zone' in E Hey (ed), *Developments in International Fisheries Law* (The Hague, Kluwer Law,1999) 395, 396. In general the focus on extended coastal State jurisdiction dominated much of the international law literature on fisheries regulation in the post-World War II period. See LL Leonard, *International Regulations of Fisheries* (Washington, Carnegie Endowment for International Peace, Division of International Law, 1944); FG Garcia Amador, *The Exploitation and Conservation of the Resources of the Sea: A Study of Contemporary International Law* (Leyden, AW Sythoff, 1959); DM Johnston, *The International Law of Fisheries. A Framework for Policy-Oriented Inquiries* (New Haven, Yale University Press, 1965); AW Koers, *The International Regulation of Marine Fisheries. A Study of Regional Fisheries Organisations* (West Byfleet, Fishing News, 1973); S Oda, *International Control of Sea Resources* (Leyden, AW Sythoff, 1963); GH Knight, *Managing the Sea's Living Resources: Legal and Political Aspects of High Seas Fisheries* (Lexington, Massachusetts, Lexington Books, 1977).

[17] FT Christy Jr, 'Fisheries Goals and the Rights of Property' (1969) 2 *Transactions of the American Fisheries Society* 369.

[18] The term ownership is used loosely here. The exclusive rights of the coastal State are balanced by important conservation and management duties. These public responsibilities may operate as an important check on the private right of States to exploit their resources. See further, chs 6 and 7.

[19] G Pontecorvo, 'The Enclosure of the Marine Commons: Adjustment and Redistribution in World Fisheries' (1988) 12 *Marine Policy* 361.

[20] See R Barnes, 'The LOSC: An Effective Framework for Domestic Fisheries Conservation' in D Freestone, R Barnes and D Ong (eds), *The Law of the Sea. Progress and Prospects* (Oxford, Oxford University Press, 2006) 233; KJ Gjerde, 'High Sea Fisheries Management under the Convention on the Law of the Sea' *Ibid* 281.

In contemporary commercial fisheries the most widespread type of regulatory measure are input controls.[21] These measures seek to limit the number of people fishing or the efficiency of the fishing effort, rather than directly control how much fish is taken from the oceans.[22] Input controls include gear restrictions, closed seasons and vessel size restrictions.[23] They are attractive to regulators because they are simple to design and easy to implement.[24] Unfortunately, such measures tend to fail because fishermen react by channelling their fishing effort in areas that are not subject to restriction.[25] For example, the use of closed seasons often leads to 'fishing derbies', where fishermen use bigger and more effective vessels to catch as much as possible in the shorter fishing season. Of course regulations may be combined to prevent this type of response, and when various methods are combined there has been a degree of success. However, this may lead to extremely complex and cumbersome regulatory structures, which are difficult to enforce and result in highly inefficient fishing practices.[26] They are also criticised for requiring too much government intervention, which in turn may increase the costs of fishing and generate hostility and possibly non-compliance in fishing communities.[27] Crucially, input controls do not offer fishermen an incentive to decrease their share of the catch, and it is generally agreed that these measures have contributed much to the collapse of fish stocks.[28]

[21] See generally, OECD, *Towards Sustainable Fisheries: Economic Aspects of the Management of Living Resources* (Paris, OECD, 1997).

[22] They are termed input controls as they effectively increase the cost to the fisherman of participating in the fishery. D Wesney, 'Applied Fisheries Management Plans: Individual Transferable Quotas and Input Control' in Neher *et al* (eds), *Rights Based Fishing* (London, Kluwer Academic, 1989) 153, 163. See also NB McKeller, 'Restrictive licensing as a fisheries management tool', *FERU Occasional Paper* No 6 (1977).

[23] See National Research Council, *Sharing the Fish. Toward a National Policy on Individual Fishing Quotas* (Washington DC, National Academy Press, 1999) 115.

[24] See generally, MP Sissenwine and JE Kirkley, 'Fishery management techniques: Practical aspects and limitations' (1982) 6 *Marine Policy* 43. They may also be effective if used in the right circumstances. For example, Greenburg and Herrmann note some success with pot limits in the red king crab fishery. JA Greenberg and M Herrmann, 'Allocative Consequences of Pot Limits in the Bristol Bay Red King Crab Fishery: An Economic Analysis' (1994) 14 *North American Journal of Fisheries Management* 307.

[25] LG Anderson, *The Economics of Fisheries Management* (London, Johns Hopkins University Press, 1977) 204.

[26] B Muse and K Schelle, *Individual Fishermen's Quotas: A Preliminary Review of Some Recent Programs (CFEC89–1)* (1989). *Cf* MP Sissenwine and JE Kirkley, 'Fishery management techniques: Practical aspects and limitations' (1982) 6 *Marine Policy* 43; M Hermman, JA Greenberg, and KR Criddle, 'Proposed Pot Limits for the Adak Brown King Crab Fishery: A Distinction Between Open Access and Common Property' (1998) 5 *Alaska Fishery Research Bulletin* 25.

[27] D Wesney, n 22 above, 164.

[28] See 'Loaves and Fishes' *The Economist* (21 March 1998) vol 246, 12; FT Christy, 'The death rattle of open access and the advent of property rights regimes in fisheries' (1996) 11 *Marine Resource Economics* 287; PH Pearse 'From open access to private property: Recent

The inability of States to control over-fishing, to reduce fishing capacity, to base decisions on adequate science, to set sustainable thresholds and adhere to them, and to take into account the impact of fishing on the wider ecosystem are the hallmark failings of contemporary domestic fisheries management.[29] Similar problems are also a feature of high seas fisheries, with the additional problem that inadequate mechanisms exist for securing the agreement and implementation of conservation rules.[30] Although the rate of increase in exploitation of fish stocks has levelled out during the past decade, the need to remove wasteful and inefficient fishing practices that have a detrimental impact on the long-term sustainability of fish stocks remains a priority. Consonant with the general trend towards market-based regulatory systems worldwide, there has been a move towards the use of property rights and market-based mechanisms to regulate fisheries, most prominently in Australia, Canada, Iceland, New Zealand, Norway and the USA.[31] Such systems have a relatively short history in terms of fisheries management practice. In 1961, economist James Crutchfield fielded the idea of limiting entry via the creation of property rights in the form of a licence.[32] At the same conference Anthony Scott suggested that a fishing right could also be attached to a vessel as a means of limiting entry.[33] The principal rationale for these suggestions was to reduce overcapitalisation and thereby facilitate greater efficiency in fishing effort. This approach was taken up by Christy, who has been particularly influential in advocating rights-based management systems. Although a keen advocate of private property rights, even Christy is careful to note the difficulties that would arise with initial allocations and the consolidation of property rights contrary to the public interest.[34] Such warnings were prophetic and a number of States have since faced considerable pressure and litigation in the face of the 'privatisation' of public fisheries.[35]

innovations in fishing rights as instruments of fisheries policy' (1992) 23 *Ocean Development and International Law* 71; P Copes 'A Critical Review of Individual Quotas as a Device in Fisheries Management' (1986) 62 *Land Economics* 278.

[29] See Barnes, n 20 above, 233.

[30] See Gjerde, n 20 above, 282.

[31] This practice will be reviewed in detail in ch 8. An important review of practice is to be found in two volumes edited by Ross Shotton for the FAO: see R Shotton (ed) *Use of Property Rights in Fisheries Management*, vol 1 (Rome, Food and Agriculture Organisation of the United Nations, 2000); R Shotton (ed), *Use of Property Rights in Fisheries Management*, vol 2 (Rome, Food and Agriculture Organisation of the United Nations, 2000) 29.

[32] J Crutchfield, 'Regulation of the Pacific Coast Halibut' in R Hamlisch (ed), *Economic Effects of Fishery Regulation: Report of an FAO Expert Meeting at Ottawa, June 12–17, 1961* (1962) 354.

[33] A Scott, 'The Economics of Regulating Fisheries', *Ibid* 25 *ff*.

[34] FT Christie Jr, 'Fisheries Goals and the Rights of Property' (1969) 1 *Transactions of the American Fisheries Society* 369, 369–70.

[35] See further, ch 8.

As early as 1968 Canada moved towards a limited entry fishery.[36] However, such an approach was fairly uncommon because prior to the consolidation of exclusive coastal State authority over adjacent seas there was no means of enforcing rights against foreign fishing interests. A further extension of limited entry schemes against domestic fishing interests was then delayed for a short time because it was felt that the exclusion of foreign vessels would allow for the satisfactory conservation of fish stocks.[37] However, as noted above, within the EEZ the domestic capacity quickly expanded to fill the lacuna and resulted in an equally destructive derby for fish between domestic fishermen. In response to this, property rights-based systems started to gain greater attention from the 1970s onwards.[38]

Private property-based mechanisms, such as individual transferable quotas (ITQs), grant exclusive capture rights to individual fishermen or fishing interests. By limiting the number of such grants to fishermen, entry to a fishery is limited, thereby tackling the problem at the heart of the tragedy of the commons. In recent years there has emerged a considerable body of literature, primarily in the field of economics and political science that is devoted to examining, and more often than not advocating, the potential benefits of property rights-based fisheries management.[39] In practice, many such private property rights-based systems are still quite weak in the sense that the holder of the right does not enjoy all or the full extent of the typical incidents of ownership, such as the right to alienate or manage the property. Accordingly, many economists advocate a strengthening of the property rights.[40] As the argument runs, stronger property rights will result in greater efficiency, generate stronger interests

[36] GA Fraser, 'Limited entry: Experience of the British Columbia Salmon Fishery' (1979) 36 *Journal of the Fisheries Research Board of Canada* 754.

[37] See National Research Council, *Sharing the Fish. Toward a National Policy on Individual Fishing Quotas* (1999) 32 (hereinafter 'NRC').

[38] See generally, RB Rettig and JC Ginter, *Limited Entry as a Fishery Management Tool: Proceedings of a National Conference to Consider Limited Entry as a Tool in Fishery Management 1978* (Seattle, University of Washington Press, 1980).

[39] See generally, FT Christy and A Scott, *The Common Wealth in Ocean Fisheries: Some Problems of Growth and Economic Allocation* (Baltimore, Johns Hopkins Press for Resources for the Future, 1965); PA Neher, *et al* (eds), n 22 above; EA Keen, 'Common property in fisheries. Is sole ownership an option?' (1983) 17 *Marine Policy* 197; PH Pearse, 'Fishing rights, regulations and revenues' (1981) 15 *Marine Policy* 135; M Taylor, 'The Economics and Politics of Property Rights and Common Pool Resources' (1992) 3 *Natural Resources Journal* 633; PH Pearse, n 28 above; R Arnason, 'Ocean fisheries management: recent developments' (1993) 17 *Marine Policy* 334; RE Townsend, 'Transferable dynamic stock rights' (1995) 19 *Marine Policy* 153; BL Crowley (ed), *Taking Ownership. Property Rights and Fishery Management on the Atlantic Coast* (Halifax, Nova Scotia, Atlantic Institute for Market Studies, 1996); RQ Grafton *et al*, 'Private Property Rights and Crises in World Fisheries: Turning the Tide?' (1996) XIV *Contemporary Economic Policy* 90; D Symes (ed), *Property Rights and Regulatory Systems in Fisheries* (Fishing News Books, 1998).

[40] See, eg, R Hannesson, *The Privatization of the Oceans* (Cambridge, Massachusetts, Massachusetts Institute of Technology, 2004).

in the protection of the capital (ie, the fish stock), and encourage greater self-policing of the property. In short, fisheries management will become cheaper and more effective. However, whilst property rights may be extended and strengthened in fisheries management systems, there appear to be some obstacles to this, both in theory and practice. As will be shown in the next three chapters, property is necessarily shaped by a variety of legal, political and moral considerations. Such values are not limited to concerns about efficiency or social utility; they also include concerns about the fair allocation of wealth and proper social order. These concerns may result in forms of property holding that are sub-economically optimal or designed to facilitate non-economic goals. In practice, there may be reasons why property rights cannot apply to certain resources, or why certain types of property apply to resources. For example, if a resource cannot be physically circumscribed, then it may be impossible or too costly to reduce it to private property. There may be legal limits on the extent to which private rights can be allocated over resources. And so despite the increased use of private property rights in fisheries and evidence that it has improved the regulation of some fisheries, we must be cautions about calls for privatisation of the oceans. This remains far from universal and certainly not free of criticism.[41]

This brief review of fisheries has outlined the key problems and trends in the regulation of one of our most important common pool natural resources. These result from both the physical attributes of the resource and a failure to develop adequate regulatory regimes. In one of the few observations on the particular issues of property rights and fisheries from a legal perspective,[42] Churchill and Lowe summarise the consequences

[41] As Symes concludes, the jury is still out: D Symes, 'Property Rights, Regulatory Measures and the Strategic Response of Fishermen' in D Symes (ed) above note 39 3, 4. For alternatives to private rights systems see F Berkes (ed) *Common Property Resources. Ecology and Community-Based Sustainable Development* (London, Belhaven Press, 1989); F Berkes *et al*, 'The benefits of the commons' (1989) 340 *Nature* 91; BJ McCay and J Acheson (eds), *The Question of the Commons: The Culture and Ecology of Communal Resources* (Tucson, University of Arizona Press, 1987); BJ McCay, 'Social and Ecological Implications of ITQs: an overview' (1995) 28 *Ocean and Coastal Management* 3; R Hannesson, 'On ITQs: An Essay for the Special Issue of Reviews in Fish Biology and Fisheries' (1996) 6 *Reviews in Fish Biology and Fisheries* 91. There are also criticisms of the economist's methodology. Eg, as Barzel points out, both 'Knight and Gordon assumed that property rights are either both present and perfectly well defined, or totally absent. They neglect the possibility of an intermediate state in which rights are only imperfectly defined.': Y Barzel, *Economic Analysis of Property Rights* (Cambridge, Cambridge University Press, 1989) 64. He is referring to FH Knight, 'Some Fallacies in the Interpretation of Social Cost' (1924) 38 *Quarterly Journal of Economics* 582, and HS Gordon, 'The Economic Theory of a Common Property Resource: The Fishery' (1954) 62 *Journal of Political Economy* 124. Not only is the focus narrow in terms of the quality of the property right, it is narrow in terms of the social implications of the property right.

[42] This paucity of legal coverage of property rights and fisheries may be contrasted with voluminous literature in other disciplines. There is some literature that considers directly fisheries and/or property rights, but unfortunately this is mainly from the early

that result from the common pool nature of fisheries, and the absence of pre-capture private property rights.[43] There is a tendency to fish at a level above biologically optimum rates, a tendency to fish in an uneconomic manner, a high likelihood of competition and conflict between fishing groups, and consequentially the need to implement a substantial degree of international management. Although private property rights seems to address these concerns, the so-called 'privatisation' of the oceans poses fundamental questions about how best to regulate natural resources. It is the wider concerns about the use of property rights that are addressed in the present book. In particular, if law is a necessary medium for the pursuit of these goals, then we must consider how the values that inhere in legal institutions ultimately shape the development of property rights.

2. PROPERTY AND SOVEREIGNTY: SOME MODES OF ANALYSIS

The regulation of natural resources, whether they are fisheries, agricultural lands, minerals or even the atmosphere, poses important questions about the allocation of wealth and power in society. To what ends and in whose interests do we regulate such resources? Who can own these resources and in what form? Can and should limits be placed on the use of resources to protect other social values? Such questions are rightly the domain of both international and municipal law. This is because law is the means by which such ends are achieved. The present book explores

part of the century. See TW Fulton, *The Sovereignty of the Sea* (London, Blackwood, 1911); PB Potter, *The Freedom of the Seas in History, Law and Politics* (New York, Longmans Green and Co, 1924); PT Fenn, *The Origin of the Right of Fishery in Territorial Waters* (Cambridge, Massachusetts, Harvard University Press, 1926); PC Jessup, *The Law of Territorial Waters and Maritime Jurisdiction* (New York, GA Jennings Co, 1927). Also, HG Crocker (ed), *The Extent of the Marginal Sea: A Collection of Official Documents and Views of Representative Publicists* (Washington, Government Printing Office, 1919). More recent literature has focused on the provisions of the Law of the Sea Convention and the deficiencies this has engendered, or upon regional fisheries: see RR Churchill, *EEC Fisheries Law* (Dordrecht, Kluwer Academic Publishers, 1987); M Dahmani, *The Fisheries Regime of the Exclusive Economic Zone* (Dordrecht, Nijhoff, 1987); E Hey, *The Regime for the Exploitation of Transboundary Marine Fisheries Resources* (Dordrecht, Nijhoff, 1989); E Miles, *Management of World Fisheries: Implications of Extended Coastal State Jurisdiction* (Seattle, University of Washington, 1989); WT Burke, *The New International Law of Fisheries: UNCLOS and Beyond* (Oxford, Clarendon Press, 1994); F Orrego Vicuña, *The Changing International Law of High Seas Fisheries* (Cambridge, Cambridge University Press, 1999). Professor O'Connell gives greater consideration to the treatment of property rights than most other legal commentators. This is most evident in the historical aspects of his work and those sections dealing with the juridical nature of maritime zones. Unfortunately, it was published prior to the adoption of Law of the Sea Convention and so much of the commentary is speculative and blind to post-Convention developments. DP O'Connell, *The International Law of the Sea* (Oxford, Clarendon Press,1982, 1984), 2 vols.

[43] RR Churchill and AV Lowe, *The Law of the Sea*, 3rd edn (Manchester, Manchester University Press, 1999) 281.

the relationship between domestic law, international law and property in respect of the regulation of natural resources and examines how this relationship impacts on the answers to the above questions about the regulation of property. The core thesis that it pursues is that when law is used to regulate a resource, the values and limitations inherent in a legal institution necessarily shape the form and content of any resultant right. So, to understand what forms and extents of property rights may be extended to natural resources, we must understand how legal rules on property are constructed and applied. It is further argued that considerations inherent in the construction and application of legal norms may limit the scope for strong private property rights in respect of fisheries and, indeed, other natural resources.

Although the regulation of natural resources through the institution of private property appears to be the primary function of domestic law, it is important not to disregard the fundamental role that international law has to play in both setting the parameters within which domestic regulation of natural resources takes place and in directly regulating natural resources. It may be uncommon to analyse property in terms of international law, but to reject such an approach overlooks the close conceptual relationship between germane legal concepts and potential modes of analysis. Take for example sovereignty under international law. This refers to the legally circumscribed authority of States to deal with matters within a defined sphere of competence. It is primarily concerned with legal relationships between States, which include the creation and maintenance of control over territory and the natural resources pertaining to that territory. In contrast, property rights are an institution of private law which regulates legal persons' relationships in respect of certain objects, both tangible and intangible. Clearly, sovereignty and property operate at different levels and in different ways: sovereignty is about rules between States and property is about rules between individuals. As a result the treatment of property and sovereignty together may be considered inappropriate or objectionable, with many commentators preferring to maintain a distinction between the concepts for analytical reasons.[44] Nevertheless, a bifurcated analysis of property and sovereignty can be challenged in both theory and practice, and provide important insights into the operation of each concept.

The relationship between international law and property is of considerable practical importance. First, limits on the scope of States' authority under international law properly affect the scope of property institutions under domestic law. For example, according to the maxim *sic utere tuo, ut alien non laedas*, international law does not permit States to conduct

[44] M Loughlin, 'Ten Tenets of Sovereignty' in N Walker (ed), *Sovereignty in Transition* (Oxford, Hart Publishing, 2003) 55.

activities or allow activities to be conducted on their territory, or in common spaces, that cause harm to other States or the environment.[45] Accordingly, States may be required to place limits on the uses of property that might otherwise be lawful under domestic law. Such limits are implicit in international rules for the protection the environment, rules regulating hazardous activities, and rules concerning State expropriation of property.

Secondly, international law is increasingly concerned with the operation of property rights. This is quite explicit in the field of human rights, where the European Court of Human Rights has developed a considerable jurisprudence on the subject of State takings of property,[46] and the Inter-American Court of Human Rights has actively sought to protect important customary and indigenous forms of property.[47] In such cases, international courts have ruled directly on the legality of domestic property regimes. The values which shape the content of domestic law and international law are not necessarily identical.[48] Such a divergence of values may result in conflict between norms of international law and domestic law concerning the proper treatment of property, such as frequently occurs in cases of expropriation of private property by States. In the context of natural resources, this critical juxtaposition of values arises when States within whose territories globally important resources are located act in a way which threatens the resource and hence the interests of other States. Are such States bound to protect and preserve a rainforest in order to maintain biodiversity and important carbon sinks at the expense of domestic development priorities which may require conversion of rainforests to farmland? It is of vital importance to ascertain which rules and values prevail when such conflicts arise. The indications are that such conflicts will be more frequent in practice because international law, through its preoccupation with sustainable development, is increasingly concerned with the form and substance of natural resource regulation. It is notable that in debates about sustainable development, the prominence of economic approaches to the regulation of natural resources and the environment has been elevated considerably over the past few decades.[49] Thus, calls for the effective use of economic and environmental measures permeated the Brundtland

[45] See the *Trail Smelter Arbitration*, (1938, 1941) 3 RIAA 1905.

[46] See A Riza Coban, *The Protection of Property Rights with the European Convention on Human Rights* (Aldershot, Ashgate, 2004).

[47] See, eg, *Sawhoyamaxa Indigenous Community of the Enxet People v Paraguay*, Case 0322/2001, Report No 12/03, Inter-Am CHR, OEA/Ser L/V/II.118 Doc 70 rev 2, 378 (2003); *Comunidad Mayagna (Sumo) Awas Tingni Case*, Order of the Court of 6 September 2002, Inter-Am Ct HR (Ser E) (2000).

[48] See further, ch 3.

[49] See A Gillespie, *International Environmental Law, Policy and Ethics* (Oxford, Clarendon Press, 1997) ch III.

Report.[50] Similarly, Agenda 21 urges government and industry to 'work towards the development and implementation of concepts and methodologies for the internalisation of environmental costs into accounting and pricing mechanisms'.[51]

Thirdly, international law may create certain property rights directly, either for the State or for legal persons within the State. For example, the mineral resources of the deep sea-bed are defined as the common heritage of mankind, and subject to regulation by the International Seabed Authority, an international institution which grants mineral exploration and exploitation licences. In short, international law establishes a form of exclusive right for the benefit of private persons over the seabed of a kind more readily found in domestic property institutions.

Fourthly, sovereignty shares a close conceptual relationship with property. Territorial sovereignty in particular has been developed largely by reference to concepts of private ownership, to the extent that it mirrors the conceptual *modus operandi* of property. It is no mere coincidence that the doctrinal modes of acquisition of territory under international law parallel the modes of acquisition of property under domestic law. This was an inevitable result of the process of legal reasoning that includes the use of analogy and requires legal norms to possess coherence and systemic integrity. In the absence of well-settled rules of international law in its formative period, domestic law provided a fertile source of rules.[52] Territorial sovereignty provides the paradigm within which international law questions of resource use are to be determined.[53] The development and articulation of this concept have drawn heavily upon domestic institutions of property, to the extent that many territorial transactions are international analogues of their domestic counterparts. Although a conceptual analysis of territorial sovereignty in terms of property is not impossible, it is uncommon. The following observation offers us a point of departure:

> The Law of Nations is but private law 'writ large'. It is an application to political communities of those legal ideals which were originally applied to relations of individuals.[54]

This quote from Holland prefaces Hersch Lauterpacht's seminal study, *Private Law Sources and Analogies of International Law*, and captures the essence of this relationship between sovereignty and property. The object theory of territorial sovereignty which Lauterpacht advanced holds that

[50] World Commission on Environment and Development, *Our Common Future* (Oxford, Oxford University Press, 1987).
[51] UN Doc A/CONF/151/4/ (1992) s 30.9.
[52] See further, ch 5.
[53] This is dealt with in further detail in ch 6.
[54] TE Holland, *Studies in International Law* (Oxford, Clarendon Press, 1898) 151.

the relationship of the State to its territory is 'identical with or analogous to the private law right of property'.[55] By casting territorial sovereignty as a property type relationship, it is possible to draw upon conceptual analyses of property to provide an account of the factors shaping the regulation or natural resources under international law. This approach allows for the development of three further lines of analysis. It allows us to consider claims to territorial sovereignty in light of justifications of property, it allows us to consider the limits to territorial sovereignty in light of the normative limits of property law and it allows us to consider what may be termed the public incidents of territorial sovereignty.

The Sisyphean task of providing an authoritative account of property has occupied scholars throughout history.[56] Such accounts typically include the argument from natural rights, the argument from liberty, the argument from utility and its influential off-shoot, the economics-based approach, and the argument from propriety. There are also strong anti-property arguments. These are what can be termed general justificatory theories. They are concerned with the general problem of whether or not property can be justified at a fundamental level, ie why there should be property rights per se. Property theorists are also concerned with two other kinds of justificatory problem.[57] First, if property in general is justified, then what kind of property is allowed, what can be owned, and in what ways? This is the termed problem of specific justification. Secondly, given that a general regime of property can be justified and that a specific kind of property is justified, then who in particular may have title to the property. This is termed the problem of particular justification. Although the present book is ultimately concerned with these subsidiary problems, it must first address the question of general justification because all particular and specific justifications must be consistent with the general justificatory regime set out for property.[58] Thus particular and specific justifications of property rights in fisheries should be consistent

[55] H Lauterpacht, *Private Law Sources and Analogies of International Law* (London, Longmans Green and Co, 1927) 92.

[56] For an overview of such accounts, see LC Becker, *Property Rights* (London, Routledge and Kegan Paul, 1977); S Buckle, *Natural Law and the Theory of Property: Grotius to Hume* (Oxford, Clarendon Press, 1991); Christman, n 7 above; J Grunebaum, *Private Ownership* (London, Routledge and Kegan Paul, 1984); JW Harris, *Property and Justice* (Oxford, Clarendon Press, 1996); CB Macpherson, *Property: Mainstream and Critical Positions* (Oxford, Blackwell, 1978); S Munzer, *A Theory of Property* (Cambridge, Cambridge University Press, 1990); A Reeve, *Property* (London, Macmillan, 1986); A Ryan, *Property and Political Theory* (Oxford, Blackwell, 1984); RB Schlatter, *Private Property: The History of an Idea* (London, Allen and Unwin, 1951); J Waldron, *The Right to Private Property* (Oxford, Clarendon Press, 1988).

[57] See LC Becker, 'The Moral Basis of Property Rights' in JR Pennock and JW Chapman (eds), *NOMOS XXII: Property* (New York, New York University Press, 1980) 187 *ff*.

[58] In any case, Reeve notes that the separability of these levels of justification may be more illusory than real, for any general justificatory theory must have reference to a particular form of right and the persons who may enjoy them. A Reeve, n 56 above, 29.

with the principles of liberty, equality, utility, desert and propriety that shape property generally. Moreover, although there may be considerable disagreement about which general justification ultimately provides the moral basis for property, there is ready acknowledgement that any such moral principle is inextricably linked with the allocation of wealth in society.[59] Consequently, any general justification for property will result in a particular configuration of property rights and this in turn will result in a particular distribution of wealth in society. For example, in western capitalist societies there is a strong tendency towards highly individualist, exclusive private property rights consonant with free-market ideology. The structure of property here is strongly influenced by neo-utilitarian or economic considerations, with the consequence that it may be insufficiently sensitive to the distribution of wealth in society. Indeed, it is highly likely that such an approach will result in vast inequalities in wealth.[60] Because the introduction of property rights in fisheries has implications for the distribution of wealth in society, general justifications must be carefully considered.[61]

As both private property and territorial sovereignty are concerned with control of things, then it is reasonable to infer that there are certain shared normative limits to the scope of each institution. Most accounts of private property reduce the concept to the idea of excludability.[62] It follows then, that if something cannot be excluded, then it cannot become the object of property law. Gray suggests three factors that shape the excludability of things: physical, legal and moral.[63] Physical non-excludability arises when one cannot practicably place limits on access to a thing, for example, the atmosphere. As a general rule marine fisheries have traditionally been considered incapable of physical exclusion and so not susceptible private property rights. Legal excludability is absolutely necessary where a thing cannot be physically bound, for example, intellectual property rights. Clearly this is an issue in respect of things such as ocean space, water and fish, which cannot practicably be bounded. This point is important because title to such resources under international law appears to be closely bound up with certain public order type responsibilities as a result of the particular nuances of how control over ocean space has evolved. Finally, a resource may be not become the object of private property rights where there are powerful and compelling moral reasons for refusing to propertise the resource. All societies, through institutions such as the legislature and the

[59] Christman, n 56 above, 4.
[60] *Ibid*, 43.
[61] See ch 2.
[62] See, eg, Munzer, above note 56 22; J Penner, *The Idea of Property in Law* (Oxford, Clarendon Press, 1997) ch 4; Harris, above note 56 5; K Gray, 'Property in Thin Air' (1991) 50 *Cambridge Law Journal* 252. This issue is further developed in ch 2.
[63] Gray, *Ibid* 269.

judiciary, engage in a process of defining and redefining the moral limits to property to ensure that property remains consistent with more highly regarded human values, as indicated in the general justifications of property above.[64] Thus values such as the preservation of channels of communication and freedom of speech commonly shape the limits of property.[65] Under international law, such limits are quite evident in, for example, the putative regime for the treatment of the resources of outer space and celestial bodies, which precludes ownership claims,[66] or the prohibition on the possession or use of certain weapons on humanitarian grounds.[67]

Thirdly, the historic derivation of sovereignty from a property-based conceptual framework has infused territorial sovereignty with some of the values that have shaped and continue to shape property in municipal legal systems. As will be demonstrated in chapter 5, one can trace the conceptual influence of property on the form and extent of territorial sovereignty and maritime authority. At the risk of over-simplifying this, one can point to how historical and absolutist accounts of property influenced and resulted in absolute accounts of sovereignty. However, just as modern conceptions of property have been modified to reflect the reality of prevailing social political and economic conditions within States, so too has the concept of territorial sovereignty been modified to meet such changed circumstances.[68] This is already evident in some contemporary accounts of sovereignty.[69] A significant feature of this process is that in both domestic and international contexts there has been a reinvigoration of interest in the public function of property, both as an ordering concept and as a means to achieve certain public interests. This is particularly manifest in the field of environmental protection, where the ownership of land and natural resources is increasingly subject to public duties or stewardship-type obligations.

[64] It is not within the scope of this thesis to discuss the moral limits to property, but rather to highlight that they exist and provide an important measure of the scope of property.

[65] See, eg, *Davis v The Commonwealth of Australia.* (1988) 166 CLR 79.

[66] Art 2, the Treaty on the Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and other Celestial Bodies 1967, 610 *UNTS* 205.

[67] See, eg, 1925 Geneva Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare, XCIV *LNTS* (1929) 65–74. Also, the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction 1972, 1015 *UNTS* 163; Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on Their Destruction 1993 (1993) 32 *ILM* 800.

[68] See P Allott, 'Mare Nostrum. A New International Law of the Sea' (1992) 86 *AJIL* 764.

[69] An important study of public functions of permanent sovereignty, through the articulation of duties that pertain to the right or exercise of sovereignty over resources, has been made by Nico Schrijver, *Sovereignty Over Natural Resources* (Cambridge, Cambridge University Press, 1997).

3. SCOPE AND ORIENTATION OF THIS STUDY

Clearly, if property rights are used to regulate natural resources, then it is essential to understand how such rights are understood in legal terms. Chapter 2 outlines of the nature and scope of property as a legal institution. Contemporary accounts of property are shown to focus on the characteristic of excludability. Building upon this, the way in which physical, legal and moral considerations shape excludability, and hence the applicability of property rules, are considered. In particular, consideration is given to how a plurality of justificatory theories of property shape the excludability of particular instances of property. From this analysis it will be evident that moral limits to property in particular play a significant role in delimiting the scope of property, frequently requiring limitations or use of property in the public interest.

Although property is frequently seen as a private law concept, reflecting a sphere of individual autonomy and control, it must have limits. In part, such limits are a structural necessity, otherwise unbounded private rights would simply cancel each other out. They are also the product of collective/public decisions as to how things may be used and held within a society. It is an essential function of property to constitute relationships of power in society. This is manifest in substantive rules of property, which often require property to be used in a way that meets or promotes certain public ends. As the public function of property is poorly articulated in academic literature, chapter 3 presents an outline of this, based upon the idea of the public interest. This reaffirms how certain public functions form an essential component of property holdings. In particular, it shows how the public interest varies across different communities, and how the different needs and composition of international and domestic legal communities may result in different public interests. These in turn affect the shape and extent to which private property rights may apply to natural resources. In chapter 4 the interface between the public and private functions of property is examined, and suggestions on how this affects the regulation of natural resources are offered. In particular it shows how the structure of legal rules builds in the more fundamental values that delimit the scope of property rights and public interests. In certain circumstances, a quite complex interface of private and public interests, as shaped by physical legal and moral factors, may produce sophisticated forms of property holding where individual holdings are subject to overarching public interests. These can be defined as stewardship.

The next three chapters test these assertions about the nature of property rights, and demonstrate how the public function of property reveals itself in the development and regulation of natural resources regimes and fisheries regulation in the law of the sea. Chapter 5 explores the development of sovereign authority over ocean spaces and the natural resources

therein. This demonstrates how property concepts, and in particular the factors of physical, legal and moral excludability, have shaped the scope and content of sovereign rights. For example, in the early development of the law of the sea, sovereignty over ocean space was limited because the oceans were perceived to be beyond the bounds of human control. This, combined with the then dominant occupation theory of ownership, meant that only when the seas and their resources could be physically controlled did claims of ownership over ocean space emerge, for example, as with the development of the cannon shot rule in the 17th century. Since then there has been a gradual extension of exclusive, property-type claims to the seas and their resources. This has been generated in part by States' pragmatic self-interest, but also by the general realisation that exclusive control over ocean spaces would provide a more stable regulatory regime. In the 20th century this consolidation and extension of exclusive control over ocean space became increasingly contingent on legal excludability which was in turn dependent upon multilateral agreements. This point is crucial because under international law, the legal and moral factors shaping excludability are necessarily different from those operating within a domestic legal order, with the result of that different forms of control have emerged. This is most evident in the concept of the EEZ.

Before examining the current regulation of marine resources, some general restrictions on the exercise of sovereignty over natural resources are considered in chapter 6. Such limits also pertain to the specific use of marine resources. Chapter 7 then traces the contemporary contours of sovereignty over ocean space. The precise limits of this, as set out in the Law of the Sea Convention, are examined along with post-1982 developments in international fisheries law. In both chapters, the extent to which a State may exert exclusive control over its natural resources is considered in light of physical, legal and moral constraints on ownership. Whilst coastal States may determine the ownership regime applicable to fisheries, the scope of their authority is not wholly unrestricted. It is limited by international law. In particular, coastal State rights in the EEZ are balanced with certain responsibilities to conserve and manage fisheries. This regime, which may be described as stewardship, has been further enhanced by subsequent developments under international law, aimed at achieving sustainable fisheries. These limits constitute important and strong public functions, which may limit or at least impact upon the shape of private property based regimes under domestic law. The underlying theme of these chapters is to show the heightened relevance of international law to the regulation of natural resources, especially beyond the exclusive territorial jurisdiction of States.

Chapter 8 explores the way in which rights-based fisheries management systems have been implemented under domestic law. It also examines the extent to which such mechanisms result in more efficient and effective

fisheries regulation.[70] The typical forms of such rights are considered first. These are then scrutinised in further detail by way of a series of case studies that examine the experience of certain States with strong property rights-based fisheries management systems. In particular, the chapter examines how limitations inherent in the nature of marine resources and legal regulatory structures dictate the forms that rights-based fishing entitlement may take. When natural resources such as fish are regulated through legal institutions of property, then values inherent in the legal system will shape the form and content of the resultant right. As property rights have an important public function, factors such as propriety, equity, and justice must be factored into the design of property rights, in addition to the values of utility and efficiency. Ultimately, this suggests that private property rights may not be the most appropriate regime for natural resource regulation. Indeed, the structure of property institutions and the values inherent in the regulation of important natural resources suggest that stewardship may be a more appropriate frame of reference for an analysis of such rights. These themes are then tied together in the concluding chapter.

[70] The question of effectiveness is a multifaceted one, and may mean different things to natural scientists, lawyers, economists, and political scientists. See O Young (ed) *The Effectiveness of International Environmental Regimes* (Cambridge, Massachusetts, Massachusetts Institute of Technology, 1999). Ultimately our measure of effectiveness must be viewed in light of all the values that shape a system of resource regulation. Such values are traced in the next two chapters.

2

The Private Function of Property

1. INTRODUCTION

> Everyone has the right to own property alone as well as in association with others.
>
> Article XVII of the Universal Declaration of Human Rights 1948

IT IS DIFFICULT to deny the need for some form of property. As Hayek would put it, although property is not indispensable, historical experience teaches us that human action and not design confirms its necessity.[1] Or, as Posner notes, no-one would bother to cultivate land, investing much time and effort, if others were free to help themselves to the product of the work.[2] Despite its apparent necessity, the idea of property suffered a decline in legal scholarship in the early part of the 20th century, largely as a consequence of Hohfeld's deconstruction of property.[3] It has since been reinvested with a new vigour. This might be a consequence of the collapse of the communist hegemony in the former Soviet Union and the emergence of capitalism as the dominant political ideology of the 20th century.[4] It may also be a result of the way in which property has been adapted to meet new agendas, such as the use of property rights and market mechanisms to tackle environmental issues.[5] In any event, it is clear that private property rights and free market mechanisms form an indispensable part of contemporary social order.

[1] FA Hayek, *The Constitution of Liberty* (London, Routledge and Kegan Paul, 1960).

[2] R Posner, *Economic Analysis of Law* (Boston, Little Brown, 1992) ch 3.

[3] WN Hohfeld, 'Some Fundamental Legal Considerations as Applied in Judicial Reasoning' (1913) 23 *Yale Law Journal* 16. Also WN Hohfeld, *Fundamental Legal Conceptions as Applied in Judicial Reasoning* (New Haven, Yale University Press, 1919).

[4] C Sunstein, 'On Property and Constitutionalism' (1993) 14 *Cardozo Law Review* 907.

[5] L Breckenridge, 'Protection of Biological and Cultural Diversity: Emerging Recognition of Local Community Rights in Ecosystems under International Environmental Law' (1992) 59 *Tennessee Law Review* 735; RB Stewart, 'Controlling Environmental Risks through Economic Incentives' (1988) 13 *Columbia Journal of Environmental Law* 153. There is a considerable body of literature in which property-rights-based tools are advocated for fisheries management. See ch 1, p 8 above.

What many recent calls for private property have in common is the claim that private property rights make us all more prosperous.[6] In contrast, this book is more concerned with the capacity of property to address the crises facing global and domestic fisheries and to provide a mechanism for achieving legally defined conservation and management objectives. However, given that property discourse and the application of property rights in practice impact upon the allocation of wealth and power, this book must also concern itself with this facet of property. It is important to highlight these distinct perspectives because although they are not necessarily incompatible, they may on occasion conflict with each other. In this chapter, we consider how the justifications of property influence the particular and specific forms of property. In a pluralist context no single set of property values dominate. However, it is clear that certain elements are common across all property justifications, and they place important restrictions on the scope and form of private property or justify the use of other forms of property to regulate certain things.

2. PROPERTY AND EXCLUDABILITY

Property, in its broadest sense, is an institution governing the use of things. It is an economic institution in the sense that it is concerned with the allocation and use of goods and it is a social institution in that property provides a means to achieve social order.[7] It is also a legal institution: law is the vehicle for the definition and regulation of any regime of property. Property is thus a shared paradigm, our understanding of which is legitimately informed by a variety of intellectual disciplines. In providing an account of the legal institution of property, the point here is not to dispute the validity of non-legal perspectives on property. Rather it is to point to the fact that property rights must be legally constructed. Property rights are the product of property rules and property rules are located within legal systems. This means that property rights are invariably exposed to the values and limitations which inhere within a legal system and any analysis of property that disregard such values and limitations is incomplete.

[6] As Rose points out, what advocates of private property have in common is their desire to maximise preferences—ie generate increased social or economic wealth for the members of a society. This argument for the wealth enhancement function of property is a compelling one and it can be traced to utilitarian theories going all the way back to Bentham. C Rose, *Property and Persuasion: Essays on the History, Theory and Rhetoric of Ownership* (Oxford, Westview Press, 1994) 3.

[7] One should note that not all things are subject to the institution of property, nor is property the only means of controlling or regulating things. This can be achieved through other regulatory measures, and is evident in fields such as the provision of public services.

In abstract legal terms, a property right refers to a state of affairs in which one party, the right holder, has a claim on an act or forbearance of another party, the right regarder, in respect of a thing.[8] This right, where it is exercised, or is in force, has the authority of law behind it, meaning that failure of the duty bearer to comply with the right will justify the use of coercive measures to ensure compliance or compensation in lieu of performance. Moving beyond this basic outline of the relationship between the right holder and right regarder, it has become almost clichéd to describe property as a 'bundle of rights'. Thus Honoré provides us with an account of the incidents (sticks in the bundle) of ownership.[9] He defines 11 such incidents: the right to possess; the right to use; the right to manage; the right to the income of a thing; the right to the capital of the thing; the right to security; the rights or incidences of transmissibility and absence of term; the duty to prevent harm; liability to execution; and the incidence of residuarity. Given that these incidents may describe the composition of any form of property, be it private, collective or common property, what appears to be crucial is how the quality and content of the bundle of rights varies in practice and who holds them.[10]

More recent literature on private property rights has further distilled the legal essence of property by narrowing the range of incidents essential to property and by pointing to the relative quality of the incidents in practice. For example, Christman notes that virtually any analysis of property will focus on a number of core concepts—use, destruction and transfer.[11] Drawing upon Honoré's analysis, he considers that only the first five incidents are essential to ownership.[12] The other incidents, such as the right to

[8] The recognition of a claim right may entail certain duties or acts of forbearance. Such duties follow from the existence of a recognised claim right, which must first be established through the prescriptive process.

[9] AM Honoré, 'Ownership', in AG Guest (ed), *Oxford Essays in Jurisprudence* (London, OUP, 1961) 107. Similar approaches have been adopted by others. See F Snare, 'The Concept of Property' (1972) *American Philosophical Quarterly* 9 and L Becker, *Property Rights: Philosophic Foundations* (London, Routledge and Kegan Paul, 1977) ch 2.

[10] Thus private property will only exist when a person enjoys a certain minimum amount of these incidents. See Honoré, *Ibid* 108. Common property differs from other forms of property in one significant respect: it is a non-exclusive right. Although exclusivity is central to common property, in a sense, its application is antithetical. Common property is an inclusive right. Thus, although a common property right holder may enjoy possession, use, and so on, this is done so inclusively. As a general rule, the points below about exclusivity do not apply to common property. However, this qualification may be subject to further caveats. A State may decide that a resource is the common property of only its citizens. This means that externally the resource is effectively collective or private property in the sense that the State is the owner and may exclude non-common property rights holders from the resource. Secondly, management of a common property regime will require the implementation of resource use rules in practice, and when a person contravenes such rules they may be excluded from the common property. For that person, at least, the resource is no-longer common property.

[11] J Christman, *The Myth of Property* (Oxford, Oxford University Press, 1994) 19.

[12] *Ibid* 19–20.

security, transmission and absence of term, are considered to be adjuncts to the core incidents.[13] Christman regards the incidence of residuarity as a structural necessity of the legal system which protects ownership and is not an element of ownership itself.[14] He is also sceptical about the prohibition of harmful use and rejects it as an essential component of ownership. This distinction between essential incidents and non-essential incidents of ownership is also made by Waldron, who regards the prohibition on harmful use to be a background constraint which places limits on what anyone can do with an object, whether it is their property or not.[15] Carter concurs and makes out a similar argument in respect of liability to execution.[16]

If property rights are to be regarded purely as claim rights, then Christman, Waldron and Carter would appear to be correct in their evaluation of Honoré's incidents, because a claim right to have one's capacity limited would be nonsensical. The right holder can only claim that which he may hold. He cannot claim that which is required of him.[17] Conversely, the right regarder's position is responsive, and is defined by how he reacts to the claim. Thus, the essential incidents of property, as a claim right, appear only include those things that logically comprise the claim, whereas acts of recognition appear to dictate the limits of that claim. This is the pure view of property comprising only of those incidents that give the right holder's claim any meaning, namely the right to possess, the right to use, the right to manage, the right to the income of a thing, and the right to the capital of the thing.[18] The other aspects of ownership are those limits that are imposed by the right regarder, ie the duty to prevent harm and liability to execution, and these are viewed as external to the right.

So we come to understand property in terms of excludability: the right holder's authority to exclude other persons from the *res*.[19] This is not

[13] *Ibid* 187.

[14] *Ibid*.

[15] J Waldron, *The Right to Private Property* (Oxford, Clarendon Press, 1990) 32–3, 49.

[16] A Carter, *Philosophical Foundations of Property Rights* (London, Harvester Wheatsheaf, 1989) 5–7.

[17] Thus the right holder cannot claim a prohibition on harmful use, although he might expect this to shape the extent of his property right.

[18] The right to income has also been reconceived by Christman on the grounds that it, or rather income per se, cannot be regarded as something that is exclusively derivable from ownership. In reality income is the sum of various market processes. 'Income interests', as he calls this right, serve an allocative function rather than an autonomy protecting function and so are not essential to ownership. Christman, n 11 above, 169. This point is crucial, because if income is derived from external factors, which become distorted, ie the market is imperfect, then the right to such income must be questioned. Accordingly, he points out that the right to income must be considered separately from control type rights in order to ensure that distribution of property is egalitarian: *Ibid*, chs 7–8.

[19] One may note the strong parallels between this reduced account of property in legal terms and economic accounts of property.

exclusion per se, because it might not be exercised, and it is not exclusiveness because other persons can have interests in the *res*;[20] rather it is excludability in the sense that it is the owner's legal right to exclude others from his property.[21] This is what Underkuffler calls the common conception of property: the idea that property involves the protection of individual interests against collective power.[22] However, does excludability so understood capture the whole essence of property? Here we take a point of departure from the pure view of property, a position which is explored in greater detail in the next two chapters. The starting point for this departure is to recognise that both rights in general and property rights in particular are relational constructs, constructs that are contingent upon social institutions for their meaning and operation. If we start from the position of property in terms of a social institution, an institution that is responsive to the needs of society, then it follows that it is society at large that will dictate the scope and limits of that institution. As Gray puts it:

> '[p]roperty' is the power-relation constituted by the state's endorsement of private claims to regulate the access of strangers to the benefits of a particular resource.[23]

This does not require us to reject the important function that property has to play in protecting individual interests. Indeed, such interests must be a feature of any form of social organisation. Rather, we would discount the view that exclusory rights must take any degree of absolute priority over other interests. To quote from Gray and Gray, it is 'beginning to be agreed that the power relationship implicit in "property" is not absolute but relative'.[24] Although strong private rights may dominate many areas of property discourse, the prioritisation of private rights is not a logical requirement of property per se, but a product of the social context in which property rights have evolved. We should not conflate the strong historic need to defend individual autonomy from adverse intrusions by the apparatus of the State (which is reflected in the common law) with the normative requirement for property to do so in all instances. It is certainly more than arguable that where the apparatus of the State are constrained by democratic processes, then the need for property to stand as the bulwark of individual autonomy is somewhat reduced. To narrowly construe

[20] S Munzer. *A Theory of Property* (Cambridge, Cambridge University Press, 1990) 22. Exclusivity is then developed at pp 89 *ff*. See also J Penner, *The Idea of Property in Law* (Oxford, Clarendon Press, 1997) ch 4.

[21] *Ibid* 95–8.

[22] L Underkuffler, *The Idea of Property* (Oxford, Oxford University Press, 2003) 39–42.

[23] K Gray, 'Property in Thin Air' (1991) 50 *Cambridge Law Journal* 252, 294.

[24] K Gray and SF Gray, 'Private and Public Property' in J McLean (ed) *Property and the Constitution* (1999) 11, 12.

property in 'terms of raw exclusory power' is to locate property in the hands of the past, not the present.[25]

Even if we accept the pure view of property as excludability, then it follows that when exclusive control cannot be established over a resource then it cannot be reduced to private property. The parameters of excludability are set out by Gray. He proposes three determinative factors that limit excludability—physical, legal and moral.[26] We shall consider each of these factors in turn, but what is important to signpost is that even those favouring strong private rights to exclude, accept private property must be limited in the interests of society. Moreover, these moral considerations are not only concerned with dictating the application or non-application of property rules to particular things. In many instances they operate to justify the imposition of a particular form of ownership, or justify some duties being imposed upon the rights holder, or permit the State to modify or adjust the rights without the consent of the rights holder.

A resource may be physically non-excludable, for example, a beam of light or an idea. Of course not every resource is capable of such simple classification. For example, one may claim a private property right in the spectacle of a sporting event.[27] This sporting spectacle may be physically excludable only by the construction of a roofed stadium that prevents those outside the stadium from watching the spectacle. When the stadium is absent, or is open to the skies, then one cannot claim a private property right in the spectacle so to prevent visual intrusion. As such, it is necessary to observe that physical excludability exists only where it is reasonably practicable to exclude others from the benefits of that resource in its existing form.[28] As Gray notes, a test of reasonable practicability plays an important role in defining the scope of property rights. For example, under US law a trade secret is susceptible to protection against appropriation only where the inventor takes efforts that are reasonable under the circumstances to maintain secrecy.[29] In respect of maritime

[25] *Ibid* 13. In support of this, they cite a wide array of common law authorities, including: Lord Camden CJ in *Entick v Carrington* (1765) 95 ER 807, 817; Deane J in *Gerhardy v Brown* (1985) 159 CLR 70, 150; Justice Rehnquist in *Kaiser Aetna v US* 444 US 164, 179–80; Justice Marshal in *Loretto v Teleprompter Manhattan CATV Corp.* 458 US 419, 435; and Justice Ritchie in *Colet v The Queen* (1981) 119 DLR (3d) 521, 526.

[26] Gray, n 23 above, 269.

[27] See *Victoria Park Racing and Recreation Grounds Co. Ltd v Taylor* (1937) 58 CLR 479. In this case property rights were claimed over the spectacle of a racing event. The construction of a platform overlooking the event and the broadcasting of commentary and reports from this platform were alleged to be a nuisance.

[28] The qualifier of form is an important one. For example wild animals are not physically excludable unless they are somehow reduced into captivity. This reduction to captivity may be regarded as a change in the form of the resource.

[29] S 1(4)(ii) Uniform Trade Secrets Act 1986. See RA Klitzke, 'The Uniform Trade Secrets Act' (1980–1) 64 *Marquette Law Review* 277, 279.

areas this notion has clearly played a role in defining the extent of coastal State authority or claims or ownership of the sea and its resources.[30] The impossibility or impracticability of physical exclusion may be remedied by using the law to secure exclusion. Thus, until quite recently fish have, as a general rule, been considered incapable of physical exclusion, and so incapable of being considered the object of a private property right.[31] Only once legal mechanisms, ie quotas, were developed for facilitating 'exclusion' could property rights arise in fisheries. For such resources, factors limiting legal excludability are vitally important.

In practice, legal excludability functions in both a narrow and wide sense. The narrow form of legal non-excludability is illustrated by the following case. In *Kellogg Co v National Biscuit Co,* the plaintiff was unsuccessful in a suit against Kelloggs to prevent them from using the term 'shredded wheat' in relation to biscuit products.[32] Kelloggs were permitted to use the term, and the goodwill that went with it, because the plaintiff had failed to create a protectable proprietary interest through intellectual property laws relating to patents or trade marks.[33] In short, if the law provides the owner with the means to legal exclusion and if that person fails to use it, then they cannot subsequently exclude persons from that property. Clearly, in cases where the proprietary interest is ephemeral or not easily susceptible to physical exclusion such legal excludability is absolutely crucial. This is particularly important in cases where the scope of property law expands into marine areas because legal control may be the only practical means of delimiting and enforcing proprietary rights. Most fish in their natural, pre-capture state are a fungible good that is highly mobile and so cannot be individually allocated to specific fishermen, hence the use of legally constructed quota or fishing licences to limit access. The wider view of legal excludability takes into account the full range of legal limitations on the exclusive use of a thing. Here property is reduced to a bundle of rights of entitlements, and law operates to reserve certain of these incidents from the holder of the property. For example, certain rights of access over land may be reserved from a landowner's exclusive use of his property. Typically such legal limits are the product of powerful and overriding public interests. These are explored in greater detail in chapter 3.

Legal excludability may work in two other ways. First, limits to legal authority act as a limit on law's capacity to guarantee excludability. For example, a State cannot guarantee title over a resource located beyond the

[30] See chs 5 and 7 below for further details.
[31] See further, ch 8.
[32] 305 US 111 (1938).
[33] *Ibid* 112. Such legal measures may also be contractual. See D Kennedy, 'Form and Substance in Private Law Adjudication' (1975–6) 89 *Harvard Law Review* 1685, 1714.

limits of its sovereignty; or a particular resource may be shared between two States, which means that it cannot be regulated without some degree of cooperation, as in the case of an international watercourse. In such cases, the limits of prescriptive and enforcement authority serve to limit the extent of unilateral excludability over a thing. Secondly, the operation of law as a form of practical reason places limits on what forms of legal right can be advanced and recognised as a matter of law. For example, all legal systems require a degree of coherence between particular legal rules in a related field of law. More specifically, coherence requires that localised rules are consistent with higher order principles, such as the requirement that one cannot use one's property in way harmful to the interests of other persons. In a novel context, a specific rule on how to deal with property may not exist or a questionable use of property may arise. In such cases, legal reasoning and the requirement of coherence will require the novel situation to be treated in accordance with the general rule. This may result in limits to excludability.[34]

Turning now to moral excludability. Resources may be incapable of propertisation in the face of powerful and compelling moral reasons. Gray notes that in all societies there are certain resources which are regarded as so

> central or intrinsic to constructive human coexistence that it would be severely anti-social for these resources to be removed from the commons.[35]

Undesirable or intolerable consequences would follow if one person, or a group of persons, was permitted to control the access to those resources.[36] Society, through institutions such as the legislature and judiciary, engage in a process of defining and redefining the moral limits to property to ensure that property remains consistent with more highly regarded human values. Thus, values such as the preservation of channels of communication and freedom of speech,[37] national security,[38] protection of cultural property[39] and protection of the environment frequently shape the limits of property.[40] Although excludability is at the heart of private property, paradoxically an excessive focus on the private or exclusive

[34] These two limits on excludability are considered in greater detail in ch 4.

[35] Gray, n 23 above, 280.

[36] Gray notes that this reflects the well known point of Locke that appropriation is not allowed where it would not leave 'enough, and as good left in common for others': *Ibid* 280–1.

[37] See *Davis v The Commonwealth of Australia.* (1988) 166 CLR 79.

[38] Thus Part One of the Anti-Terrorism, Crime and Security Act 2001 permits the seizure and confiscation of 'terrorist property'.

[39] See *Penn Central Transportation Company v New York City* 438 US 104 (1978).

[40] Other highly valued objectives may be pursued. In *Gerhardy v Brown*, members of the Australian High Court observed that the incidents of ownership were subject to more important social objectives, such as social equality, the provision of education and health: (1985) 159 CLR 70, 103 (Mason J), 152 (Deane J).

function of property may result in a detriment to private rights.[41] The following review indicates that certain limits are inherent in most justifications of property. These limits to property lend support to the argument that the legal construct of property may also require particular limits on private property or require its positive use to meet certain fundamental social objectives.

3. JUSTIFICATIONS OF PROPERTY

Debate about the justification of property is, in essence, a debate about the consequences of excluding access to things. This is well-trodden ground and includes a number of well-known theories used to justify property: the natural rights approach, the liberty theory, the desert theory, the utility/economic approach and property as propriety.[42] Although certain aspects of these justifications may vary as political ideologies wax and wane, contemporary institutions of property are, in reality, highly pluralistic and this is reflected in the particular and specific kinds of property with which we are familiar on a daily basis. For example, a fisherman is asked why he wants to own the fish he catches. His immediate response is that he has always caught the fish in a particular area and he argues that he should continue to enjoy such an entitlement. Besides, he has invested time, effort and capital in catching the fish, and so he deserves to be rewarded for his efforts. He also knows that if he owns the stock or enjoys exclusive rights to fish he is encouraged to invest in it, perhaps resulting in bigger and better catches. When pushed, he adds that fishing somehow defines him as a person, that it is part of his heritage and

[41] As Macpherson observes: 'For when the liberal property right is written into law as an individual right to the exclusive use and disposal of parcels of the resources provided by nature and of parcels of capital created by past work on them, and when it is combined with the liberal system of market incentives and the rights of free contract, it leads to and supports a concentration of ownership and a system of power relations between individuals and classes which negates the ethical goal of free and independent individual development. There thus appears to be an insoluble difficulty within the liberal democratic theory.': 'Liberal-Democracy and Property' in CB Macpherson (ed), *Property, Mainstream and Critical Positions* (Oxford, Blackwell, 1978) 199–200. See also *The Political Theory of Possessive Individualism: Hobbes to Locke* (Oxford, Clarendon Press, 1962) and 'Democratic Theory: Ontology and Technology' in *Democratic Theory: Essays in Retrieval* (Oxford, Clarendon Press, 1973). Also, Munzer, n 20 above, ch 5.

[42] For an overview of such accounts see LC Becker, n 9 above; S Buckle, *Natural Law and the Theory of Property: Grotius to Hume* (Oxford, Clarendon Press, 1991); J Christman, n 11 above; J Grunebaum, *Private Ownership* (London, Routledge and Kegan Paul, 1984); JW Harris, *Property and Justice* (Oxford, Clarendon Press, 1996); CB Macpherson, *Property: Mainstream and Critical Positions* (1978); Munzer, n 20 above; A Reeve, *Property* (London Macmillan, 1986); A Ryan, *Property and Political Theory* (1984); RB Schlatter, *Private Property: The History of an Idea* (London, Allen and Unwin, 1951); J Waldron, above n 15.

culture.[43] Pluralism means that several accounts of property may operate at the same time. Indeed, any promotion of property rights which is derived from a single justification, such as wealth enhancement, ignores how other values embedded in the institution of property necessarily configure particular and specific forms of property.

These familiar justifications, labour/desert, liberty, autonomy etc, do not merely justify a claim right, they also shape the scope and content of the resultant right. These values are embedded in the complex property law systems by which we govern the use of things. In the following review, it is clear that few justifications of property exclusively support private property or unrestricted forms of ownership. Indeed, a number of justifications demand limits on ownership either to protect certain minimal private or collective interests. The public function of property, which addresses collective concerns about the allocation of things, is developed in the next two chapters, which in turn informs the analysis of property rights in fisheries in chapter 8.

(a) Property as a Natural Right

This approach starts from the proposition that individuals have certain essential rights that derive from the independence and dignity of individuals, as expressed in terms of rights over the self.[44] This reasoning has been extended to support the claim that people are entitled to hold those things resulting from their art, intelligence and industry, an approach which is most closely associated with Locke's labour theory, which asserts that it is the expenditure of labour by a person that reduces a thing to private property. Locke was the first to make the case for private property as a natural right of the individual, and despite some flaws it remains a standard justification for private property.[45] Locke claimed that although the world and its resources were originally common to all, each person had property in one's self.[46] Since one has property in one's body and one's labour, then one must

[43] Support for this approach can be drawn from the comments of the Human Rights Committee. In the *Mahuika* case, the HRC considered fishing rights to be an integral part of their culture, although this was to be reinterpreted in the context of the modern world: *Apirana Mahuika et al v New Zealand* Communication No 547/1993, New Zealand, 15 November 2000, CCPR/C/70/D/547/1993, para 9(3). A similar approach was taken in *Kitok v Sweden* Communication No 197/1985, 27 July 1988, CCPR/C/33/D/197/1985 and *Länsmann et a. v Finland*, Communication No 511/1992, 26 October 1992, CCPR/C/52/D/511/1992.

[44] Such rights arise without operation of the law and so are termed natural rights. See H Steiner, 'The Natural Right to the Means of Production' (1977) 27 *Philosophical Quarterly* 41.

[45] Locke's approach has been resurrected most recently, at least in a secular fashion, by Robert Nozick in *Anarchy, State and Utopia* (Oxford, Basil Blackwell, 1974).

[46] 'Though the Earth, and all inferior Creatures be common to all Men, yet every Man has a *Property* in his own *Person*': Locke, n 50 below, pt ii, § 27.

have property in the product of one's labour.[47] To bolster this argument, he argued that labour is special because it adds to the value of the good.[48] Accordingly, only productive labour, which increases the supply of goods and improves human life, will generate a property right.[49] A further, and highly persuasive, feature of this approach was that it defended the individual from arbitrary encroachments of governmental, or rather monarchical, power.[50] As civil society was formed to protect individual property it was inconceivable that government, exercising the powers bestowed by society, could in any way interfere with anyone's private property except to the extent necessary to protect the institution of private property. Two further aspects of Locke's argument should be noted. First, he adds the qualification that the object acquired is not more that anyone can make use of before it spoils.[51] This seems to follow from the proposition that only productive labour results in property.[52] He then posits that there must be 'enough and as good left in common for others'.[53] This proviso ensures that no matter how scarce resources become there is always sufficient left to guarantee a means of subsistence to all.[54] In this sense Locke's account of property is permeated by a fundamental duty to preserve mankind.[55]

[47] 'Though the Earth and all inferior Creatures be common to all Men, yet every Man has a *Property* in his own *Person*. This no Body has any Right to but himself. The *Labour* of his Body and the *Work* of his Hands, we may say, are properly his. Whatsoever then he removes out of the State of Nature hath provided, and left it in, he hath mixed his *Labour* with, and joined it to something that is his own, and thereby makes it his *Property*. It being removed from the common state Nature placed it in, it hath by this *labour* something annexed to it, that excludes the common right of other Men': *Ibid* § 27.

[48] *Ibid* § 40.

[49] *Ibid*. Buckle terms this form of labour as 'workmanship' in order to distinguish it from the more common understanding of labour: above n 42, 151.

[50] J Locke, *Second Treatise of Government*, reproduced in P Laslett, *Two Treatises of Government: A Critical Edition with an Introduction and Apparatus Criticus* (Cambridge, Cambridge University Press, 1964) para 138. Buckle notes that Locke served the cause of the Whigs and his benefactor, the first Earl of Shaftesbury in this respect: Buckle n 42 above, 162. *Cf* Filmer, Locke's archrival, who defended the absolute power of the monarch: R Filmer, in P Laslett (ed), *Patriarcha and other political works of Sir Robert Filmer* (Oxford, Basil Blackwell, 1949).

[51] Locke, n 50 above, pt ii, §§ 37–8.

[52] 'It will perhaps be objected … That if gathering the Acorn or other Fruits of the Earth, *&c*. makes a right to them, then any one may *ingross* as much as he will. To which I answer, Not so. The same Law of Nature, that does by this means give us Property, does also *Bound* that *Property* too. *God has given us all things richly*, I Tim. vi. 17 is the Voice of Reason confirmed by Inspiration. But how far has he given it to us? *To enjoy*. As much as any one can make use of to any advantage of life before it spoils; so much he may by his labour fix a Property in. Whatever is beyond this, is more than his share, and belongs to others. Nothing was made by God for Man to spoil or destroy.' Above n 50, Bk ii, 31.

[53] *Ibid*. Waldron notes that this is not really a qualification: n 15 above, 209–18.

[54] The operation of this proviso is quite complex. Waldron is highly critical of Locke in this respect noting that the proviso is inconsistent with the underlying recognition of the right to self-preservation and should be dropped: Waldron, n 15 above, 212–3. Buckle appears to rescue the proviso, noting that the productive value of labour ensures that subsistence for all is maintained. In a money economy subsistence and even flourishing becomes possible without property. Buckle, n 42 above, 157–61.

[55] *Ibid*, para 6. Also see Book I, para 42.

Despite its moral and intuitive appeal, the natural rights approach has a number of well-documented shortcomings, and in order to sustain this approach, further qualifications on the right must be added.[56] First, the labour theory lacks internal coherence. The special role given to labour is difficult to justify or distinguish from other acts. Proudhon was foremost of Locke's critics in this respect, arguing that labour cannot be distinguished from other acts of claim, such as flag-raising or declarations, and which are, in effect, versions of property from first occupation.[57] Accordingly, the labour justification can only be redeemed by giving a special role to labour. Becker suggests that this is possible by making the following qualifications.[58] First, labour puts a distinction between a private property and common property, the distinction being added value. Secondly, as unappropriated property has no value, and labour is commonly a means of appropriation, then it would be unjust to deny one the benefits of one's labour. Thus the value of goods is contingent on the mixing of labour. Finally, labour would not occur unless the expected benefits (added value) accrue to the person labouring. Thus one is entitled to the whole of one's benefits. However, this turns the argument into a consequentialist argument, in that it relies upon the effects of labour, and to this extent it is inconsistent with the natural rights approach.

A further difficulty is the inability to reconcile the idea that every one has property in their body with the idea that everyone has property in the fruits of their labour in all cases. Becker makes the point that either parents have property in their children and the children have no property rights, or the children have property in their own bodies and their parents do not always have the right to the fruits of their labour.[59] This contradiction can only be overcome by making the rights to the fruits of one's labour derivative of the right to property in one's body. Giving property rights a higher priority entails grounding them in other natural rights such as the right to life or liberty. Liberty permeates the Lockean thesis in another way if one takes the premise 'every man owns his labour' to mean that every man has the right to do any act, gain income from any act and manage his acts under the conditions they so choose. To be acceptable, such a premise is necessarily subject to the caveat that the exercise of one's labour does not violate the rights of other people.

[56] D Hume, *A Treatise of Human Nature*, LA Selby-Bigge (ed) (1888) Book III, pt ii, s 3; J Waldron, n 15 above, ch 6; J Tully, *A Discourse on Private Property: John Locke and his Adversaries* (Cambridge, Cambridge University Press, 1980).

[57] PJ Proudhon, in JA Langlois (ed), *What is Property?: an enquiry into the principle of right and of government* (1966) 84 *ff*. Hume and Kant are critical of Locke for simply providing a disguised version of first occupancy: see Grunebaum, n 42 above, ch 3.

[58] Becker, n 9 above, 35.

[59] *Ibid* 37.

The metaphor of owning the body does not accurately extend to owning non-human property. Crucially, property in the former can exist without any reference to distribution, whereas in the latter it cannot. If it did not, then it would, when considering original acquisition, simply amount to a first come, first served arrangement with no restriction. The act of labour-mixing is equally problematic. As Nozick points out, why should the mixing of labour result in the gaining of property rather that the losing of one's labour.[60] This part of the Lockean approach, at least, can be rescued. Thus O'Neil points out that the labour mixing metaphor is often misunderstood and that the real point is the improving effect of labour.[61] Even then the question remains why, if one makes an object more valuable by labour, should the labour give title to the whole and not just the improvement?[62] If labour is rewarded by recognising the contribution of the person as a property right then the labour theory collapses into a desert theory of property.[63] Equally, if 'labour' is special in that it increases the social bounty of goods, then it could be claimed to be a form of utilitarianism.

Turning to the second flaw in Locke's reasoning, when Locke talks of a natural right to property he refers only to the right to possess, use and manage the property laboured upon. Accordingly it is claimed that the labour theory does not apply to the modern conception of property typified by Honoré's incidents.[64] Property that is not necessary for life is not justified, so excluding the accumulation of property beyond what one can use. Recalling that full liberal ownership is far more extensive than this, it is interesting to note that whenever Locke considered a right to the income derived from property and the right to transfer property, he was careful to demonstrate that these rights are only made possible by the invention of money and were as a result conventional rights.[65] Income and transfer rights are contingent on external things such as the market, social cooperation, and the desire of others to acquire the goods one has laboured upon.

The natural rights model of property fails the test of historical validification. For Locke these rights are historical and contingent, in that they arise from what individuals have done, and not from what society dictates we ought to do.[66] Yet, no pair of rose tinted spectacles allows one to imagine that the right to property has been a universal and fairly

[60] R Nozick, n 45 above, 174–5.

[61] O O'Neil, 'Nozick's Entitlement' (1976) 19 *Inquiry* 468, 476–9.

[62] *Ibid*.

[63] Becker for one is guilty of collapsing the labour theory into a particular form of the desert theory. Becker, n 9 above, 43–56.

[64] See J Christman, 'Can Full Ownership Be Justified By Natural Right' (1986) 15 *Philosophy and Public Affairs* 156. *Cf* Buckle, n 42 above, 180 *ff*.

[65] Locke, n 50 above, para 50.

[66] In this light, Nozick shares some ground with Locke.

applied norm.[67] Men have not been considered equal and the development of property rights institutions simply does not follow or reflect the natural rights approach.[68] Experience shows that most property regimes have resulted from a myriad of conventional relationships rather than inherent natural rights. A final difficulty, inherent to all natural rights theories, is that the meaning, content and relevance of any natural right only arise in a societal context.[69] For example, the right to life entails that *others* have a duty to respect it. If there was only one person then the declared right would be redundant. Thus natural rights are always socially contingent and so depend upon social convention for their legitimacy.

The Lockean approach has been revived by Nozick. Although Nozick doubts Locke's emphasis on labour, he acknowledges the value of the Lockean proviso 'enough and as good' if it is qualified. Nozick argues that appropriations, by whatever acts, are just if they do not violate the Lockean proviso. The proviso, which protects the rights of other individuals, acts as an absolute constraint on acts of appropriation. Thus, my act of acquisition is just only if it does not place others in a worse position than they would be if I did not acquire the resource. This proviso has, he argues, a strong version and a weak version. A person may be made worse off in two ways:

> first, by losing the opportunity to improve his situation by a particular appropriation … and second, by no longer being able to use freely (without appropriation) what he previously could.[70]

A strong proviso would exclude appropriations that resulted in others' diminution of the first and second type, whilst the weak version would only exclude the second.[71] He concludes that only the weak version

[67] The institution of slavery, which is clearly contrary to a theory of natural rights, was a pronounced feature of the Ancient Greece and Rome, and modern Europe and North America. Arguably, this continues in the form of pay discrimination between men and women, and between other sectors of society.

[68] Nozick tries to salvage the natural rights approach by positing the principle of rectification, which remedies any flaws in historic title caused by past violations of natural rights: n 45 above, 151, 230–1. This principle relies on the Rawlsian maximin to provide a model of the rectified distribution of wealth. Yet such a principle is too simplistic for it cannot take into account the complex implications of wealth distribution, and the varied capacities, opportunities and desires that would have otherwise resulted. Alternatively, one could argue that given historical uncertainty as to title, the right to a particular property could be expressed in terms of probability, and can only be overturned by clear evidence of a defect in title caused by an injustice. See M Rothbard, *For a New Liberty* (London, Collier Macmillan, 1978) 23–6. However, this would, as Christman argues, mean that title is occupation. Christman, n 11 above, 65.

[69] Indeed it can further be claimed that labour itself must be a socially defined concept.

[70] Nozick, n 45 above, 175.

[71] *Ibid* 176.

is necessary to a theory of justice.[72] Taking this approach to its conclusion, Nozick argues that if all unowned objects have been appropriated, then, as long as one is not worse off under a system of private property than under a state of nature, the resulting distribution of goods is just. However, his central argument is flawed because it fails to consider alternative systems of property rights, such as socialism, that might make one better off than under liberal ownership. For Nozick, only a comparison with the pre-property situation can be used as a basis for rejecting private property. Accordingly, the door is open for other forms of property. A second problem with Nozick's approach is his failure to acknowledge how value is attributed to resources, a process which must affect his evaluation of a particular system of distribution of goods. Christman notes that the non-property situation is left indeterminate.[73] Or, put another way, the values which property is given, thereby enhancing the position of individuals, is variable according to external circumstances. It is arbitrary, thus providing another ground for complaint. A third criticism is that Nozick presents a thinly disguised version of property by first appropriation. It is first occupation with constraints.[74]

A second revival of the Lockean approach supplements labour with desert to produce a more plausible account of property.[75] Although this cannot be described as a purely natural rights approach, this is not problematic if one accepts that property is a pluralist concept. The core intuition here is that, when a person performs some labour that is deemed by society as worthy of recompense, then they are entitled to that recompense. In this account, desert plays the major role. Crucially, desert is a socially constructed notion and so is determined by the wider community. Accordingly, this approach is exposed to influences from other accounts of property, and gives private property a very strong public dimension. Munzer, who advocates this approach, sets out a number of caveats to a labour/desert theory. First, labour/desert is qualified by the duty not to waste, spoil, or accumulate beyond one's needs.[76] Secondly, the net effect of an acquisition on others must be defensible, rendering it open to utility type considerations.[77] Thirdly, any existing

[72] He argues that any appropriation may worsen the position of others by incrementally worsening the opportunity of persons subsequently attempting to appropriate resources: *Ibid*. This is illustrated by Christman: 'So if the X here is a bushel of peaches, say, and Clara (a passerby in the state of nature) cannot appropriate the bushel of peaches that I have put into my basket (since I did), she may be able to pick some apples nearby (which are just as good) and thereby would *not* be rendered significantly worse off by my appropriation of the peaches, in Nozick's version of the weak Lockean proviso': n 11 above, 61.

[73] Christman, *Ibid*, 62.

[74] See Rothbard, n 68 above, 34.

[75] Munzer, n 20 above, 256 *ff*.

[76] *Ibid* 284.

[77] *Ibid*.

rights are subject to change if post-acquisition changes in the situation result in moral restrictions being traversed.[78] Finally, because of scarcity of resources, some labourers gain wages commensurate with the labour, rather than the resource.[79]

Despite its shortcomings the natural rights approach retains a measure of plausibility.[80] Why is this? First, credit must be given to Locke's strong narrative qualities. His justification of property is an account of how property developed from the original position in accordance with divine will and human reason. The emphasis on the special qualities of creative labour was both accessible and in accordance with Biblical exegesis. Also, the fact that Locke was also arguing towards a limit on the absolute monarchical power gave his approach strong liberal credentials. Subsequent reliance on the Lockean approach appears to be down to the temptation (or simple error) to substitute in arguments that are not internal to the rights-based approach. It is clear that Locke, in particular, reverts to liberty, desert or utility to reaffirm his approach, and others following in his footsteps have resorted to rationales such as creation,[81] identification,[82] or preference satisfaction to support their contentions. When combined with desert, the labour theory becomes a highly plausible account of property. At its core, the emphasis lies on the virtue and liberty of individuals rather than those incumbent in positions of power. The natural rights approach also respects the social contingency of property, which gives it broader political legitimacy. This suggests that any account of property that embodies fundamental moral concerns of a society will retain a measure of influence. In the present study, the notion that allocations of property should not result in waste or spoilage and that significant accumulations of property may be limited have a particular resonance for the use of important natural resources.

[78] *Ibid*.
[79] *Ibid*.
[80] See, eg, Becker, n 9 above, 32–56.
[81] An alternative account of Locke's labour thesis if provided by Tully, who argues that what is at stake is an interest in a thing created: J Tully, n 56 above. However, creator rights go beyond what Locke intended and place too much reliance on Locke's argument that labour makes up the greater part of a thing's value.
[82] This line of reasoning suggests that the individual's personality is extended into an object, and that the object should be reserved to that individual for to allow otherwise would result in an interference with that individual's personality. Olivecrona uses the example of a farmer and his soil, and a town dweller and his house, to convey the type of relationship and expectations about property that exist: K Olivecrona, 'Locke's Theory of Appropriation' (1974) 24 *Philosophical Quarterly* 220, 224. However, as Waldron notes such an approach must rely on the expectations that pre-existing structures of property rights generate. It is these and not the expectations and identification that are the basis of any entitlement: Waldron, n 15 above, 197.

(b) Property as Liberty

A number of arguments in favour of private property derive from liberty. What these arguments have in common is the idea that ownership of things gives people material independence, which in turn facilitates moral or political independence. If persons depend upon others for their material needs then they will in some way be beholden to them and unable to exercise true independence in their actions.[83] To illustrate, one variant of property as liberty notes that men may have a capricious nature and act according to their whims. This may be mitigated by the introduction of property because it facilitates habits of foresight and prudence by establishing a connection between current action and future prospects. In short, it permits a continuing interest in the value of a resource.[84] However, as Waldron rightly points out, most accounts of property from this approach do not fully explain why only private property facilitates liberty.[85] If material needs and concerns can be satisfied according to some other method of resource allocation then surely liberty will be secured, thus negating the need for private property. This failure to unequivocally link liberty to private property is evident in Nozick's influential version of the libertarian position.[86]

Nozick argues that any systematic attempt to redistribute property involves an unacceptable restriction on individual freedom.[87] He rejects all 'patterned' or intended distributions of property, such as egalitarianism or utility, and puts in their place a theory of entitlement. The entitlement theory concentrates upon the procedures for acquiring title in a just manner. In other words one justly owns something if one has acquired it by means of just procedures.[88] For this approach to succeed, Nozick has to vitiate any theory of redistribution. He does so by relying on the generally recognised respect for individual liberty.[89] Unless one can demonstrate

[83] This can be traced to Mill, who pointed out that those who are independent of means have nothing to fear from others when expressing their opinions, whereas those that rely on others for the provision of their means 'might as well be imprisoned as excluded from the means of earning their bread'. See also Rousseau, *Social Contract*, Book II, ch 3.

[84] See TH Green, *Lectures on Principles of Political Obligation* (London, Longmans Green, 1941) 212. This justification of property has been picked up by economists, who argue that security of tenure generates longer term interest in the maintenance of the resource.

[85] Waldron, n 15 above, 318–22.

[86] Nozick, n 45 above.

[87] *Ibid* 163. It is clear that Nozick is seeking to justify a capitalist approach to wealth, and that he is also advocating a full liberal account of private property.

[88] *Ibid* 153.

[89] His critique turns on the hypothetical basketball player, Wilt Chamberlain, whom fans are willing to pay an extra amount to see play. If the fans are willing to pay the extra amount and Wilt is willing to play for the remuneration then it would be unjust to prevent this occurring. Surely one must be allowed to give one's property to those one desires. Obviously such a natural distribution of wealth would disturb any patterned or intended distribution of wealth and so redistributive theories of justice would require interference with individual liberty: *Ibid* 160–7.

the legitimacy of an interference with one's liberty to use or dispose of one's property as one chooses then his approach holds true. However, Nozick fails to justify private property. Like earlier libertarians, he presupposes it to exist in a particular form. As O'Neil reveals:

> The argument presupposes, so does not demonstrate, that it is wrong to interfere to restore disturbed patterns or end-states, and that such restorations are always redistributive and violate individual property rights. But it is just these property rights which have yet to be established. … Nozick comments at one point that we lack a theory of property (p 171). We do indeed, but the lack cannot warrant the assumption (cf pp 282–2) that individual property rights are rights to control resources in all ways, to dispose of them however and to whomever the owner wishes, or to accumulate them without limit. This interpretation of property rights must be established before the restoration of patterns or end-states by state action can be rejected as unjustified interference which violates individual's rights.[90]

A further difficulty with Nozick's approach is that huge disparities in wealth may arise where there are no legitimate constraints on what people may do with their property.[91] This commitment to unequal holdings is problematic because it fails to address the fact that the extent of one's holdings is an important factor in determining the extent of one's liberty. Clearly a wealthy person has liberty to do far more than a poor person. This raises the spectre of material dependence hinted at by Mill and if this holds true then there must be a point at which the more fundamental value of liberty requires interference with property holdings. This point might be defended on grounds that the total store of goods produced is greater under a regime of private ownership, but at this point the argument moves away from one of liberty to one based on utility or efficiency.[92]

It is clear that this approach suffers from a failure to determine the scope of liberty, which is in itself a difficult task. The account of liberty used by Nozick is tautologous. In order to know what one is at liberty to do or refrain from doing one must know the extent of one's liberty and one cannot use the right to liberty to determine this; it must be determined by an independent line of reasoning.[93] Seen in this light it is clear that liberty based arguments can be recast in such a way as to defend whatever version of liberty one chooses. Thus, if liberty is comprised of

[90] O O'Neil, 'Nozick's entitlements' in J Paul (ed), *Reading Nozick: Essays on Anarchy, State and Utopia* (Oxford, Basil Blackwell, 1981) 308–9.

[91] Carter notes that Nozick is attempting to secure the foundations of capitalism. Carter, n 16 above, 39.

[92] Christman, n 11 above, 81.

[93] It is possible to argue that the property rights acquired by the first possessors were full liberal ownership rights, but such seems to reduce to a claim that the right to property is derived from first occupation.

more limited property rights, as long as these are not interfered with, then liberty is maintained.[94]

Like the labour/desert approach, the liberal justification of property remains persuasive despite its shortcomings. Liberty is a compelling moral and political ideal, and the link between private property and liberty has strong narrative resonance.[95] However, the link is not as secure as it first seems. From the foregoing it is clear that a system of property rights is contingent on, or derivative of, a theory of liberty, and constructing a coherent account of liberty is no easy matter.[96] It is suggested that some guidance as to the parameters of the notion of liberty underpinning liberal justifications of property can be drawn from the account of the public function of property in the next chapter. Although there is some truth in the argument that material independence facilitates liberty, the assumption that private property is the only means of achieving this cannot be presumed and it is quite possible that liberty may be supported by other forms of property holding such as common property. Taking the second major failing with the libertarian approach, that it may lead to vast inequalities in holdings and wealth, it is interesting to note that Nozick tries to mitigate the extreme effects of private property by circumscribing liberty by a baseline condition. For Nozick the liberty to appropriate is limited to that which does not reduce the condition of another to one worse off than that found in a state of nature.[97] This suggests that liberty cannot stand alone as a justification of property, or that full liberal ownership must in some circumstances be limited.

(c) Property as Utility

A utilitarian account of property claims that private property maximises human welfare. Thus Aristotle argued that private property is necessary to avoid conflict and social disharmony between users of resources in common ownership, and to ensure that the product of a resource is maximised.[98] Hume justified property in terms of security of expectations.[99] Accordingly, all people have an interest in stability of possession and an interest in the sanctity of their possessions, and this mutuality of interest

[94] This seems to permit reducing liberty to egalitarianism.

[95] Rose, n 109 below, pp 5–6 and ch 2.

[96] See JN Gray, 'On Liberty, Liberalism and Essential Contestability' (1978) *British Journal for the Philosophy of Science* 385.

[97] Nozick, n 45 above, 178–9.

[98] Aristotle, *The Politics*, trans and intro by TA Sinclair, revised and represented by TJ Saunders (Harmondsworth, Penguin, 1992) §§ 1262–1263.

[99] D Hume, *Treatise of Human Nature*, LA Selby-Bigge (ed) (Oxford, Clarendon Press, 1960). Also, J Bentham, *An Introduction to the Principles of Morals and Legislation* (London, Athlone Press, 1970).

leads to an institution of property.[100] Bentham reasoned that any action that augments the happiness of the community more than it diminishes it is consistent with the principle of utility.[101] Happiness itself is comprised of subsistence, abundance, equality and security, and, of these, security has pre-eminence.[102] Property is nothing more than:

> a basis of expectation; the expectation of deriving certain advantages from a thing which we are said to possess, in consequence of the relation in which we stand towards it.[103]

If humans are capable of forming expectations about the future, then their well-being may be contingent on how well they are able to act in accordance with their intentions. Pleasure is experienced when these are satisfied, and disappointment when they are not, so utility is promoted by securing expectations regarding one's possessions. Indeed, Bentham argued strongly against any form of State interference in property rights, which was seen to destabilise people's security of expectation.[104] The result of this is the protection of the socio-economic status quo, whatever this may be, by the priority of security (of expectation) over any existing or future need for a more equal distribution of property.[105]

Although accounts of property derived from utility appear to require a strong form of liberal ownership, this does not preclude other forms of property or restrictions on private property. As noted the key to property is the security of expectation and one can argue that other forms of property are equally capable of sustaining expectations.[106] Moreover, property may also be subject to a number of legitimate interferences, such as taxation, that do not necessarily compromise security of expectations. Utilitarian

[100] Hume, *Ibid*, Bk III, Pt II, § II–IV, 484–516.

[101] Bentham, n 99 above, 12.

[102] See 'Principles of the Civil Code', in CK Ogden (ed) *Jeremy Bentham: The Theory of Legislation* (London, Kegan Paul, 1931) ch III.

[103] Bentham, n 99 above, 111–12.

[104] J Bentham, *The Works of Jeremy Bentham* (London, Simpkin Marshall, 1843) vol I, 311. Surely though there is an inconsistency in that intervention will generally be required to protect property rights.

[105] '[W]here the distribution of property and power is concerned, to keep things in the proportion in which they actually are, ought to be, and in general is, the aim of the legislator. His great purpose is to preserve the total mass of expectations as far as is possible from all that may interfere with their course.': W Stark (ed), *Jeremy Bentham's Economic Writings* (London, Allen and Unwin, 1952) 3 vols, vol 3, 198. Cited in A Parel and T Flanagan (eds), *Theories of Property. Aristotle to the Present* (Waterloo, Canada, Wilfrid Laurier University Press, 1979) 225.

[106] As Christman states, expectations can be secured through a consistent and public institution of property, which may take a variety of forms. Christman, n 11 above, 102. Going further, he argues that as private property allows the free market to emerge then it is likely that people will be less secure in their possessions because of the unpredictability of the market. See also A Ryan, *Property* (Milton Keynes, Open University Press, 1987) 48; Becker, n 9 above, 56 *ff*.

accounts of property have been subject to powerful criticisms, focusing on the conflict between utility and other moral goals such as justice, the problems of measuring human satisfaction and welfare, and the tendency of utility to result in unequal allocation of wealth and resources.[107] Despite these criticisms utility remains a compelling justification for property.[108] To overcome critical objections its advocates have adopted a more behaviourist approach that focuses on utility as a function of an ordering of preferences. Such preferences are exhibited through manifest choices and welfare is measured according to the person having more things that feature higher on the list of preferences. At this point, traditional accounts of utility dovetail with economic approaches to property rights.[109]

(d) Economic Approaches to Property Rights[110]

As noted earlier, economics has been given greater prominence in the protection and conservation of the environment, through economic valuation of natural resources and the application of economic cost/benefit models. Property rights are the principal mechanism by which values are attributed to resources. Advocates of private property claim that it is the most efficient means of allocating resources and that it provides an incentive for the productive use of resources.[111] In contrast, common property is inefficient and will lead to the degradation of a resource.[112] More specifically, the argument is that only when the full package of rights (use, management transfer and income rights) is vested in a single person are

[107] CB Macpherson, *The Life and Times of Liberal Democracy* (Oxford, Oxford University Press, 1977) 33.

[108] Becker notes that it is direct, technically simple and deductively valid, n 9 above, 58.

[109] The economic approach takes the individual as the basic unit of analysis. This individual is a rational self-interested agent that seeks to maximise his own preferences, hence the link with classical utilitarian approaches. See CM Rose, *Property and Persuasion: Essays on the History, Theory and Rhetoric of Ownership* (Boulder, Westview Press1994) 3.

[110] It is necessary for the commentary in this part to be more extensive because this approach underpins the most powerful claims for the introduction of property rights into natural resources and because, unlike other accounts of property, it claims to reduce a plurality of values to a single common denominator. As noted above, such claims need to be subject to scrutiny.

[111] Although economic justifications of property are found in earlier works by Bentham and Marx, they only came of age in the mid-20th century, influenced by the work of Alchian and Demetz, and the paradigmatic tragedy of the commons scenario. AA Alchian, 'Some economics of property rights' (1961) *Rand Paper No 2316*. H Demetz, 'Some aspects of Property Rights', (1964) 9 *Journal of Law and Economics* 61; H Demetz, 'Toward a Theory of Property Rights' (1969) 57 *American Economic Review* 347. G Hardin, 'Tragedy of the Commons' (1968) 162 *Science* 1243.

[112] Richard Posner has put the argument forward that common property which leads to the 'tragedy of the commons' should give way to private property. RA Posner, *Economic Analysis of Law*, 5th edn (1998) 36–45.

efficient outcomes achieved. It is always better to 'internalise' some effect or factor, ie give people property rights over it, than to adopt some alternative system of use.

Before considering the core idea that private property leads to efficiency it is necessary to say something about externalities. Externalities are the effects of a transaction on parties other than the transactors; they are external to the transaction. Externalities may be positive, such as the effect of an improvement on your house to your neighbour's property, or negative, such as air pollution emitted by a factory. Externalities are not intended, they result from the side effects of market behaviour. Neither are externalities paid for by the contracting parties. They are borne by parties who did not create them. Consequentially, any cost-benefit analysis will be incomplete because costs and benefits cannot be properly accounted for. The economic approach to property is based on the idea that efficiency is a plausible measure of utility. For an efficient allocation of resources to take place there must be no externalities. Internalising costs and benefits ensures that those best positioned to pay for something will do so. Demetz argues that private property systems emerge because externalities are best alleviated by the ascription of private property rights to individuals over the inefficiently used factors.[113] In the absence of externalities a market is efficient because it 'places every productive resource in that position in the productive system where it makes the greatest possible contribution to the total social dividend measured in price terms'.[114] As the Coase theorem demonstrates, no matter how resources are initially allocated, free trade among rational agents ensures an efficient outcome.[115] Thus property rights are inextricably linked to the free market.

The importance of efficiency cannot be understated.[116] Unless the particular allocation of resources under private property demonstrates some measurable economic advantage over other possible allocations then private property fails to merit its special status. The most important tests of efficiency are those provided by Pareto superiority, Pareto optimality, and Kaldor-Hicks efficiency. A situation is Pareto superior where an individual increases their welfare and no-one decreases in welfare. A situation is said to be Pareto optimal when there is an allocation of goods which cannot make at least one individual better off without making another individual worse off. Or in other words a Pareto optimal situation has no

[113] Demetz, 'Towards', n 111 above, 347.

[114] FH Knight, 'The Ethics of Competition' in FH Knight (ed) *The Ethics of Competition and other Essays* (1935) 48.

[115] R Coase, 'The Problem of Social Costs' (1960) 3 *Journal of Law and Economics* 1.

[116] See Demetz, 'Towards a Theory of Property Rights' n 111 above. *Cf* F Michelman, 'Ethics, Economics and the Law of Property' in *NOMOS XXIV: Ethics Economics and Law* (New York, New York University Press, 1982).

Pareto superior. The difficultly with Pareto rankings is that they do not allow for comparison of levels of satisfaction. Where a person is made worse off then a Pareto ranking cannot be made, and because numerous states exist in which persons are made worse off Pareto ranking of efficiency is severely limited. To get round this problem the Kaldor-Hicks test is used.[117] The Kaldor-Hicks test allows the person increasing their welfare to compensate those whose welfare decreases. The compensation payment needs only to be hypothetical, in that should the payment be made then a Pareto improvement would be achieved. It should be reiterated that each of these efficiency rankings are ordinal, not cardinal. They avoid interpersonal comparisons. However, Christman disputes this and argues that the Kaldor-Hicks approach admits interpersonal rankings through the back door. Compensation is contingent on willingness to pay, and willingness to pay for something reflects how badly someone desires a thing. Clearly there must be some currency for payment of compensation which means that a comparison of desires can take place.[118] Another criticism of the Kaldor-Hicks method is the Scitovsky paradox, which shows that more than one Kaldor-Hicks efficient result can be derived.[119] The point we wish to stress here is that even these apparently ordinal efficiency tests cannot be regarded as free from interpersonal comparisons of welfare.

Proponents argue that only when full liberal ownership is vested in an individual are efficient outcomes generated. Competitive markets are uniquely necessary to produce economic efficiency, and these rely solely upon the existence of private property. Some further comments on the free market are required to clarify this.[120] A market is a place where individuals voluntarily trade goods and services, and a free market is one that is free of trade constraints. A perfect market is said to exist when the following conditions are met.[121] All agents must be rational, in the sense that they act to maximise their own utility. All economic agents must be price takers—there should be an absence of monopolies or other groups that can unilaterally affect the price of goods. There should be no transaction costs. Thus all

[117] See N Kaldor, 'Welfare Propositions of Economics and Interpersonal Comparisons of Utility' (1939) 49 *Econ. J* 549; J Hicks, 'The Foundations of Welfare Economics' (1939) 49 *Econ J* 696; J Hicks, *Value and Capital* (Oxford, Clarendon Press, 1946).

[118] Christman, n 11 above, 100.

[119] T de Scitovsky, 'A Note on Welfare propositions in Economics' (1941) 9 *Rev ES* 77.

[120] It is not within the scope of this thesis to change or even fully explain the assumptions of welfare economics. For an account of this see J Coleman, *Markets, Morals and the Law* (Cambridge, Cambridge University Press, 1988); Also, AM Feldman, *Welfare Economics and Social Choice Theory* (London, Nijhoff, 1980).

[121] The following conditions are taken from Christman, n 11 above, 32. These conditions are generally taken to underpin any theory of welfare economics. See CE Ferguson and JP Gould, *Microeconomic Theory* 4th edn (Homewood, Illinois, RD Irvin, 1975) 222–5. Also Coleman, n 120 above, ch 10.

transactions are assumed to be costless and any rights obtained thereby can be costlessly enforced. There should be unobstructed entry and exit into the market. Finally, there must be full information: all economic agents must possess full and perfect knowledge. According to direct theorems of welfare economics, under these conditions trade will reach an equilibrium; an equilibrium that can be reached from any starting point.[122]

It is possible to take issue with a number, if not all, of the assumptions central to the economic justification of private property. First, it assumes too much about how rational people behave. Secondly, economic assumptions about what is morally worthwhile are highly questionable. Finally, there are internal inconsistencies with economic approaches. These include problems with assumptions made about the operation of the free market and the link between private property and efficiency. These are considered in turn.

The economic approach is predicated on rational choice theory, which assumes that individuals make choices that are consistent and predictable and that generally have the effect of maximising their preferences through choice-based mechanisms.[123] Economists generally admit that there may be variations from the outcomes predicted, but generally account for them according to other non-rationality hypotheses so as to preserve the core assumption of rational choice. However, there are a number of important limitations to rational choice theory. First, rational choice strategies are not always formulated.[124] This means that the outcomes that rational choice theory predicts do not always follow. One factor causing this has been labelled the status quo bias, which demonstrates that individuals are predisposed in their choices to what is habitual.[125] Another important deviation from rational choice theory occurs when the individuals perceive the rational choice outcome as violating widely accepted norms of fairness.[126] A second limitation arises from situations involving uncertain

[122] As all trades are voluntary and rationally informed (which suggests that individuals will act to better themselves) then all trades will manifest Pareto superior moves, leading to an equilibrium that is Pareto optimal.

[123] See TS Ulen, 'Rational Choice Theory in Law and Economics' in B Bouckaert and G De Geest (eds), *Encyclopedia of Law and Economics* (Cheltenham, Edward Elgar, 2001) 790, 791.

[124] TS Ulen, 'Rationale Choice Theory and the Economic Analysis of Law' (1994) 19 *Law and Social Inquiry* 487.

[125] See R Thaler, *The Winner's Curse. Paradoxes and Anomalies of Economic Life* (Princeton, New Jersey, Princeton University Press, 1992); R Korobkin, 'Policymaking and the Offer/Ask Price Gap: Toward a Theory of Efficient Entitlement Allocation' (1994) 46 *Stan LR* 663.

[126] J Andreoni, 'Why Free Ride? Strategies and Learning in Public Goods Experiments' (1998) 38 *JP Econ* 291; G Marwell and R Ames, 'Economists Free Ride, Does Anyone Else?' (1981) 15 *JP Econ* 295; W Guth, R Scmittberger and B Schwarze, 'An Experimental Analysis of Ultimatum Bargaining' (1982) 3 *Journal of Economic Behaviour and Organization* 367; D Kahneman, J Knetsch and R Thaler, 'Fairness as a Constraint on Profit Seeking: Entitlement in the Market' (1986) 76 *American Economic Review* 728. The experiments reported show a strong tendency towards equity and fairness. This may be approximating a position something like the one Rawls predicted would happen behind the veil of ignorance. J Rawls, *A Theory of Justice* (Oxford, Clarendon Press, 1972) 139.

outcomes. Where individuals are required to make choices involving unpredictable outcomes, for example, placing values on lottery tickets with different win probabilities, then they have been shown to act at odds with rational choice theory.[127] Deviations are also likely to occur as a consequence of cognitive limitations that impair their ability to make fully supported rational choices. A related criticism of the economic approach is that it is *ex ante*. By *ex ante* one means that it focuses on incentives and expectations about the future. Individuals are expected to maximise their preferences and this is done on the basis of future and uncertain events. What may *ex ante* be efficient, can turn out to be *ex post* inefficient. In this sense economic approaches are at odds with orthodox legal approaches that rely heavily on past events as a guide to future conduct and therefore based on untested assumptions about 'preferences' which in turn must be tested by experience. The point is not to suggest that rational choice theory is redundant, but to warn against sanguine acceptance that entitlements will flow to their highest value use; although rational choice theory is plausible this is not to say that it is absolutely verifiable and we should remain sceptical about uncritical assertions derived from it.

The second issue is whether or not economic assumptions about value hold true. At the heart of the economic justification of property is a belief that economic forces and values should have a primacy in a decision-making process. A number of assumptions come together at this point. First, the assumption that economic values such as preference maximisation and efficiency are worthwhile moral goals. Second, the assumption that concepts of value are the only factors worth measuring. Third, the assumption that other factors can be reduced to economic variables of value for the purpose of ranking. Fourth, that things can be valued for the purposes of economic modelling. All these assumptions are open to criticism.

If economic values are not legitimate moral goals, then no matter what the particular merits of efficiency, it cannot be used to justify property rights. According to most economic theories, persons are taken to be rational self-interested preference-maximisers.[128] However, there appears to be little evidence proving that people become happier when their desires, beyond their basic wants, are satisfied.[129] The work of Hayek is worth noting at this point for his strong defence of private property and the free market system, and, more importantly, his challenge to social justice—or

[127] S Lichtenstein and P Slovic, 'Reversals of Behaviour between Bids and Choices in Gambling Decisions' (1971) 89 *Journal of Experimental Psychology* 46; R Thaler, n 125 above.

[128] See Rose, n 109 above, 27–30. Also NP Barry, *The New Right* (London, Croom Helm, 1987) 34–5.

[129] Kant was among the first to state that satisfaction of desires does result in happiness or contentment. See R Dworkin, 'Is Wealth a Value?' (1980) 9 *JLS* 191. Also B Argyle, *The Philosophy of Happiness* (London, UCL Press, 1987) 142–4 and 207–8.

distributive justice.[130] Hayek depicts society as a whole as a spontaneous order, a form of human order that has evolved rules and guiding principles through the mutual interaction of humankind over the centuries.[131] The institution of private property is one that has become necessary within this spontaneous order. It has become so because it allows owners of property to pursue their desires.[132] It allows them freedom of choice and it creates a predicable situation within which the owner may plan and carry out his desires. Although such a situation could be achieved through an alternative system of property administered by law, private property has the advantage of allowing for the individual initiative so essential to spontaneous order. It is important to note then that private property is not logically essential. Rather historical experience merely shows it to be so. This suggests that a variety of different property institutions may evolve if the need arises and the circumstances allow. Also, Hayek does not establish that economic goals are singularly important and it is possible to use his reasoning against him to show that across time private property/economic goals have not been the single nor overarching societal goals.

Even if it is conceded that wealth is a morally desirable goal, it must be remembered that there are other values which do not fit into the economist's model. As Adam Smith pointed out, people do not always act out of economic self-interest.[133] People may be motivated by things such as love, dignity and respect.[134] Frequently, these values take explicit priority over economic values. By way of example, Gillespie notes that in early American environmental cases it was held that cost–benefit analysis could not be used to make a decision concerning endangered species.[135] Conservation was predicated on values such as aesthetic quality or cultural and educational value, rather than cost.[136] In the same way that questions have been posed

[130] See FA Hayek, *The Mirage of Social Justice* (London, Routledge and Kegan Paul, 1982). Also FA Hayek, *Rules and Order* (London, Routledge and Kegan Paul, 1982).

[131] Hayek, *Ibid* ch 2.

[132] In this sense Hayek is quite utilitarian and he readily admits that men wish to have wealth at their disposal and that they are generally predisposed towards wealth enhancement, as a form of preference maximisation. See Flanagan, in Parel and Flanagan, n 105 above, 342.

[133] A Smith, *The Theory of Moral Sentiments*, DD Raphael and AL Macfie (eds) (Oxford, Clarendon Press, 1976) s 1.

[134] *Ibid*. Also J O'Neil, *Ecology, Policy and Politics: Human Well-Being and the Natural World* (London, Routledge, 1993) 118 *ff*. Baker notes that monetary values cannot account for integrative values such as honour, respect and reverence that refer not to individual desires but to feelings orientated in other fields of commitment. CE Baker, 'The Ideology of the Economic Analysis of Law' (1975) 5 *Philosophy and Public Affairs* 3, 35.

[135] A Gillespie, *International environmental law, policy and ethics* (Oxford, Oxford University Press, 2000) 39. He refers to the US courts' consideration of the Endangered Species Act in *Hill v TVA* 549 F 2d 1064, 1074, where the court held that '[e]conomic exigencies … do not grant courts a licence to rewrite statute, no matter how desirable the purpose or result might be'.

[136] Gillespie, *Ibid* 40.

about economic values generally, questions can be asked of the goal of efficiency. There seems to be general agreement that efficiency should not dictate morality, although it may have a role to play in how we bring about our moral goals once they have been determined. As Posner admits, 'more efficient is not a synonym for better'.[137] Carter points out that society has to care for its old and unproductive people and it does so by placing them in care. Of course, a more efficient way of dealing with them would be to kill them.[138] Clearly, this is not acceptable according to the wider values and rules of every society, and the point is made that efficiency does not pre-empt other moral ends.[139] A further problem arises because efficiency tallies votes based on each consumer's willingness to pay. As a result it overemphasises the preferences of the wealthy, who can pay more, and underemphasises the preferences of the poor.[140] Economists respond to such criticisms by claiming that other values can be reduced to economic values and so taken into account. They regard other values as personal preferences best revealed and satisfied through market mechanisms.[141] However, when they attempt to reduce ethical, political and social values down to simple monetary terms they are guilty of making a category mistake.[142] They try to describe something in terms that simply don't apply to it. As Dowdeswell asks: 'Can we price the value of the pristine mountains, the beauty of the sunset, the sound of the swirling brook?'[143] Such values cannot be converted into economic terms. If this point is ignored and economic values are misapplied then undesirable consequences could follow.[144] For example, environmental resources that are perceived of as harmful or fulfilling no economic purpose, or have no aesthetic, cultural or

[137] R Posner, 'Economic Justice and the Economist' (1973) 33 *Public Interest* 109, 113.

[138] Carter, n 16 above, 75.

[139] As Ogus notes: 'efficient solutions are not always just solutions': AI Ogus, 'Economics, Liberty and the Common Law' (1980) 15 *Journal of the Society of Public Teachers of Law* 42, 53. He uses the example of a factory producing essential goods, but causing a nuisance to an adjacent private dwelling. Assuming that it is cheaper for the private resident to install double-glazing than it is for the factory owner to do so, then the most efficient recourse is for the private resident to provide double-glazing. Yet the question remains, why should the private resident pay for the factory owner's problem?

[140] DA Farber, 'From Plastic Trees to Arrow's Theorem' (1986) *University of Illinois Law Review* 337, 354–5

[141] See D Kennedy, 'Cost-Benefit Analysis of Entitlement Problems: A Critique' (1981) 33 *Stan LR* 387.

[142] M Sagoff, *The Economy of the Earth: Philosophy, Law and the Environment* (Cambridge, Cambridge University Press, 1988) 94.

[143] E Dowdeswell, Speech at the World Summit on Social Development, UNEP 1995/3.17. Cited in Gillespie, n 135 above, 40. See also A Gore, *Earth in Balance: Forging a New Common Purpose* (New York, Plume, 1992) 190–1.

[144] Such consequences might include slavery, child labour, and the destruction of places of cultural value. Unless non-monetary values are recognised as part of a decision making process then it may be difficult to deny morally repugnant yet efficient practices. See Gillespie, n 135 above, 41.

recreational value could be destroyed or replaced without consequence.[145] Similarly, if economic logic were to guide resource policy then it would become acceptable to replace less valued resources with higher valued resources. Apart from any moral objections this raises important concerns about biodiversity. As we will show in chapter 6, scientific understanding of ecological context and the consequences of resource consumption are driving the regulation of natural resources in new ways to ensure that certain goods and values that transcend the individual natural resource are protected. It is also clear that the point about skewed preferences remains. Simply put, economists have failed to explain how and why other values can or should be reduced to monetary values.[146]

The last set of criticisms concerns the internal coherence of economic approaches. First, the link between private property and efficiency is questionable. An initial difficulty is that exponents of the tragedy of the commons approach presuppose private property to exist. As Carter notes, it is the private ownership of the cows that poses a problem, for if they were not individually owned then there would be no incentive to increase grazing effort.[147] It is not private property that solves the tragedy of the commons, but the introduction of adequate control over the resource use. Control does not have to be in the form of private property, although it may be the most efficient means of exercising control. Thus, economic theory conflates the absence of individual ownership rights with the absence of individual duties of care, and as long as the latter exist and are enforced then common property is well cared for.[148] In Demetz's terms all that is required is to make the people who produce the externalities responsible for them. It does not follow that private property rights are the only way of achieving this.

Secondly, there is a questionable linkage between private property institutions and the free market, with the assumption that private property entails a free market, which in turn leads to the most efficient allocation of resources. This linkage is problematic for a number of reasons. In the first place, individuals are considered to be rationally self-interested preference maximisers. This questionable motivation leads them to trade goods in order to increase their wealth.[149] In the second place, there is

[145] See A Leopold, *A Sand County Almanac* (Oxford, Oxford University Press, 1949) 210 *ff*.

[146] There is a large body of literature on this point. See M Sagoff, 'Reason and Rationality in Environmental Law' (1987) 5 *Ecology Law Quarterly* 265, 272; M Jacobs, *The Green Economy: Environment, Sustainable Development and the Politics of the Future* (London, Pluto, 1991); P Soderbaum, 'Neoclassical and Institutional Approaches to Environmental Economics' (1991) 24 *Journal of Environmental Informatics* 481. There are parallels in other areas where, eg, it is denied that wealth should have anything to do with policy influence. If it was a measure of a person's values then it would lead to disenfranchisement.

[147] Carter, n 16 above, 68.

[148] Becker uses the example of a public library to illustrate this point: n 9 above, 62–3.

[149] Notes 123–127 above, and the accompanying text. See also n 116 above.

a clear difference between having the right to do something, which the traditional model of liberal ownership provides, and the incentive that a person has to do it, which free market theory presupposes.[150]

There are a number of other attacks that can be made upon the free market model. First, the assumption that free markets exist is unrealistic. Most if not all economies are mixed and are to a large degree imperfect.[151] Therefore the allocation of resources will not be as efficient as assumed. Secondly, markets operate in a real world environment, which inevitably places obstacles in the way of free trade, for example mountain ranges and technological restrictions. These impediments may distort market allocation of resources. The assumption is made that these factors are exogenous and unalterable by individuals, but this does not hold true, because governments may seek to overcome the obstacles. This involves some degree of intervention and so undermines that notion that only private interest motivates market behaviour. Thirdly, there is the assumption that trade is non-tuistic—that it is not done to benefit the welfare of the trading partner. People do trade in a way that is mutually beneficial, which again runs counter to assumptions about actors in the market. Finally, there are more obvious complaints about market assumptions. These include economic disutilities arising from monopolies and oligopolies, which distort the allocation of resources. In short, crucial assumption about the operation of the market are made which do not hold true in practice, rendering the claim that property rights are more efficient inconclusive.

(e) Property as Propriety

A much neglected and unarticulated justification of property is propriety.[152] According to this approach, property law exists so as to accord to each person or entity that which is proper or appropriate.[153] Property is a key element in the structuring of society and part of a

[150] Christman, n 11 above, 39.

[151] Economists may reply that it is only a model and that it serves to illustrate potential economic effects and variables, and that it is not meant to be normative in the sense that this is how things should be. However, the point made is that when all the assumptions are laid bare then many of the consequences of the economic approach to property rights simply do not hold out.

[152] There has always been some terminological confusion with these terms. Professor Pocock notes that from Rome to Locke '"property"—that which you owned and "propriety"—that which pertained or was proper to a person or situation—were interchangeable terms'. JGA Pocock, 'Mobility of Property', in A Parel and T Flanagan, n 105 above, 141, at 142.

[153] As Rose puts it: 'Property in this world "properly" consisted in whatever resources one needed to do one's part in keeping good order; and the normal understanding of order was indeed hierarchy—in the family, in the immediate community, in the larger society and commonwealth, in the natural world, and in the relation between natural and spiritual worlds'. Rose, n 109 above, 59.

system of governance. Thus for Aristotle, the citizen was possessed of property in order to be autonomous, which was necessary for him to function properly as an agent of society.[154] For Bodin, property was a fundamental constraint on the power of the monarchy. It was essential for the maintenance and ordering of families, which were in turn necessary constituent parts of society.[155] The principal focus of property in this tradition was land, with the responsibility and privilege that it carried. Land was considered as a special case because the powers and privileges that went with it had a much greater effect on other people's ability to survive than moveable or consumable property. The most important point is that property carried with it some measure of governing authority, and that this authority had definite hierarchical characteristics.[156]

What property in this sense boils down to is the idea that certain property holdings and land in particular carry with them a responsibility to the wider community, or perhaps that collective interests may take priority over private interests. This is evident in a number of contemporary property situations, for example American takings law, and it also infuses property more generally.[157] Thus it is still the case that ownership of my home allows me space to shelter and nurture my family, or that ownership of a business allows the entrepreneur the opportunity to employ workers and provide an economic service. Ownership of my home is proper to me in my capacity as member of a family and ownership of a factory is proper to the businessman. These aspects of property are closely related to the above historical antecedents, but what is interesting about the contemporary manifestations of property as propriety is that the ordering function of property is no longer exclusively regarded as an internal function of the property right. The property owner is no longer expected to carry out a 'trusteeship' function. This factor appears to have been usurped by the State, or exists as an external constraint on the use of the property.[158] This is perhaps

[154] Aristotle, n 98 above, § 1263.

[155] J Bodin, *Six Bookes of a Commonweale*, a facsimile reprint of the English translation of 1606 by R Knolles (ed) intro by KD McRae (Cambridge, Massachusetts, Harvard University Press, 1962) 11–12, 110–11, noted in Rose, n 109 above, 59.

[156] Rose, *Ibid* 59; Also CM Rose, 'Empires and Territories at the End of the Old Reich', in JA Vaan and SW Rowan (eds), *The Old Reich: Essays on German Political Institutions, 1495–1806* (Bruxelles, Éditions de la Librairie Encyclopédique, 1974) 61 *ff*.

[157] Rose, n 109 above, 64. Takings law is concerned with the legitimacy of government regulations that have the effect of depriving property owners of some or all of the benefits of their property, and related issues of compensation.

[158] Rose casts property as propriety as a weaker idea: *Ibid* 64. This is presumably because property is now a lesser part of an ordering system, which includes government and law, whereas historically property was a much more central part of the regime of government.

explicable on grounds of modern democratic theory, or according to the argument that the individual cannot always be expected to act in the public interest when it conflicts with his private interest, thus necessitating and externalisation of the trusteeship function.[159]

At this point it is worth considering two related areas where property as propriety is manifest: the public trust doctrine and contemporary notions of stewardship.[160] In both cases important public policy considerations about resource use, which flow from conceptions of good order, determine the shape of particular constellations of property rights. Although it may be difficult to pin a justification of property to a concept as nebulous as good order, it is possible to point to certain widely accepted or entrenched political and legal values as evidence of what amounts to good order.[161] The conception of good order referred to here includes certain environmental goals.

American public trust doctrine has its roots in Roman law and the idea that certain resources such as air, running water and the sea were incapable of ownership. This continued into English law, and, after independence, evolved into a sophisticated form of public ownership in the US.[162] Public trust has two significant features. First, it is inalienable.[163] Secondly, it provides the State government with the continuing responsibility for the stewardship of the resource. This means that resources cannot be used in a way that would violate the interest protected by the public trust.[164] Public trust doctrine occupies a secure place within American jurisprudence, and has been used to regulate a number of resources, including public spaces, the environment and fisheries.[165] In essence the public trust is a proprietary interest of the State that ensures that certain resources, in which there is a public interest, are used in a way that benefits the community, or are not used to the detriment of the community. It is property with special responsibility.

[159] Hypothetically, such a choice could be made under the veil of ignorance as suggested by Rawls, but of course in reality a decision by the owner in the public interest cannot be guaranteed.

[160] Stewardship is considered in more detail in chapter 5, section 5.

[161] See further ch 3, s 2(b) below.

[162] This line of reasoning is evident in the work of Henry de Bracton: H de Bracton, *On the Laws and Customs of England*, GF Woodine (ed) (Cambridge, Massachusetts, Harvard University Press, 1968) 39–40.

[163] In the leading case of *Illinois Central Railroad v Illinois* 146 US 384 (1982), the US Supreme Court held that a legislative grant of a waterfront property to a private company was necessarily revocable as certain public trust property could not be placed entirely beyond the direction and control of the State.

[164] See JL Sax, 'The public trust doctrine in natural resource law: Effective judicial intervention' (1970) 68 *Michigan Law Review* 471; *Cf* R Delgado, 'Our Better Natures: A Revisionist View of Joseph Sax's Public Trust Theory of Environmental Protection, and Some Dark Thoughts on the Possibility of Law Reform' (1991) 44 *Vanderbilt Law Review* 1209.

[165] See further, ch 8, s 3(e).

Similarly, stewardship seeks to ensure that certain resources are used in a manner which does not override community interests in the resource. The result is that the steward is subject to certain overriding duties in respect of the resource. These typically involve conservation and management duties but may also include facilitating shared use and enjoyment of a resource. In terms of propriety, the assumption could be made that unless certain resources are used in such a manner, then at best undesirable conflicts may arise and at worst more serious social disorder is precipitated. Thus stewardship, like other property holdings, has an ordering function which reflects the high degree of interest a community has in a particular resource.

If one accepts that property is directed at achieving some form of order then an account of property derived from propriety is not too problematic. Indeed, most commentators would agree that property has this basic ordering function. However, difficulties arise when we move from an abstract idea of order to what may be termed proper order. When an account of property tells us what form and amount of property is proper for a person, it stops being a mere description of what happens and becomes a normative account of how society should be ordered. At this point property as propriety must presuppose the existence of a particular form of order or social structure. This is problematic. For example, in older accounts of property in this tradition the order advocated does not conform to what we now regard as decent or fair, ie feudalism. Property reflected an established order, a hierarchy, and so tended to preserve the status quo between the haves and have-nots.[166] Of course one could reject the 'unequal' or illiberal dispersal of property that was prevalent under this view, and substitute a version of ordering that is democratically acceptable. However, the point remains that this version of property depends on an account of how society should be ordered, and this is no easy task.

A second problem with this approach is that it presumes that a comprehensive account of social order can be formulated, according to which the allocation of resources can be measured. As Hayek and von Mises point out in respect of non-market economies, although this degree of planning is theoretically possible, it is not a practical prospect.[167] Indeed, experience tells us that attempts at deliberative social order are doomed to failure. Alternatively, an account of property based on a vision of proper social order runs the risk of ending up as totalitarianism, or, at the very

[166] Critics of 'modern republicanism' include R Epstein, 'Modern Republicanism—or The Flight from Substance' (1988) 97 *Yale Law Journal* 1633, 1635. Also M Tushnet 'The Concept of Tradition in Constitutional Historiography' (1987) 29 *William and Mary Law Review* 93, 96 *ff*.

[167] FA Hayek, 'The Nature and History of the Problem' in FA Hayek (ed), *Collectivist Economic Planning: critical studies on the possibilities of socialism*, (London, Routledge, 1935) 1; L von Mises, 'Economic Calculation and the Socialist Commonwealth' in Hayek, *Ibid* 87–110.

least, would be open to claims of authoritarianism. Moreover it might necessitate infringing generally accepted rights and freedoms, such as the liberty to dispose of one's possessions freely.[168]

If a comprehensive account of propriety is a practical impossibility what is left of accounts of property derived from propriety? There are three possibilities in this respect: first, that propriety merely justifies property in those things necessary to survive; secondly, that propriety justifies those holdings necessary to facilitate a person's participation in social order; and thirdly, that it provides a corrective or rectifying function that ensures uses of certain resources do not run counter to social order.

Under what may be termed minimal propriety it is recognised that certain things are essential to human survival: shelter, food, clothing and a sound environment. It may be that hunger, homelessness and so on run counter to a version of good order, or that these failings will result in instability and disorder. Either way it is assumed that any satisfactory form of social order must first provide for basic human needs. This may be understood positively, in the sense that certain property holdings must be provided for, or negatively, in the sense that accumulations of property that prevent others satisfying their needs are not permitted. In some form this minimal ordering function of a property system is recognised in most, if not all, accounts of property. Certainly, international law entertains basic welfarist provisions.[169] The problem is that under this version of property all that is proper for a person is that which is necessary to survive. Above and beyond this point the theory has nothing to say about further accumulations of property, inequality of holdings and harmful uses of property. Accordingly, it would need to be supplemented by another property justification that explains how greater or more sophisticated holdings are determined and structured. It is worth highlighting that propriety in this sense does not justify merely private property. As long as certain minimal needs are satisfied then it does not matter how this happens. Accordingly, it could justify collective forms of holding, or even a system of charitable entitlements to those incapable of furnishing their basic needs.

Under the second version of propriety a person is entitled to those things necessary to ensure that they can properly participate in society. This version of propriety goes beyond the first in that it requires a form of organisation that recognises individuals' capacity for rational

[168] Of course one could suggest that the proper form of order is a liberal free market society. If this is so then property as propriety loses its normative resonance and becomes a mere apology for a market economy.

[169] See Art 11 of the International Covenant on Economic, Social and Cultural Rights 993 *UNTS* 3, which obliges States to ensure an adequate standard of living for their people. However, as Alston notes, this right has been violated 'more comprehensively and systematically than probably any other right': P Alston, 'International Law and the Human Right to Food' in P Alston and K Tomasevski (eds), *The Right to Food* (Boston, Nijhoff, 1984) 9.

thought, self-reflection, control and desire formation. It must then allow for a degree of control over material things necessary to allow a person to service their interests as formulated. In this respect it closely parallels or amounts to a version of property based on autonomy according to liberty based arguments for property.[170] What is being put forward distinctly is the claim that good or proper order is based on an ideal of individual autonomy. Again this version of propriety does not automatically entail private property rights, although some private property may be necessary to fulfil one's desires. For example, if my goals are to pursue spiritual enlightenment through monastic reflection, then this might only be achievable through the giving up of personal possessions and participating in some form of communal ownership of daily necessities and the means of their production. Neither does it support a claim that I must own or control all those things necessary to the fulfilment of my desires. Our goals must be realised through action and there may be physical, legal, economic, and social limits that restrict the way in which we can control things. Autonomy in this sense ensures opportunities and the capacity to obtain control over things. It does not require it. Clearly certain goals cannot be reconciled with the interests of society, such as vast accumulations of wealth or exclusive control over natural resources that would disenfranchise others. Most versions of autonomy would argue that only certain arrangements and activities are valid goals.

Finally, under what may be termed object propriety, it is recognised that certain things have a direct bearing on society's ability to function.[171] This capacity flows from the inherent nature of the thing. Accordingly, where the use of property threatens or destabilises good order, centrally or collectively determined uses of property must be imposed.[172] Under such a view certain things are deemed to be critical to social order. Typically this would include, inter alia, land and other factors of production, such as the oceans or airspace.[173] Untrammelled ownership of such things may

[170] Some accounts of autonomy start from the position of self ownership, which is then projected into things. See generally, TM Knox, *Hegel's Philosophy of Right* (Oxford, Oxford University Press, 1952) §§ 41–77. A useful summary of this is provided by Munzer, n 20 above, ch 4. See also J Raz, *The Morality of Freedom* (Oxford, Clarendon Press, 1986) 369 *ff*; G Dworkin, *Theory and Practice of Autonomy* (Cambridge, Cambridge University Press, 1988) ch 1; J Christman, 'Autonomy and Personal History' (1991) 21 *Canadian Journal of Philosophy* 1.

[171] This reflects the point made in ch 1: that the physical characteristic of a thing affects the form of ownership capable of being applied to it.

[172] This view of property is reflected in Underkuffler's second conception of property—'operative property'. This view of property permits 'collective definition, redefinition, control, *and* change' of property, rather than protect some fixed view of property: Underkuffler, n 22 above, 46–51. See further, ch 3, s 2(b)(i).

[173] Indeed it could extend to other proprietary interests such as gold reserves and control of the supply of money in an economy.

affect society's ability to guarantee the general well-being by ensuring the production of food or preventing environmental degradation. Thus, a farmer owns land because ownership is necessary to allow him to harvest it productively free from trespass. Yet such ownership may also include an obligation to ensure its productive use and the supply of certain products into the marketplace free from certain harmful pesticides. According to this version of propriety, property is not merely about certain minimum entitlements, it also involves more sophisticated responsibilities, and questions about who must give effect to these (either the individual through use conditions or the State through regulatory controls). As noted above, this begs difficult questions about the content or aims of such good order. However, it is not necessary to engage in a potentially futile, or at least highly contestable, debate about the utopian meaning of 'good order'; it is only necessary to accept that such interests must be substantively constrained. They must have an operative existence within society. Thus one can properly have recourse to public interests, such as rules on environmental protection, as articulated in law, to determine limits on property.[174] These interests are discussed in more detail in the next chapter.

Two final points may be added. First, this account of property does not provide a universal justification of property. Rather it seeks to explain property rights in certain resources. For example, propriety may have little to say about property rights in socially unimportant things such as one's pen or book. Property in such things may require explanation on other grounds.[175] Secondly, just as the above variations of property may result in alternative forms of property, so too this version cannot claim to support private property rights exclusively. The form of ownership should respond to the needs of society. Thus stewardship and common property are just as likely to be required by propriety as is private property.

(f) Property and Pluralism

Advocates of pluralism claim that property can only be properly understood by reference to a number of separate and irreducible principles.[176]

[174] As Underkuffler states 'It is those commonly understood and real constraints that provide the 'great common ground' for societal understandings of the nature of claimed rights and competing public interests, and that are necessary for a meaningful discussion about them': n 22 above, 82.

[175] The point is that ownership of my pen will have little direct bearing on matters of social order.

[176] Thus Munzer argues that the lack of answers to important questions such as how to rank moral principles and evaluate the consequences of moral decision-making renders pluralism necessary: n 20 above, 9. For Rose property is pluralistic because it can be understood in

Apart from the absence of a single unifying account of the justification of property, pluralism is attractive because it both recognises the complexity of property institutions and is inclusive of the variety of moral values that underpin social institutions such as property. Indeed, in any question of resource use a number of different justifications will be put forward in order to make a case for or against a particular form and allocation of property rights. A number of justifications were shown above to have a high degree of logical and narrative plausibility.[177] These include a version of property from labour when supplemented by desert and a qualified version of the liberty justification, where limits are applied to ensure that certain basic needs are met, remain plausible. Utilitarian and economic approaches can be reduced to an account of property based upon preference maximisation, and, although certain criticisms were levelled at such approaches, these were targeted at assumptions made about the operation of markets, the limited focus on private property at the expense of other forms of property and the prioritisation of economic values, rather than the objective of maximising preferences. Lastly, an account of property as propriety was shown to hold true if merely by virtue of the inherent ordering function of property. Although no particular form of order was advocated, there is evidence of increasing controls on property to ensure that certain things are properly stewarded.

As we noted above, although these approaches are not free from criticism, they remain persuasive and help explain contemporary institutions of property. The question then is not about their general acceptability, but rather how to reconcile these different approaches because it is highly likely that different justifications will require different outcomes. For example, utility may require a certain type of property that would run counter to liberty.[178] In such situations of conflict what is important is that such conflict can be resolved—or rather the various justifications coordinated.[179] Once this is achieved then it is important to ensure that specific

terms of preference satisfaction and propriety. She admits that preference satisfaction informs our property practice, but the pluralism comes instead from the traditional understanding of property as 'propriety' and its 'constant albeit ill-articulated intrusions': Rose, n 109 above, 51–52

[177] Becker holds that two accounts of property from labour (one supplemented by desert), one account derived from utility, and one from liberty hold true. These should be encompassed within a pluralist account of property: n 9 above, 99. Munzer argues that property is to be understood according to the three principles: the principle of utility and efficiency, the principle of justice and equality, and the principle of desert based upon labour: n 20 above, 3.

[178] Liberty might conflict with preference maximisation when a State restricts transfers of ownership in the free market to ensure that resources are kept in the hands of certain persons in order to protect community or cultural values, eg works of art or subsistence fisheries.

[179] Becker, n 9 above, 103.

sorts of property are compatible with the accepted general justifications of property.[180]

Becker suggests three possible means of coordinating property justifications: by aggregation, by ranking and by arbitrary means.[181] Of these, arbitrary coordination can be discounted as morally, politically and legally unsound. Aggregation provides in cases of conflict that a specific justification of property is determined by the prevailing majority of justifications. This is done on the basis that each justification has equal weighting. For example, if utility, labour and propriety support a specific property right and liberty argument prohibits it, the three outweigh the one, and the specific right is justified. Of course all this proceeds on the basis that each justification can be given equal weighting, and, indeed, that interpersonal calculations are possible. Superficially, coordination may seem compelling, but in reality it is the equivalent of reducing numerical factors to common denominators in order to assimilate those factors. This simply will not do. One cannot simply assert that any justification from liberty has the same weighting as a justification from utility and so on. Becker follows this approach as a position of last resort because neither liberty nor utility justifications have succeeded in achieving dominance over each other.[182]

An alternative approach to the problem is taken by Munzer, who relies upon intuitionism to deduce how to decide potentially opposite justifications of property.[183] Intuitionism is the idea that certain moral judgements and opinions are made according to a person's considered understanding of a situation.[184] Accordingly, we are 'simply to strike a balance by intuition, by what seems to us most nearly right'.[185] The principal advantage of this approach to property is that it is reflects the fact the decisions about property are political decisions, which are not necessarily closed according to any overarching moral code.[186] The main attack on intuitionism comes from utility, where a single, standard test of value is adopted.[187] However, Munzer counters this by arguing that is impossible to construct

[180] *Ibid* 107.

[181] *Ibid* 104.

[182] Even for Becker this is simply a presumption: n 42 above, 105.

[183] See Munzer, n 20 above, ch 1.

[184] On intuition see GE Moore, *Principia Ethica* (Cambridge, Cambridge University Press, 1903); B Barry, *Political Argument* (London, Routledge and Kegan Paul, 1965); T Nagel, *Mortal Questions* (Cambridge, Cambridge University Press, 1979) 128 *ff*.

[185] Rawls, n 126 above, 34.

[186] According to Rawls, whom Munzer relies upon, intuitionist theories have two features: 'first, they consist of a plurality of first principles which may conflict to give contrary directives in particular types of cases; and second, they include no explicit method, no priority rules, for weighing these principles against one another.': Rawls, n 126 above, 34.

[187] See, eg, R Hare, *Moral Thinking: Its Levels, Method and Point* (Oxford, Clarendon Press, 1981).

any moral theory without intuition, and he points out that even Hare, a utilitarian critic of intuitionism, proceeds according to the intuition 'that probable effects on preference satisfaction are relevant features of actions'.[188] Munzer presents a qualified account of intuition in order to avoid collapsing into wholesale subjectivity. He accepts intuitions only after they have been subjected to some 'procedure for eliminating intuitions that are apt to depend on bias, prejudice, class associations, or poor empirical information'.[189] Thus some judgements should be disregarded on grounds of faulty or distorted reasoning.

Munzer's use of intuitionism provides a more satisfactory explanation of pluralism than Becker's, although the approaches are by no means incompatible. It is preferable because it does not provide an absolute and static account of property. Intuition does not adhere to a fixed set of moral priorities and so explains how property has changed over time according to changes in the underlying moral values. It is also consistent with the fact that various justifications remain persuasive and are frequently recast in contemporary debates about the design of resource systems and the allocation of resources. Munzer's qualified intuition produces three fundamental principles: the principle of utility and efficiency, the principle of justice and equality, and the principle of desert based upon labour.[190]

The principle of utility and efficiency aims at 'maximising preference satisfaction'.[191] Efficiency is regarded as welfare maximisation, which can also be understood as individual preference maximisation.[192] The combined principles require that property rights should be allocated 'so as (1) to maximise utility regarding use, possession, transfer and so on of things and (2) to maximise efficiency regarding the use, possession, transfer and so on of things.'[193] It is important to note that, as well as supporting private property, such as clothes, furniture and other personal items, this principle also supports public property such as military resources, schools and hospitals.[194] Therefore it does not automatically commit one to an absolute regime of private property.[195] Neither does it commit one to a capitalist economy (one where private ownership of

[188] Munzer, n 20 above, 11.

[189] Munzer, n 20 above, 10. A final caveat is entered by Munzer—as his is an account from intuition it does not claim to be a right answer.

[190] These are consistent with those justifications that retain a degree of normative plausibility noted above.

[191] *Ibid*, p196; J Griffin, *Well-Being: Its Meaning, Measurement, and Moral Importance* (Oxford, Clarendon Press, 1986).

[192] Munzer, n 20 above, 198.

[193] *Ibid* 202. He goes on to note how these two may be ranked according to how they have differing ordinal and cardinal capacities, but this is not necessary for the present review.

[194] *Ibid* 206. This is based on plausible assumptions about what people want—security, education and a basic welfare safety net.

[195] *Ibid* 207. That said he is flexible as regards the balance between public and private, and notes that this will be contingent on political choices.

the means of production is justified); it merely permits the possibility.[196] It also favours a moderately equal distribution of property. This is based upon notions of diminishing marginal utility and recognition that wide differences in wealth may produce preference dissatisfaction.[197] Munzer acknowledges the conflict that may arise in respect of property rights and notions of utility and efficiency.[198] This is of course avoided by the fact that his theory is pluralist, and so he can claim that considerations of utility and efficiency can never be sufficiently weighty to override property rights.[199]

The principle of justice and equality relies on the moral position that individuals have certain morally justifiable individual advantages that cannot be sacrificed for overall utility.[200] The principle recognises that certain minimal needs and capabilities exist.[201] Munzer's account is drawn from Rawls' *Theory of Justice* and leads him to present the principle thus: unequal holdings of property are justifiable if everyone has certain minimum amounts of property and any inequalities do not undermine a fully human life in society.[202] What is important is that this principle may temper the distributional consequences of the first principle. However, although the justice and equality principle generally takes precedence over the principle of utility and efficiency, any such conflict that might arise will be rare as most utilitarian positions are compatible with moral intuitions and considered judgements.[203]

[196] *Ibid* 210.

[197] See Munzer, n 20 above, section 5.3. The point is that huge discrepancies between the haves and haves not may result in feelings of resentment, social marginalisation and discontent.

[198] For example, utility and efficiency may appear to justify the taking of private property in the interests of the wider community without compensation.

[199] *Ibid* 226.

[200] *Ibid* 228.

[201] *Ibid*.

[202] *Ibid* 227.

[203] It is notable that Rose considers utility/efficiency, justice/equality and labour/desert to be reducible to a single 'all powerful principle of preference satisfaction': Rose n 110 above, 51. Rather than view justice/equality, ie the guarantee of certain minimum holdings, as imposing limits upon preference maximisation, Rose suggests that they can be understood in terms of preference satisfaction. If one accepts the concept of diminishing marginal utility of wealth, then it follows that limited transfers of wealth from rich to poor will maximise overall preferences. For example, £10 is valued more by a poor person than a millionaire, so that a transfer of £10 from the wealthy to the poor will increase the total amount of preference satisfaction. If our expectations differ from those presumed under utility theory then no disutility arises from a frustration of expectations. Rose admits that such transfers must be carefully undertaken because excessive transfers in wealth will result in disutility (See F Michelman, 'Property, Utility, and Fairness: Comments on the Ethical Foundations of "Just Compensation" Law' (1967) 80 *Harvard Law Review* 1165, 1222–4). Such transfers are a disutility because violations of the expectation that one will get the returns from one's investment will discourage action by the propertied to expand the size of the pot. Rose moves to highlight that of course such disutility depends upon expectations being frustrated (at p 56). This is clearly the case because justice and equality considerations form part of our accounts of property. Therefore no demoralisation costs result from ensuring that basic needs are met or that wealth transfers take place in accordance with a widely accepted account of equality or justice.

The third of Munzer's pluralist principles is that of desert by labour.[204] At its root labour is still the basis of a property right. However, this is qualified in order to make the principle acceptable, because not all forms of labour, nor the products of all labour, are appropriate objects of property. These qualifications are as follows. First, everyone has the right to life, which may require that labourers share the products of their labour. Also, necessity may demand that labourers do not allow the products of their labour to spoil or accumulate beyond their needs. Secondly, property is only allowed where the net effects of acquisition are defensible, ie they do not cause unreasonable harm or disadvantage to others. This qualification is derived from the first two principles. Thirdly, post-acquisition changes in a situation may modify previously acquired property rights. For example, property rights in food grown and harvested may be overridden by considerations of justice or utility. In one year all the rights associated with ownership accrue to a farmer, whilst the next year the event of a famine demands the distribution of food in order to feed the starving. Fourthly, transfer of property is permitted as long as it satisfies the above rules on acquisition. Fifthly, in conditions of scarcity labour may in certain times generate wages rather than property.[205] Finally, because labour is a social activity and not an individual activity in the Lockean sense, a wage policy must be formulated in accordance with desert. The important thing to take from this is that under certain conditions labour may justify a property right on grounds of merit rather than value.

A number of important points are to be drawn from Munzer's pluralist account. First, it denies that there is an objective moral truth, although it admits that some degree of moral objectivity is possible.[206] Some form of modified intuition is the only means of assessing and assimilating the various justifications of property. Secondly, coherence and consistency of reasoning (in its limited or relative form), and its application in practice, is essential. This will result in undeniable limits on property rights, but also some uncertainty, which, in turn, points towards a mixed system of property with varying degrees of property rights, rather than a uniform and absolute system of property. Thirdly, it appears that some intuitive ranking of the principles is possible. This is as follows: firstly, any application of the principles must be context sensitive. Thus a decision maker must consider the way in which society regards a particular object of property because this will affect the way in which it is evaluated according to the principles. Secondly, although the first principle (utility/efficiency or preference maximisation) is the most important day to day determinant

[204] Munzer, n 20 above, ch 10.

[205] For example, a person may labour on another's property. Or the thing laboured on may be immediately subject to a constraint in accordance with exception 3.

[206] Munzer, n 20 above, ch 11.

of property, it is absolutely subject to the second principle (justice and equality). The third principle, however, is modified by both the first and second.

Although Munzer's pluralist account of property does not explicitly include the justification of property based on propriety, it can be reconciled with this approach. Indeed, in a later article Munzer defends his account of property noting how the key normative aspects of a propriety-based view of property are subsumed within his 'background theory of property', and, in particular, in his treatment of moral character, republicanism, virtue and commercial society.[207] In short, his background theory admits of the connection between property and its wider social context. Although he admits to a degree of scepticism about aspects of property as propriety and points to its underdevelopment as a normative account of property, he admits that it has scope for normative development. For present purposes, one does not need to locate propriety precisely within Munzer's approach. It is sufficient to note that the application of propriety can be identified in practice. As noted above, propriety may shape property, but only where the form of order or principle pursued has some operative existence within a legal system. What is then essential is to determine the existence of such public interests (proprietary considerations) that limit private interests in property in practice.

4. CONCLUDING REMARKS

Property is an institution governing the use of things. More particularly it is a legal institution in the sense that law provides the basis for the definition and regulation of the regime of property, and a social institution for it provides a means to achieve social order. Property regimes have three aspects. First, there is the property right, being the bundle of entitlements that define the holder's rights in respect of the use of a particular resource. Secondly, there is the body of property rules, being the rules under which a particular property entitlement is exercised. These two facets presuppose the existence of a third feature of a property system—a supporting legal structure.[208] This is important because property rights are never purely abstract rights or economic rights; they are legal rights and are thereby infused with the values of the community that sustain the legal system.

[207] S Munzer, 'The Special Case of Property Rights in Umbilical Cord Blood for Transplantation' (1999) 51 *Rutgers Law Review* 493, 558–9. He further suggests that Rose and Alexander offer a primarily explanatory cum historic approach rather than a normative account of property. However, this fails to admit the normative scope of propriety.

[208] This is generally domestic law. However, as chs 5–7 illustrate, international law also has an important role to play in creating property rules, particularly in States' maritime zones.

Within any legal system we can readily observe that property rights occur along a spectrum ranging from open access at one end to private property at the other. Most property systems are likely to embody the numerous forms of property from along this spectrum and, even then, the forms are likely to be highly stylised and adapted.[209] The forms of property so implemented are usually representative of the diverse ideologies holding sway in different societies. However, as Waldron notes:

> [n]o society, whatever its ideological predilections, can avoid the fact that some resources are more amenable to some types of property rule than others.[210]

More specifically, the application of property rules to a resource is contingent upon its excludability, either physically, legally or morally. These factors may either prevent the application of property rules to a particular resource or circumscribe the way in which those rules apply. Further, we can see how at a fundamental theoretical level a number of limits on property rights necessarily shape specific and particular forms of property in practice. Property is a relational construct between the owner and others within a society. Property is also contingent upon the existence of a political order and this contingency means that limits will be imposed upon individuals and private interests to the extent that they are necessary to preserve the collective political order.[211] The issue is then to determine the nature and scope of these public interests that interface with property rights, and to consider how these can be reconciled with private interests if and when they come into conflict.

[209] Max Weber notes that 'none of these ideal types … is usually to be found in historical cases in "pure" form': *Economy and Society* (1968) 216. He is referring to ideal types of legitimate domination. On this see Waldron, n 15 above, 44.

[210] *Ibid* 45.

[211] For example, as Brennan J notes in *US Trust Company v New Jersey*, 431 US 1, 50 (1977).

3

The Public Function of Property Rights

> Property rights serve human values. They are recognised to that end, and are limited by it.[1]

1. INTRODUCTION

The exclusion of public or community interests in property discourse tends to result from the narrow focus of classical liberal theory on individual rights. As Robertson points out, classical liberal theory creates a divide between the public and private spheres of social organisation. Into this schema property rights have been located entirely within the private sphere and this tends to negate any public function that property might serve.[2] Taking his lead from the seminal article by Cohen,[3] Robertson attacks the notion that public and private spheres should be conceptually distinct:

> The system of property arrangements in any society has to be consciously designed to maintain a proper form of political and social order. Such an outcome cannot be left to the blind workings of private market forces alone.[4]

One can note the echoes this has of the account of property derived from propriety. Indeed, there is little doubt that the public aspects of property are an essential feature of most expositions of property, even in disciplines

[1] *State v Shack* 277 A 2d 369, 372 (1971).

[2] M Robertson, 'Liberal, Democratic, and Socialist Approaches to the Public Dimension of Private Property' in J McLean (ed), *Property and the Constitution* (Oxford, Hart Publishing, 1999) 239–42.

[3] M Cohen, 'Property and Sovereignty' (1927) 13 *Cornell Law Quarterly* 8. In this article he argues that dominion over things is also *imperium* over our fellow human beings (p 13). From this generally accepted premise he argued that, dialectically, property should be distributed with due regard to the productive needs of the community (p 17) and that it is also subject to 'positive duties in the public interest' (p 26).

[4] Robertson, n 2 above, 248.

that might be considered to have a stronger affinity with untrammelled property rights and the operation of the free market.[5]

Underlying Robertson's argument is a belief that unconstrained private property rights pose as much of a risk to individual freedoms as does unjustified State interference. For example, the concentration of media ownership in one person's hands may pose a risk to freedom of expression in society.[6] Of course, it does not follow that just because the owner of private property has certain power over others in respect of the use of the resource he will use it in such a way as to infringe their liberty, although clearly there is a risk of such. What is crucial then is having in place adequate safeguards against such possible abuse. This is the point of exploring the public function of property.

As a prelude to this analysis, it is important to address the question why liberal theories of property marginalise the public function of property. In part it results from the emphasis on private rights as a counter to the excess of governmental authority, and certainly many liberal theories were developed at a time when individuals required protection from public encroachment by the State. In part it flows from the emphasis on individual autonomy within liberal theory. Hence individual rights enjoy a priority over community interests. Certainly this is true of liberal democracies, where respect for individual liberty is the keystone of the system of government. In part, it reflects the fact that political theory has failed to advance a sufficiently coherent and acceptable framework of public values, and certainly such accounts of the public function of property are few and far between.[7] What is clear from the previous chapter is that most private liberal values are abstract, transnational values. Liberal theories tend to take political community as a given and, typically, they look no further than an abstract notion of the origin of community, rather than the actual origins and development of particular communities.[8] This point is crucial because one cannot ignore the fact that individuals and their rights are located within political communities. As such, providing an account of the public function of property becomes vital because it serves to locate

[5] Thus, Fiss comments on the distortion of democratic functioning caused by concentrations of private wealth. O Fiss, 'Money and Politics' (1997) 97 *Columbia Law Review* 2470. A number of commentators, taking their cue from Marx, have noted the important public role of private corporations, and their capacity to exercise *de facto* sovereign powers in respect of their economic activities. See PI Blumberg, 'The Politicalization of the Corporation' (1971) 26 *Business Lawyer* 1551; D Vogel, 'The Corporation as Government' (1975) 8 *Polity* 5; C Lindblom, *Politics and Markets: The World's Political Economic System* (New York, Basic Books, 1977) 17; B Fisse, 'Corporations, Crime and Accountability' (1995) 6 *Current Issues in Criminal Justice* 378.

[6] See, eg, Communications Act 2003 s 375.

[7] See ch 2, s 3(e).

[8] See P Kahn, *Putting Liberalism in its Place* (Princeton, New Jersey, Princeton University Press, 2004) 10.

accounts of property in particular communities, thereby ensuring that community interests and values are built into a system of property rights. Moreover, a failure to supply a coherent account of the public functions of property makes it difficult to rationalise decisions concerning competing private and public rights. Indeed, the absence of a coherent structure of public interests renders public claims open to criticism for being arbitrary exercises of power. The result of this (lack of) focus is a distorted view of the function of property, where public controls on property are seen as external impositions, rather than necessary elements of the property holding.

A full consideration of the public function of property is particularly important in the context of fisheries and other natural resources. Fisheries are not simply owned and used in a way that corresponds to typical notions of ownership: international law prescribes their conservation and management.[9] We know that the impact of fishing on other marine resources is controlled, for example to protect dolphins, and there is a whole body of law devoted to the protection of the marine environment, which necessarily impacts upon fishing activities. Moreover, even in property rights-based systems of fisheries management, where the owner and the market play a significant role in determining the use of a fishery resource, the quota is fundamentally contingent on the State for its existence, and so commonly subject to qualifications concerning allocation, use and transfer.[10] These regulations are not merely concerned with the facilitation of individual interest, they are concerned with ensuring that fishing activities are conducted in a way that serves the public interest. In resource management there is much scope for private and public interests to come into conflict, particularly when strengthened private rights are sought, or regulatory constraints are imposed upon relatively freely held property rights.[11] For example, if a quota is characterised as a property right, then any regulation or limitation of the quota may be construed as a regulatory taking, which may then be subject to claims for compensation.[12] It is precisely this type of situation which begs the question, for example, of how a public interest in the management of the fisheries and the protection of the environment is to be balanced against the private rights of the quota holder.

There are many examples of public interests being ultimately prioritised over competing private interests in the control of property. For example, a private property owner may not use their property in a way that threatens the general public's health and safety, or where the use contravenes certain

[9] See further ch 7, s 2.
[10] See ch 8, s 3.
[11] See ch 1, above.
[12] See further, ch 8, s 3(e).

environmental regulations. Neither may one use one's property in violation of the criminal law.[13] These limitations are not merely practical limits on the use of property. They are restrictions on the scope of private rights that ensure that liberty, utility and other fundamental justifications of property are respected. The justifications of private property examined in the previous chapter revealed a number of imperatives that are, in effect, public interest limitations on property rights. By way of introducing some of the essential aspects of a category of public interests, let us consider these further.

Part of the reason why the labour/desert approach is so compelling is that it encourages socially and economically valuable activities. There is a 'public interest' in rewarding certain labour. By rewarding productive labour, society as a whole may benefit from the supply of products to the marketplace. This is further reflected in the desert element of this approach. So, in order to distinguish labour from other assertive acts, only that labour which is deemed socially worthy results in property. Crucially, desert here is regarded as a socially contingent attribute. In this, and other justifications of property, the public interest plays an important role in reinforcing the private function of property, by bestowing a broader political legitimacy on the private right and demonstrating the wider public benefits that may flow from a system of individually held entitlements. Yet the public interest is not limited to reinforcing of a system of private rights. One should recall that any viable labour/desert theory places limitations on the allocation of property. Thus, Locke introduced the 'spoils' and 'sufficient leftover for others' caveats, a position reflected in Munzer's waste, spoil and accumulation limit.[14] An essential feature of this justification is that is that it directly seeks to limit wasteful accumulations of wealth and provide everyone with the opportunity to acquire material goods. The latter protects the opportunity to guarantee everyone in society minimal subsistence.

The libertarian justifications of property draw upon the contribution that property makes to the political and economic autonomy of agents. Some degree of autonomy is a fundamental condition of any liberal democracy. Thus, property in this tradition may contribute to a broadly defined public interest in guaranteeing political and economic participation. However, in order to protect this position, and also to protect individuals against accumulations of wealth, most liberals would caveat their approach by providing for guaranteed means of subsistence.

The public interest is palpably manifest in utilitarian and economic justifications of property. For the utilitarian, property is instrumental in maximising human welfare across society as a whole. An important

[13] These limits are expressed in the widely recognised maxims *sic utere tuo ut alienum* and *salus populi est suprema lex*.

[14] S Munzer, *A Theory of Property* (Cambridge, Cambridge University Press, 1990) 284.

aspect of this is to guarantee minimal subsistence or holdings because of the net utility this will provide for society. Similarly, the economist views property as facilitating the most efficient allocation of a resource. Private property reduces waste and increases the size of the 'resource pot', which in turn enriches everyone in society. Both approaches are deeply instrumentalist and seek to justify private property according the good which it will generate for the community as a whole.[15] Although these approaches are typically associated with free market regulation and strong private rights, most societies undertake some form of public interest regulation to ensure that certain fundamental social and economic ends are secured. A useful examination of these is provided by Ogus, who sets out five commonly recognised instances of 'public interest' intervention designed to correct market failures: regulation of monopolies, control of public goods and other externalities, correction of information deficits, addressing coordination problems (ie highly complex problems that generate excessive transaction costs) and, arguably, addressing exceptional market circumstances, such as wartime food rationing.[16] In each instance, public regulation by the State occurs when market or private law mechanisms fail to secure certain outcomes expected of a market-based system of economic organisation.

According to property as propriety, property is central to the structuring of society and questions of governance. It is thus intimately bound up in questions of public interest. As a minimum, property in this tradition seeks to guarantee access to the essentials (food, water, shelter) for human existence, and probably also guarantees those things that are necessary for political and economic autonomy. Most societies have more developed and sophisticated ideas of good order, and in such societies it is likely that propriety requires more complex forms of ownership. Historically, property in this tradition carried with it certain responsibilities to the community, which on occasion trumped conflicting private interests.[17] In contemporary property systems, this public function has frequently been usurped by the State. Thus property holdings, and in the particular the ownership of land and other natural resources, is frequently subject to manifold public duties imposed by law.

It is evident that there are important limitations on the scope of private property. However, it appears that typical accounts of property, such as Honoré's incidents of ownership, fail to articulate a sufficiently wide

[15] See, eg, GC Bjork, *Private Enterprise and Public Interest: the Development of American Capitalism* (Englewood Cliffs, New Jersey, Prentice Hall, 1969) 65.

[16] A Ogus, *Regulation: Legal Form and Economic Theory* (Oxford, Hart, 2004) 29–46.

[17] See ch 2, s 3(e).

or coherent scope for the public function of property. Thus Honoré is limited to stating the existence of a negative duty of non-harmful use. This falls short of explaining the wider range of positive requirements to which property may be subject, such as maintaining resource bases and the protection of important social values. Indeed, it does not seem to reflect the minimum public functions of property found in the accepted justifications of property noted above. In the absence of a coherent explanation of the public function of property it is possible to draw upon the wider literature concerning the public interest.[18] What we are concerned with in respect of the public function of property is the provision of a coherent framework that can explain what claims in respect of the use of a thing can be legitimately made by a community. To this end we shall now turn to the literature on the public interest. This provides a framework upon which we can build a concept of the public function of property. It is well-suited to the task, for as Feintuck points out, 'it is generally the case that the concepts of public interest most commonly used tend to derive primarily from an economic model, with a heavy emphasis on the issues raised by competing private (property) rights and interests'.[19] The remainder of this chapter explores how the notion of public interest can be used to construct a framework which explains the public function of property.

2. A TEMPLATE FOR THE PUBLIC FUNCTION OF PROPERTY: THE PUBLIC INTEREST

The protection of certain community interests are an essential feature of the generally accepted justifications of private property. Although these interests typically reinforce economic rationales of wealth maximisation and general utility, they are not necessarily so limited and may include other social and democratic values. As Underkuffler points out, whilst property rights may be abrogated in situations of dire public emergency, they are often abrogated on a more routine basis when they clash with certain goals of government.[20] Of course, such infringements must be rationalised and explained if public officials are to counter the claim that they are simply exercising power of the State or other community apparatus in an illegitimate and arbitrary way. Claims and decisions

[18] See CJ Friedrich (ed), *NOMOS V: The Public Interest* (New York, Atherton Press, 1962) (hereinafter 'NOMOS V'); Richard E Flathman, *The Public Interest* (New York, Wiley, 1966); V Held, *The Public Interest and Individual Interests* (New York, Basic Books, 1970); M Feintuck, *'The Public Interest' in Regulation* (Oxford, Oxford University Press, 2004).

[19] *Ibid* 22.

[20] L Underkuffler, *The Idea of Property* (Oxford, Oxford University Press, 2003) 46.

that are in the public interest must also be rationalised if they are to provide a coherent counterpoint to 'private rights-based explanations' of property.

Alas, there appears to be little, if any, scholarly agreement on the precise content of the 'public interest'.[21] This is not helped by the fact that the term has several different usages.[22] For example, Allott regards the public interest as a categorical form into which societies put meaning.[23] In contrast, there are numerous circumstances when 'public interest' has a specific meaning, such as section 58 of the Enterprise Act 2002, which sets out the circumstances in which the Secretary of State may intervene on 'public interest' grounds in merger situations. For present purposes, our focus is on the idea of public interest as a form of aggregative social concern which provides a basis for legal action. What is actually being referred to, as Underkuffler puts it, is a 'public interest demand', or, more specifically, 'interests with asserted coercive power'.[24] This can be contrasted with 'self-regarding interests' that underpin private rights. Of course, this view of the public interest may include specific or operative 'public interests' as set out in legislation or as developed by courts.[25] However, what is ultimately being advanced is a framework for structuring certain types of community claims, a framework which provides a measure for determining whether or not a claim is validly in the public interest or not.

Despite some apparent uncertainties about the meaning of the public interest, it is possible give the public interest a basic shape, a framework to which we can attach some useful meaning.[26] Common to all writings on the public interest is a fundamental linkage between a community and a set of values.[27] Let us take Bell's general definition as starting

[21] FJ Sorauf, 'The Conceptual Muddle' in CJ Friedrich (ed), *NOMOS V*, n 18 above, 183, 184–5.

[22] See generally, Feintuck, n 18 above, chs 2, 3.

[23] P Allott, '*Mare Nostrum*: A New International Law of the Sea' (1992) 86 *AJIL* 764, 776.

[24] Underkuffler, n 20 above, 66, fn 10.

[25] On these type of interests, see below, section 2(b)(i).

[26] Colm states that whilst different societies have divergent ultimate values, such as the establishment of communism or God's Kingdom on Earth, they will tend to share common penultimate values, including, healthy and well-educated individuals and stable social institution. G Colm, 'The Public Interest: Essential Key to Public Policy' in CJ Friedrich (ed), *NOMOS V*, n 18 above, 115, 120.

[27] This is a theme common across most writings on the public interest. For example, Griffith suggests that it may be roughly synonymous with general welfare: Ernest S Griffith, 'The Ethical Foundations of the Public Interest' in CJ Friedrich (ed), *NOMOS V*, n 18 above, 14. Also, CW Cassinelli, 'The Public Interest in Political Ethics' in CJ Friedrich (ed), *NOMOS V*, *Ibid* 44, 46; H Lasswell, 'The Public Interest: Proposing Principles of Content and Procedure' in CJ Friedrich (ed), *NOMOS V*, *Ibid* 54, 64; J Cohen, 'A Lawman's View of the Public Interest' in CJ Friedrich (ed), CJ Friedrich (ed), *NOMOS V, Ibid* 155, 156; Feintuck n 18 above, 42 *ff*.

point: 'the interests which people have *qua* members of the public or the community'.[28] This association is a conceptual necessity because public interests take the form of community demands with a cognisable normative element, ie demands made in the name of the community that can result in duties or limitations being imposed upon private persons. This approach suggests two inter-related facets of this definition which require further consideration: the nature and identity of the community and the content of a category of public interests.

(a) The Nature and Identity of the Community

At the heart of the concept of the public interest is the idea of a community. At the simplest level, a community can be defined as a group having things in common, such as religion or culture. As Cohen notes:

> this concept of community is a system of values which bind together and weld diverse human forces and relationships into an ordered way of life.[29]

Inherent in this idea of a community is the existence of and adherence to the accepted values of the community. Indeed, the essential function of such a community is to pursue such common values or objectives.[30] This relationship between a community and its values/interests is symbiotic: communities define their own values—values which in turn define the community. This means that understanding the idea of community is fundamental to explaining the idea of public interests. We shall consider how the nature of the values affect the community in a moment, but it is useful first to consider what constitutes a community and distinguishes it from mere groups, particularly for the purpose of ascertaining how public interests are addressed within a legal system.

[28] J Bell, 'Public Interest: Policy or Principle?' in R Brownsword (ed), *Law and the Public Interests* (Stuttgart, F Steiner, 1993) 30. See also B Barry, *Political Argument* (Hemel Hempstead, Harvester Wheatsheaf, 1990) 190.

[29] Cohen, n 27 above, 156.

[30] H Bull, *The Anarchical Society*, 2nd edn (Basingstoke, Macmillan, 1995) 51. Aslo, AJM Milne, 'The Public Interest, Political Controversy, and the Judges' in Brownsword, n 28 above, 40, 41. As Abi-Saab notes on the development of the international community, the sense of community is the most important criterion for the existence of a community: G Abi-Saab, 'Whither the International Community?' (1998) 9 *European Journal of International Law* 248, 249. Franck views this as bound up in the notion of reciprocity: TM Franck, *Fairness in International Law and Institutions* (Oxford, Clarendon Press, 1995) 10–11. As discussed below, reciprocity provides a crucial mechanism for discerning public interests. See section 2(b)(iv).

(i) Plenary Legal Communities

Although there is a vital link between the community and community values, a set of common values alone is not enough to define a community for the purpose of this book, which is ultimately concerned with legal rules and their application. Values are fluid, so it is unlikely that any community will have absolute or fixed values that endure over time. Values are also properties that can be attributed to groups and individuals. For example if a community is understood simply in terms of it possessing values, then it would encompass a range of groups such as family, a fan club or a reading group. All these groups have values/goals in common, be it a shared life or a desire to watch the same football team or a love of literature, and each group will seek to pursue these ends. Such groups do not possess the capacity to create public interests; they are merely sectional groupings which occur within society. What we are concerned with are communities that operate at sufficient a scale to cut across potentially every aspect of our life—what may be termed plenary communities. The notion of plenipotence is important because a community should enjoy the capacity, whether this is exercised or not, to engage with each and every, real or potential value that may be present within the community.

Restricting the scope of our enquiry even further, we are only concerned with communities that utilise the law as a means of self-organisation. Common values seldom provide sufficient guidance as to what behaviour is consistent with the goals of a community. This is the purpose of legal rules. Therefore our focus is on law as a system of rules which operate as a coercive order or attract voluntary compliance because of their inherent legitimacy. This is not to say that law is the only vehicle for achieving the social objectives of community. Education, religion, morality and economics also have this function. However, law has a special status because it requires compliance and it is universalisable. Compliance is necessary if the interests are to be effective. Universalisability requires the treatment of similar persons in similar situations in the same way, thus transcending idiosyncratic or self-serving demands.[31] Although we are concerned with legal communities, this does not mean that we are concerned with any and every community that is governed by law. It is evident that many groups can be described as legally structured or rule-bound, eg the limited company. Again one needs to distinguish between sectional groups within a community and the community as a whole. Whilst a family or a fan club or public company may utilise the law to give itself form and pursue its aims, for example, through the institution of marriage or the

[31] See Flathman, n 18 above, 40 *ff*.

adoption of a corporate charter, the legal rules so utilised are derivative. They are drawn from the broader community's legal system. Understood thus, the idea of community with which we are concerned is one that is not dependant upon the wider community for its legal rules of organisation; it is a plenary legal community.[32]

(ii) Types of Plenary Legal Community

The plenary legal community is most commonly associated with the State, and this is an understandable approach, not least of all because it provides a common frame of reference for exploring the notion of the public interest.[33] However, the idea of a plenary legal community is neither synonymous with nor limited to that of the State.[34] First, this approach runs the risk of assuming that public interests are simply the views of the State or government.[35] As we note below, a fundamental feature of the public interest is to provide a normative standard against which, inter alia, government policy can be measured or justified. Although the public interest may coincide with the interests of the State, or rather, State machinery, it must be normatively independent of such interests. Secondly, the State is not the only plenary legal community, as defined above. From a legal perspective, such communities may also exist at both the sub-State and supra-State levels.[36] For example, within a federal State a 'legal community' exists at both the State and federal levels. 'Outside' of the state, the European Union comprises a distinct legal community that overlaps with its Member States and is defined by certain shared economic, social and political goals. There is also an international community;[37] a society of States co-existing under

[32] The question of legal autonomy is not always clear cut. For example, the autonomy of the European Community is to a large degree contingent on the legal orders of its Member States. The same appears true of international law. And yet international law may bestow political autonomy on States, suggesting a degree of circular legitimisation.

[33] Held, n 18 above, 154–5.

[34] Indeed, a limited analysis of the community as the State runs the risk of associating the public interest with the interests of the State, which in turn may elevate the interests of dominant groups or the elite within the State to the public interest. See M Feintuck, n 18 above, 38.

[35] Specifically in the context of the public interests, Bodenheimer talks of the fallacy of governmental fiat, the idea that public officials may misconceive the community interest, make mistakes, or simply abuse their positions to pursue selfish personal goals. It is thus incorrect to associate the public interest with the decisions of public bodies. E Bodenheimer, 'Prolegomena to a Theory of the Public Interest' in *C J Friedrich (ed), NOMOS V*, n 18 above, 205, 209–11.

[36] See Cohen, n 27 above, 156.

[37] See, eg, Bull, n 30 above, 13. See also B Simma, 'From Bilateralism to Community Interest in International Law' 250 *Receuil de Cours* (1994, VI) 217, 243 *ff*; C Tomuschat, 'Obligations Arising for States Without or Against their Will' 241 *Receuil de Cours* (1993) 195, 209 *ff*.

international law, although as we will see shortly this community is much more disparate and may be lacking in the same degree of cohesion of plenary legal communities at the State level. For present purposes it is not necessary to explore the full range of possible communities, which includes other sub-State groups or self-determination units. It is sufficient to note the existence of these archetype plenary legal communities, and to show how these communities, with their different legal structures and different compositions, are wedded to sometimes discrete and differing public interest demands. As will be outlined below, and developed in subsequent chapters, the different structures of the domestic and the international communities result in a different shape to the form and force of their respective public interests. This in turn provides a basis for explaining how the public function of property is shaped by various forms of public interest demand.

(iii) State and International Legal Community Contrasted

Let us start by considering the composition of a community. Milne notes that many communities are culturally heterogeneous, with individuals and groups pursuing different and sometimes conflicting goals.[38] He continues, pointing out that:

> [i]f such pluralistic communities are to hold together and not degenerate into polarised communities, their members must put loyalty to them above their loyalties to their respective religious and ethnic groups.

That means not only being committed to the "rule of law" but to giving precedence to the pluralistic community's interest over religious and ethnic groups' interests'.[39] Of course, the members of a community will only do this where the community values are truly inclusive.[40] Certainly, heterogeneity is no bar to the cohesion of a community. We know that diversity is an important feature of modern pluralist societies.[41] Nevertheless, it is reasonable to infer that a higher degree of diversity within a community will make it more difficult to achieve social cohesion and convince members

[38] Milne, n 30 above, 44.

[39] *Ibid*. Polarisation refers to communities that do not share unifying values, typically as a result of divisions along religious, ethnic linguistic or economic lines. Such communities tend to hold together through the force of power of the dominant group in society.

[40] This has led some to consider more substantive notions of a public interest rooted in fundamental principles of democracy and which are capable of countering dominant or hegemonic group values. See C Sunstein, *After the Rights Revolution: Reconceiving the Regulatory State* (Cambridge, Massachusetts, Harvard University Press, 1990). Also see M Feintuck, n 18 above.

[41] J Rawls, 'The Idea of an Overlapping Consensus' (1987) 7 *Oxford Journal of Legal Studies* 1, 4–5.

to put community interests above their own interests. This may be simply because it makes the process for accommodating values more complex, or it increases incidences of potentially incompatible values occurring within the community. Undoubtedly though, this indicates that there is a strong correlation between the coherence of a community's interests and its coherence as a community. This can be illustrated by contrasting international and atypical domestic legal communities.

It is suggested that the higher degree of heterogeneity of the international community in contrast to the State based community has made it much more difficult to agree and pursue international public interests.[42] These difficulties are to a large extent the simple product of the number and diversity of agents and interest groups which occur within States, and so indirectly, through States, which form the international community.[43] To these we must add States themselves and non-State actors, such as international organisations and NGOs. Arguably, these practical difficulties undermine efforts to place the international community's interests over sectional (State) interests, and suggest that international public interests will be weaker than national public interests. One might consider the difficulties in securing agreement to control global climate change, or the priority of certain human rights over religious rights, or the harmonisation of trading rules, as representative of this type of problem. However, this simple focus on the membership of the community is not enough. It obfuscates the impact that the structure of a community, apart from its membership, may have on the way in which it shapes the form and force of its public interests.

The general structure of a State or national community is fairly well-settled. Although there are few truly inclusive communities, we can point to what may be called stable political communities, the predominant form of which is the liberal democratic State. In a liberal democracy, citizens possess juridical equality and fundamental civic rights, there is a form of representative government secured by the separation of powers and accompanied by constitutional guarantees of civic rights, the rule of law and a market-based economy that protects private property rights.[44] States possess a vertical structure of government, whereby members of the political community invest institutions of government with the power

[42] This is not entirely negative. It is also important to point out that this heterogeneity will likely result in a wider dialogue about the content of the category of public interests, with the result that new or divergent interests may emerge.

[43] This might be regarded as a rather Kantian view of international law, which views international law as ultimately concerned with individuals, rather than purely State-centric concerns. For such a position see F Téson, 'The Kantian Theory of International Law' (1992) 93 *Columbia Law Review* 53.

[44] Michael W Doyle, 'Kant, Liberal Legacies, and Foreign Affairs' (1983) 12 *Philosophy and Public Affairs* 205, 209.

to govern the community on behalf of the members of the community. Institutions in this sense may comprise habits and practices, although they are frequently embodied in the form of actual organisations or machinery, which strengthens their functionality. Regardless of the degree of sophistication of this vertical structure of government, most modern States possess systems of government that make, communicate, administer, interpret, enforce, legitimise, adapt, and protect rules.[45] By virtue of these capacities, States are capable of facilitating, promoting and enforcing broadly accepted public interests.

What then are the features of the international legal system that facilitate the pursuit of international public interests? It is suggested that there appear to be three crucial structural distinctions between the international community and a domestic community: first, it has a horizontal structure; second, and flowing from the first, international law lacks strong global institutions capable of effectively harnessing international public interests; and third, international law is the product of a process of double aggregation. These differences are further compounded by the shorter history of the international community, the changing composition of the community and the wide deficit between real and notional equality of members of the international community. These points will now be considered in turn.

In contrast to a domestic legal order which is hierarchical, the hallmark of the international community is a system of State units interacting horizontally with other State units. Cheng presents the conventional view thus:

> the international legal system is horizontal because international society is a voluntary association of States with no superior authority to make law, pronounce judgment and otherwise enforce the law with binding effect, except through institutions which states have, by consent, established.[46]

Within this system, States are sovereign and equal, and authority in the international legal system is disaggregated throughout its individual members. This disaggregation of legal authority in the hands of individual, self-interested States means that there may be more limited

[45] These functions are drawn from Bull. Although he suggests they are not necessarily exhaustive or essential, they are broadly necessary for the maintenance of order in society. Bull, n 30 above, 54.

[46] B Cheng, 'Custom: the Future of General State Practice In a Divided World' in R St J MacDonald and DM Johnston (eds) *The Structure and Process of International Law* (Boston, Nijhoff, 1986) 513, 519–20. Of course this model of the international legal system is open to challenge. For example, Anne-Marie Slaughter suggests a model of international society where many of the traditional functions of the State are exercised by private persons and groups through transnational networks: Anne-Marie Slaughter, 'International Law in a World of Liberal States' (1995) 6 *European Journal of International Law* 503.

means for the creation of legitimate and effective public interests. States are primarily responsible for performing the functions that make rules (and so public interests) effective. For the most part States make, communicate, administer, interpret, enforce, legitimise, adapt and protect rules. The paucity of distinct administrative machinery for international government does not mean an absence of institutions. As noted above, and this is crucial in the context of an international community, institutions are also habits and practices. So, although there is no international legislature, States create rules through the mechanisms of customary international law and treaty. States communicate these rules through State officials, diplomats and other civil servants, who also administer these rules. There are international courts and tribunals capable of interpreting and resolving disputes, but these operate on the basis of consent which may render them less effective.[47]

The absence of administrative machinery leads Franck to conclude that international law will need to rely upon a higher degree of voluntary compliance with the system's rules to be effective.[48] Thus, what engenders voluntary becomes crucial. Franck suggests that it occurs when rules are perceived to be legitimate. If we accept a rule as valid, then we follow it for this reason, and not because it is reinforced by a sanction. The importance of legitimacy in this context needs a few more words because it results in a different and high degree of emphasis being placed on the process and content of the rules developed by States. Legitimacy for Franck is both procedural and substantive.[49] Procedural legitimacy results when decisions are reached according to the *right* process. Franck does not set out formal requirements for right process. He views it as rooted in meeting the expectations of a community, linked to a sense of order and measured by how far it facilitates distributive goals.[50] It exists in formal procedures for the making, interpretation and application of rules. Although Franck does not refer to Fuller, it seems to closely parallel Fuller's requirements for the internal morality of law.[51] Substantive fairness means that decisions must take into account the 'consequential effects of the law: its distributive justice'.[52] Thus a system of rules that is perceived to be distributively fair will produce a higher degree of voluntary compliance. It is located in a number of rules of international law, although this is not to say that it is systemic. For example, rules on climate change seek to apportion responsibility for action according to capacity to

[47] See eg, Art 36 of the Statute of the International Court of Justice.
[48] Franck, n 30 above, 26.
[49] *Ibid* 7–9.
[50] *Ibid*.
[51] See below fn 152 and the accompanying text.
[52] Franck, n 30 above, 8.

act.[53] What is notable is that many such rules have evolved in the context of environmental protection and the management of natural resources.[54] Remaining with matters of property, international rules on the expropriation of property require prompt, adequate and effective compensation'.[55]

Clearly international law has institutions capable of ensuring legitimacy. However, these are likely to produce distinct types of public interests as a result of the way in which its institutions make, interpret and apply rules of international law. As we shall see in chapter 7, this has implications for the regulation of natural resources.

The third structural distinction is process of double aggregation of interests which is necessary to determine international public interests. The operation and consequences of this process are keenly observed by Philip Allott.[56] He starts by observing that international rules that purport to create rights and duties for individuals only become operative through the interposition of domestic law. This is because our primary social reality is one based upon sovereignty of the State: all persons and land territory are linked to one State or another through the respective principles of nationality and sovereignty. Within this order, domestic and international social systems operate thus. First there is an aggregation of national interests, that is to say, the interests of individuals and groups within a State. These national interests are mediated and processed through some form of system of domestic government and fed in to the international system. International public interests are then formed through the interactions of governments. Thus international public interests are the product of the double aggregation of domestic and then State interests. To complete the cycle, international law then feeds back into domestic social systems according to the relational principles which determine the interface between the two social systems. The structure so presented may result in the emergence of distorted international public interests.[57] First, the structure fails to take into account sub-national interests that are not adequately represented by governments. Secondly, it does not take into

[53] Art 3(1) of the United Nations Framework Convention on Climate Change provides that '[t]he Parties should protect the climate system for the benefit of present and future generations of humankind, on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities. Accordingly, the developed country Parties should take the lead in combating climate change and the adverse effects thereof.'

[54] Such rules are considered in more detail in ch 6.

[55] See I Brownlie, *Principles of Public International Law* 6th edn (Oxford, Oxford University Press, 2003) 509–12.

[56] Allott, n 23 above, 774.

[57] This points to the need for more effective relational principles between international and domestic legal systems, and perhaps the need for greater accountability of international decision-making. Whilst I would sympathise with these concerns, such criticisms do not negate the normative role of international law, nor the normative effective of international public interest demands.

account transnational interests that are not exclusive to the aggregating process within a single State, for example, the interests of multinational corporations. Thirdly, it may exclude common interests of all humanity, which are not attained through the aggregation of State systems interests. However, despite these deficiencies, it is clear that reasonably well-formulated and generally accepted public interests, as exemplified by norms of *jus cogens*, may emerge in international law.[58] Such international public interests have an important role to play in regulating natural resources.

Allott reveals a more insidious distortion arising from this process:

> [t]he interaction of the aggregated national interests takes on a life of its own; instead of being merely a way of aggregating individual, sub-national interests into a collective, so called-international interest, the respective aggregations at the state system level come to be seen to be original interests, not merely an aggregate but an independent unity.[59]

The result is that international law may become detached from the interests of its composite human communities and interests may be formulated that are designed purely to maintain the existence of States, rather than facilitate more direct human ends. Take, for example, the principle of *uti possidetis*. Generally stated this principle provides that in the event of a post-colonial boundary dispute, the pre-independence boundaries of a former colonial or administrative division should be respected.[60] The international community of States has an international public interest in the stability of the political and legal boundaries of States because this provides certainty as to the identity of the members of the community.[61] It also promotes the existence of political communities of a sufficient size and scale that are able to function effectively at the international level. However, this public interest principle may ultimately conflict with norms that have much more immediate human concern, such as the right of self-determination. Such a right reflects the interests of groups of people within a State to pursue certain forms of political organisation, and is a manifestation of a basic interest in autonomy of political choice. It is interesting to note that international tribunals have prioritised the principle of *uti possidetis* over the right of self-determination, thus reaffirming the priority of international stability, and perhaps the purely State-centric interests, over the aggregate interests of sub State groups.[62] The old view of absolute State immunity is another such example. According to this

[58] See below, section 2(b)(v).
[59] Allott, n 23 above, 775.
[60] Opinion No 2, Arbitration Commission, EC Conference on Yugoslavia, 11 January 1992, 92 ILR 167, para 1. Also Opinion No 3, Arbitration Commission, EC Conference on Yugoslavia, 11 January 1992, 92 ILR 170, para 2.
[61] See further the discussion of agency below, section 2(b)(iv).
[62] *Ibid*.

rule a State could not be impeached before the courts of another State according to the maxim *par in parem on habet imperium*.[63] Of course, this view of immunity is no longer tenable. States can certainly be held to account for their commercial transactions.[64] And, no longer can former heads of State enjoy immunity from prosecution for acts of torture and conspiracy to torture.[65] However, it is worth observing that diplomatic immunity retains the inviolability of premises of a diplomatic mission and the person of a diplomatic agent, the latter being free from any form of arrest or detention or criminal jurisdiction.[66] Despite concerns that States have been abusing this process, for example to facilitate acts of violence abroad or to assist terrorists, it is evident that States wish to continue or even strengthen diplomatic immunity.[67]

As noted above, these fundamental structural differences are reinforced by additional factors. The first is that an international society has existed for only a relatively short period of time, thereby affording it less opportunity to realise an international public interest. Community values are frequently acquired through experience, rather than being entirely deducible from rational reflection.[68] Thus most forms of social order are a combination of planning and spontaneous order. Even when international public interests are rationally deduced, the nature of international law may prevent these interests from easy or quick realisation, ie the oft-made observation about the slow evolution of rules of customary international law. These points indicate that time is a crucial factor in the evolution or actualisation of public interests.

The existence of an international community is a relatively new phenomenon, which some observers attribute to the founding of the United Nations.[69] Whilst there may have been what can be termed a society of States going back to the Peace of Westphalia, this is generally not considered to constitute a community as defined above. For the most part, States

[63] As per Marshall CJ in *The Schooner Exchange v McFadden*: '[t]his perfect equality and absolute independence of sovereigns, and this common interest impelling them to mutual intercourse, and an interchange of good offices with each other, have given rise to a class of cases in which every sovereign is understood to waive the exercise of a part of that complete exclusive territorial jurisdiction, which has been stated to be the attribute of every nation': 7 Cranch 116 (1812) 136. It should be noted that this quote serves to illustrate the reasons for immunity, rather than support a view of absolute immunity. In this respect see *The Porto Alexandre* [1920] P 30 and *The Pesaro* 271 US 562 (1926).

[64] *I Congresso Del Partido* [1983] 1 AC 244 (HL).

[65] *R v Bow Street Magistrates, ex p Pinochet* [2001] 1 AC 147 (HL).

[66] See Arts 22, 29 and 31 of the Vienna Convention on Diplomatic Relations, 500 *UNTS* 95.

[67] See C Barker, *The Abuse of Diplomatic Privileges and Immunities* (Aldershot, Dartmouth, 1996).

[68] See, eg, the views of Hale on the common law. Reproduced in Sir William Holdsworth, *A History of English Law*, vol V, 504–9.

[69] A Verdross and B Simma, *Universelles Völkerrecht: Theorie und Praxis* (Berlin, Duncker and Humblot, 1976).

have pursued individual goals and international law merely sought to coordinate these activities.[70] However, since the founding of the UN, one is able to perceive the crystallisation of community interests, such as a concern with international peace and security, the pursuit of political democracy and legitimacy, the protection of the global environment, protection of fundamental human rights, and the more general pursuit of public order matters such as international criminal law. This has led a number of analysts and jurists to consider that the structure of international law has fundamentally altered and become an international community, that is to say a community that is bound by and pursues shared interests.[71] However, the evolution of an international community of States is not yet a fully realised project. Despite significant changes in world order, such as the development of international institutions and the articulation of some universal rules, what is certain is that most domestic legal communities have had a much longer and more intensive pedigree, thus affording them time and opportunity to refine their community values. In contrast, the international community has struggled over a relatively short period of time to secure the pre-eminence of its values over the extremely well-established and articulated interests of its constituent members.

We have already considered the impact of the heterogeneous composition of the international community on the formulation of public interests.[72] Here it may be further noted that the difficulties in formulating public interests are not merely a product of the scale and diversity of an international community; they are also a consequence of the changes in the composition of this community. These changes relate to the identity of States that compose the international community and to the increasing role of non-State actors in international transactions. As regards State membership, the most significant change here was as a result of the decolonisation process occurring in the second half of the 20th century. Between 1950 and 1990, 80 ex-colonies became independent States and members of the United Nations. The international community was no longer a relatively homogeneous club of developed States; it featured a significant number of developing nations with different needs and priorities. The impact of this change in membership on the regulation of natural resources soon became evident as new States brought to the fore issues

[70] This is Judge Friedman's law of coordination. See generally WG Friedmann, *The Changing Structure of International Law* (London, Stevens & Sons, 1964).

[71] *Legality of the Threat or Use of Nuclear Weapons*, Advisory Opinion, Declaration of President Bedjaoui, [1996] ICJ Rep 226, 270-1, para 13. Fassbender suggests that the UN Charter establishes a constitution for the international community which every State is bound to observe irrespective of its own will: B Fassbender, 'The United Nations Charter as a Constitution of the International Community' (1998) 36 *Columbia Journal of Transnational Law* 529, 549.

[72] See above pp 74 *ff*.

concerning the allocation of natural resources and the distribution of wealth in the international community. In the period from 1962 onwards, a number of important debates took place at the United Nations and resulted in a number of resolutions and agreements that sought to meet the needs of poorer nations.[73]

Although States remain the pre-eminent actors of the international community, in terms of setting and adjudicating legal standards, increasingly this is a less exclusive function. Famously, the International Court of Justice confirmed the international legal personality of the United Nations in its *Reparation for Injuries Advisory Opinion*.[74] As a general rule a subject of international law is:

> an entity capable of possessing international rights and duties and having the capacity to maintain its rights by bringing international claims.[75]

Regardless of whether international personality is synonymous with membership of the international community, the fact is that the addressees (objects) of international law are not at all limited to States.[76] Presently, most writers accept insurgents, national liberation groups, international organisations, and individuals as subjects of international law, albeit qualified in their capacity and contingent on the consent of States for their status in international law.[77] Examples of this capacity can be found in the rules on individual criminal responsibility, which have expanded beyond piracy and slave-trading to encompass a number of individual crimes, as set out under the Rome Statute of the International Criminal Court.[78] Elsewhere, the provisions of the International Convention on Civil Liability for Oil Pollution Damage 1969 establish principles of strict liability for pollution caused by shipowners.[79] If we recall that international law needs to retain high levels of voluntary compliance through legitimacy,[80] then it is likely that the objects of the law (multinational companies, individuals and non-States actors) will be increasingly concerned with the formation and consequences of international rules. For example, in the context of compliance, Protocol 11 to the European Convention on Human Rights, which is no longer optional, permits individuals to bring claims against

[73] See N Schrijver, *Sovereignty Over Natural Resources* (Cambridge, Cambridge University Press, 1997) ch 3.

[74] *Reparations for Injuries*, Advisory Opinion [1949] ICJ Rep 174, 178–9.

[75] Brownlie, n 55 above, 57.

[76] See the discussion of agency below pp 93–95.

[77] This list is not exhaustive. One might also include *sui generis* entities, such as the Holy See or the International Committee of the Red Cross, and multinational corporations. See, eg, A Cassese, *International Law*, 2nd edn (Oxford, Oxford University Press, 2005) ch 7; Brownlie, *Ibid*, ch 3; R Higgins, *Problems and Process* (Oxford, Clarendon Press, 1994) 39–55.

[78] (1998) *ILM* 999; see Arts 5–8 and 25 of the Statute.

[79] 1975 *UKTS* 106.

[80] See above pp 76–77.

States. There has also been a significant growth in the number of claims brought against States by individuals under international investment law. In the context of property rights and natural resources there have already been a number of significant decisions by international tribunals on the treatment of private property under domestic law.[81]

The last point to make here is that the deficit between the real and formal equality of States may reduce the legitimacy of the international prescriptive process, and so undermine its authority to establish legitimate public interests. The gap between real and formal equality is captured in the famous quote by De Visscher, who draws an analogy between the formation of custom and the formation of a pathway across vacant land:

> [a]mong the users are always some who mark the soil more deeply with their footprints than others, either because of their weight, which is to say their power in this world, or because their interests bring them more frequently this way.[82]

De Visscher shows that members of a community with more wealth and influence or, simply put, power may have a greater impact on the formation of community rules and principles. The point has already been made that the members of a community will only prioritise community interests over self- or sectoral interests if the community values are perceived to be truly inclusive. Rules of custom, and any potential public interests found therein, will not attract high degrees of compliance if they are seen merely to reflect the interests of powerful persons or groups within a community. There are numerous examples of how the capacity and power of States has been a factor in the law making-process. Thus, Schachter notes that military powers have exerted a greater influence on the development of the law of armed conflict, and economic powers have influenced trading and investment rules.[83] In the context of international law, this is not to suggest that law is merely the handmaiden of powerful States.[84] As we show below, the principle of reciprocity operates as an important constraint on freedom of action.[85] The relationship between custom and

[81] See eg, the cases of *Sawhoyamaxa Indigenous Community v Paraguay,* Case 12.313, Report No 2/02, Inter-Am CHR, Doc 5 rev 1, at 387 (2002), and the *Mayagna (Sumo) Awas Tingni Community v Nicaragua,* Judgment of 31 August 2001, Inter-Am Ct HR (Ser C) No 79 (2001).

[82] C De Visscher, *Theory and Reality in Public International Law* (Princeton, Princeton University Press, 1957) 147.

[83] See also O Schachter, 'New Custom: Power, *Opinio Juris* and Contrary Practice' in J Makarczyk (ed), *Theory of International Law at the Threshold of the 21st Century: Essays in Honour of Krzysztof Skubiszewski* (Boston, Kluwer Law International, 1996) 531, 536–7.

[84] Such a view is advocated by 'realist' scholars. See E Carr, *The Twenty Years Crisis* (London, Macmillan, 1946); H Morgenthau, *Politics Among Nations*, 2nd edn (New York, Knopf, 1954).

[85] See below, pp 95–100.

power is complex and there are limits to the potentially distorting effect of powerful States pursuing their own self-interests.[86] For example, the emergence of the norm of self-determination emerged in the face of pressure from powerful States.[87] As chapter 5 illustrates, the formation of the EEZ was largely the product of the concerted action of smaller less powerful States, rather than the product of the then maritime powers, although their subsequent support may have given the concept its final imprimatur of legitimacy. Power has an influence on the prescriptive process but one should not over-generalise about this.

(iv) Conclusions on Plenary Legal Communities and their Public Interests

From the foregoing analysis we can draw four conclusions concerning the way in which public interests are generated within discrete plenary legal communities. First, we can see how community structures and values are mutually reinforcing. In this respect domestic communities are likely to have developed much stronger and coherent public interests along with mechanisms to apply them. Secondly, the different structure and composition of a community is likely to generate different types of community values, and hence public interest demands. In particular, some of the structural weaknesses of international law mean that there is a higher reliance on legitimacy to secure compliance with rules, and so reinforce the sense of community. Thirdly, the structure of the international legal community is such that care must be taken when identifying international public interests. The absence of formal structures of international government, and the diffuse nature of authority in the community, may be viewed as weakening the opportunities for the articulation of public interests. That said, it is clear that the international legal community does possess mechanisms that have allowed public interest values and demands to emerge. Of course, the difference in the composition on the international community and the process facilitating the formulation of public interests has meant that different public interest values may emerge. As we shall see in the next section, and developed in later chapters, these differences pertain to what are called third order interests. Finally, given the spatial and material overlap between domestic and international communities, this is likely to pose difficulties concerning the coordination and resolution of any conflicts between competing accounts of public interest.

[86] See generally, M Byers, *Custom, Power and the Power of Rules* (Cambridge, Cambridge University Press, 1999).
[87] *Ibid* 76.

(b) The Categories of Public Interests

Whilst one can describe or induce certain interests to be public, it is much more difficult to deduce the form and extent of a category of public interest in the abstract. Nevertheless, we must start somewhere, and an obvious point of departure is with actual examples of public interests in law.

(i) Operative Public Interests

Given our present concern with the public interest from a legal perspective, a useful beginning is to ascertain what may be termed operative public interests.[88] By this we mean those community values or demands that have been given a specific/actual legal form. It is possible to identify many such public interests: from speed limits on roads to controls on the emission of smoke from buildings, from the creation of an offence to protect wild animals to the right to access personal data held by public authorities. In the UK there is particular concern about the concentrations of media ownership and the potentially adverse effect this may have on certain public interests such as freedom of speech and accurate presentation of news. Operative public interests are both explicit and implicit in the underlying legal regime.[89] They may take two forms in law: closed public interests and open public interests. Closed public interests are those which have been specifically delineated in law. For example, there is a general interest in maintaining air quality for health reasons. This is given specific form in section 1 of the Clean Air Act 1993, which prohibits the emission of 'dark smoke' from the chimney of any building. Whilst there is no explicit mention of the public interest, implicit in the provision is a public interest demand, ie demand for good air quality for health reasons, which limits the operation of a private right, ie the owner's right to use his property. The open category refers to public interests that are undefined and subject to interpretation. An example of an open interest can be found in section 74A of the Agriculture Act 1970, which allows regulations to control the content of fertilisers or materials intended for the feeding of animals where this is in the 'public interest'. This allows a

[88] For a review of public interests that operate in law see Feintuck, n 18 above, chs 3–5. Also, J Wightman, 'Private Law and Public Interests' in T Wilhelmsson and S Hurri (eds), *From Dissonance to Sense: Welfare State Expectations, Privatisation and Private Law* (Aldershot, Ashgate, 1999) 253.

[89] Broadcast licences may be revoked in the public interest under Communications Act 2003 s 238(3)(b). See also Communications Act 2003 s 375, amending Enterprise Act 2002 s 58, which refers to the accurate presentation of news and free expression of opinion. These are public interest values to be taken into account in the context of mergers. See generally, Feintuck, n 18 above.

decision-maker to exercise discretion so as to take account of a variety of factors deemed to be public. It seeks to protect the public health, as does the Clean Air Act, but in this context it is a weaker form of control because it does not impose mandatory restrictions on the use of property rights. Rather limitations are only to be imposed where the decision-makers consider this to be in the public interest.

In both instances there is a regulatory nexus at which public interests are brought to bear on private rights. As such this approach to public interests presents a rather positivist view of public interests: only those interests that are actualised in law may count as public interests. The use of public interests in this manner is a common feature of regulatory regimes—rules that seek to regulate the operation of markets.[90] Here the public interest refers to measures designed to control monopolies or facilitate social regulation. The public interest is also used in cases where courts refuse to enforce contracts contrary to public policy. This includes contracts in restraint of trade,[91] contracts prejudicial to the operation of government or administration of justice,[92] and contracts for immoral purposes.[93]

There are a number of limitations with this approach which renders exclusive reliance upon operative public interests problematic. First, there is no way of testing the legitimacy of an operative public interest by reference to the specific rule in question.[94] Without further validation it risks an unquestioning assumption that values entrenched in a legal system truly embody the interests of the public or community. It may be that a community requires adherence to the law by simple reason of the moral virtue in upholding the law.[95] However, as Lyons points out, there is 'no reason a priori to accept a presumption favouring obedience to law, and neither experience nor theory favours such a presumption'.[96] Even theorists who purport to claim a moral presumption favouring obedience

[90] See Ogus, n 16 above; also T Prosser, *Law and the Regulators* (Oxford, Clarendon Press, 1997).

[91] 'The public interests which the common law doctrine against restraint of trade is designed to promote, are social and economic—liberty and prosperity.': *Petrofina (Great Britain) v Martin and Another* [1966] 1 All ER 126, 138 (Diplock LJ). 'The public interest requires in the interests both of the public and of the individual that everyone should be free so far as practicable to earn a livelihood and to give to the public the fruits of his particular abilities.': *A Schroeder Music Publishing Co Ltd v Macaulay* [1974] 3 All ER 616, 621 (Lord Reid).

[92] *Amalgamated Society of Railway Servants v Osborne* [1910] AC 87.

[93] *Pearce v Brooks* (1866) LR 1 Ex 213.

[94] See Flathman, n 18 above, 63.

[95] One might associate such a position with the virtue of maintaining order or the importance of preserving the integrity of a legal system.

[96] D Lyons, 'Normal Law, Nearly Just Societies, and Other Myths of Legal Theory' in Brownsword, n 28 above, 13.

to the law, such as Bentham and Hart, make room for justified disobedience.[97] Experience shows such a presumption to be both unfounded and dangerous. First, there is evidence of law's failure to define adequately the public interest, as manifest in the open category of operative public interests. This failure is also manifest where such interests are advanced in judicial proceedings and so may be of little value in subsequent proceedings.[98] Secondly, and perhaps more importantly, there are numerous instances of operative public interests that conflict with fundamental precepts of morality, or which result in minority interests being marginalised or worse. The perpetuation of slavery throughout history, the Nuremburg Laws of Nazi Germany and the policy of apartheid in South Africa are poignant examples. They might be viewed as aberrations, the product of flawed communities, and the claim might be advanced that truly just societies will produce just laws. This will not do. We might admit, as does Rawls, that there is a fundamental natural duty of justice which 'requires us to support and comply with just institutions that exist and apply to us'.[99] One might further claim that the minimal threshold for a just society is reached through a genuine political democracy. However, it is doubtful whether such a position has been reached. As Rawls later accepts, so-called democratic societies have historically failed to achieve this position.[100] This point needs no further evincing.

Secondly, the open category of operative public interests requires a frame of reference for the determination of the public interest, which the regulatory structure does not provide. Accordingly, a decision-maker must draw upon some extra-legal conception of the public interest to justify his determination of the public interest at any given time for any given issue. A decision maker that fails to provide a principled articulation of the interest is immediately exposed to criticism that the public interest so stated is a mere rhetorical device to gloss over a decision reached on narrower, possibly *ad hoc* political, grounds, or that the decision represents a subjective rather than objective account of the public interest.

In short, legal rules are the product of other fundamental values, and not the source of the values. Operative public interests provide empirical evidence of the existence of the category of public interests, but there is no basis for assuming their inherent legitimacy. As such, it is necessary to provide a normative account of public interests which presents a method

[97] Bentham permits this on grounds of utility. See Lyons, *Ibid* fn 4. Hart admits of the need to subject law to moral scrutiny, and that this may provide cause for disobedience. HLA Hart, *The Concept of Law*, 2nd edn (Oxford, Clarendon Press, 1999) 210.

[98] BM Mittnick, *The Political Economy of Regulation* (New York, Columbia University Press, 1980) 256 *ff*.

[99] J Rawls, *A Theory of Justice* (Oxford, Clarendon Press, 1972) 115.

[100] *Ibid* 226.

for independently determining the content of the category of public interests. The distinction here is between *the* public interest (conceptual framework) and *a* public interest (operative interests). The position adopted here is that an operative public interest—that is to say a community demand that is legally coercive—must adhere to the requirements established for a framework for the public interest (set out below).

(ii) Normative Public Interests

Held, in her leading analysis of the public interest, presents a typology of public interest theories: preponderance theories, common interest theories and unitary theories.[101] Common interest theories assume the existence of interests common to all members of a community, whilst preponderance theories look for interests which are merely held by the majority of a community. Both approaches look to calculate the public interest from the sum measure of individual interests, and to this extent are quantitative devices used to determine the public interest, rather than identify the content of it. There are a number of problems with quantitative approaches. First, in reality truly common interests will rarely exist.[102] Moreover, as soon a single person disputes the common interest, it negates the idea that the interest is actually common. Whilst such difficulties are avoided by preponderance accounts, this will invariably result in minority interests being excluded. Moreover, both accounts fail to accommodate the interests of future generations.[103] Such interests must form part of the public interest because communities are dynamic organisms with an interest in ensuring the conditions for their continued existence. For these reasons quantitative approaches to the public interest are rejected. This leaves us with unitary approaches.

Unitary approaches seek to derive the public interest from some overarching ethical value or set of values. According to Held, a unitary account of the public interest asserts that something is in the public interest if it is of universal *moral worth*.[104] In this sense the public interest relies on an underpinning moral principle or set of principles. The principle criticism of a unitary conception of the public interest is that it requires the advancement of a single, universally supported moral theory. This then precludes the existence of conflicting individual interests.[105] Whilst this

[101] Held, n 18 above, 42–6 and chs 3–5.
[102] Barry n 28 above, 196.
[103] See Feintuck, n 18 above, 13.
[104] *Ibid* 135–6.
[105] Held, n 18 above, 154–60. Also A McHarg, 'Reconciling Human Rights and the Public Interest: Conceptual Problems and Doctrinal Uncertainty in the Jurisprudence of the European Court of Human Rights' (1999) 62 *Modern Law Review* 671, 675–6.

criticism appears true of Socratic and Hegelian abstractions of the public interest, which purport to establish unitary moral theory, it elides more complex, pluralist visions of morality (certainly as it applies to property concepts). We are not suggesting that there is an absolute or unified moral basis to the public interest, but rather that it derives from a value that is capable of being applied universally. Before we identify those qualitative principles that underpin the public interest, we must deal with another significant objection to the public interest which follows from the rooting of the public interest in some notion of moral worth.

Lucy and Mitchell point out that if the unitary concept of a public interest is rooted in some substantive moral principle or doctrine, then what is the point of invoking the public interest rather than that moral principle directly.[106] This echoes Held, who suggests that the term should 'not be used to convey meanings for which more precise terms are available'.[107] There are, however, a number of reasons that support the use of the public interest as a normative category. First, at an operational level law does not usually draw explicitly or directly upon moral philosophy to determine the content of rights. It does, however, frequently make use of the 'public interest' or similar device to permit decision-makers to insert other (extra-legal) values into a decision-making process.[108] Yet the public interest is more than just a mediating concept at the interface of law and morality. It provides a framework within with certain values can be articulated. Moral principles or doctrines encompass both individual and collective values. The public interest serves to define a particular subset of moral values—these are explicitly community-type values—which are relevant in a decision-making context. Moreover, if we recall that the public interest may be conceived of as a categorical form, which necessarily holds a plurality of values, it reinforces the idea that several rather than singular moral values should be taken into account. This mirrors the role played by private law justifications of property set forth in chapter 2: property is based upon a number of irreducible justifications (eg, liberty, utility and propriety), all of which are important to decisions about the use and allocation of

[106] WNR. Lucy and C Mitchell, 'Replacing Private Property: The Case for Stewardship' (1996) 55 *Cambridge Law Journal* 566, 595–6.

[107] Held, n 18 above, 163.

[108] See eg, Art 1 of the First protocol to the European Convention on Human Rights, which provides that: '[e]very natural or legal person is entitled to the peaceful enjoyment of his possessions. No one shall be deprived of his possessions except in the *public interest* and subject to the conditions provided for by law and by the general principles of international law. The preceding provisions shall not, however, in any way impair the right of a state to enforce such laws as it deems necessary to control the use of property in accordance with the *general interest* or to secure the payment of taxes or other contributions or penalties.' (emphasis added)

natural resources. Finally, the public interest provides more than simple rhetorical coherence to a set of ideas or values; it exerts a normative pull on the way in which decisions are reached in society.[109] In the same way that private property directs attention towards the importance of protecting individual autonomy against the States, the public interest serves to direct attention to the public functions of property. It serves to contextualise any decision by making explicit, as was shown above, the linkage and effect of the relationship between a community's values, structures and legal rules.

Returning now to the key purpose of this chapter, we need to establish a normative framework for the public function of property. So far we have identified the public interest as a device that facilitates certain community interest demands to be made in a legal context. These demands must pertain to certain community values, be they substantive or structural. They must also be rooted in some idea of morality that can be applied universally (at least within the community). They must also be capable of having legal effect. What follows is a normative framework for the public interest which seeks to fix the operation of the concept in these core requirements. In doing so it sets out the content of these underlying values, and indicates some of the limitations inherent in the public interest. At this stage, it must be emphasised that a normative account of the public interest is presented as an argument of principle. It seeks to explain or justify certain legal relationships or decisions that are taken in the public interest. As Bell indicates, the public interest operates as a justification in situations or decisions where some persons 'lose out', but are compelled to conform because of the overall gain for the community.[110] In such a context, the framework for the public function of property so derived operates as a series of higher order principles or justifications shaping the regulation of property.

Underlying this approach is an assumption that public interests may differ qualitatively, meaning that some public interests are more important than others. To reflect this, public interests are categorised into three orders of interests. First order interests are those that meet the physical needs of any community, and includes anything deemed necessary to the survival of life per se. Second order interests are structural requirements that are essential to existence of social order per se. Third order interests are those distinct aims of the plenary legal community, which may be manifest as fundamental rules of a legal system. This ordering indicates

[109] In Allott's more evocative terms, it is the 'notional centre of gravity of a society. … It determines the direction of action of all social force.' He continues to note that it causes public decision making to be directed at the interest of society as a whole. Allott, n 23 above, 776.

[110] Bell, n 28 above, 30.

some degree of hierarchy between the interests.[111] More will be said on this once the content of each order is outlined.

(iii) First Order Public Interests

Turning now to first order interests, in chapter 2 it was shown that all accounts of property seek to guarantee a minimal level of subsistence. Humans cannot survive without certain basic goods, ie air, water, food, and shelter, and to be blunt, without life there can be no society. Central to the present study is the fact that this basic order of interests provides a strong basis for environmental rules and principles which seek to ensure the conditions for meeting these vital needs. The importance of ensuring these goods is not limited to survival per se; it is also a requirement of political order in the liberal tradition. As the liberal position holds, any form of political association will risk collapse if it fails to ensure that basic needs of its members (and hence their political autonomy) can be met. In short, first order interests comprise of the provision of certain basic goods necessary for survival. Of course this begs the question: at what level of subsistence should basic goods be ensured so as to meet survival needs?

It would seem reasonable to argue that any list of basic goods must be qualified so as to specify a certain minimum quality of the basic good. For example, air must be sufficiently free of harmful contamination to allow us to breathe without our health being jeopardised. Water should be sufficiently clean to allow its consumption.[112] Food should be sufficiently nourishing, and so on. Of course, it is difficult to state precisely what degree of quality is required here, other than to indicate it should be sufficient to sustain life. The determination of this sufficiency threshold is a technical judgement that requires a different knowledge basis, one which is the domain of scientific experts. It is thus a question of application rather than principle. At this point it is necessary to point out that our concern with basic needs represents a *de minimis* threshold for survival. Malnes makes a useful distinction between what he terms vital needs and preferences or desires. As he points out, our individual well-being is achieved through the fulfilment of our interests. Some interests, which he terms vital needs, consist of 'the physical prerequisites of survival and normal biological functioning'.[113] These vital needs contribute to a person's well-being regardless of what they actually want and generally comprise the types of basic good noted above. In

[111] One may draw parallels between this approach and Maslow's hierarchy of needs. See A Maslow, 'A theory of human motivation' (1943) 50 *Psychological Review* 370.

[112] See eg, the Indian Supreme Court decision in *Andhra Pradesh Pollution Control Board v Nayudu (No 2)* [2002] 3 LRC 275.

[113] R Malnes, *Valuing the Environment* (Manchester, Manchester University Press, 1995) 34.

contrast, preferences or desires frequently relate to a quality of life (although they may overlap with vital needs) and these are to a large extent chosen.[114] Whilst the argument for meeting a *de minimis* threshold of basic needs may appear to be morally unsatisfactory, the likelihood is that *de minimis* levels are always exceeded through the pursuit of third order interests. Thus, most societies, subject to their economic capabilities, will pursue a higher minimum quality of life as a part of their particular social goals.

Two further qualifications should be added to this description of first order interests. First, we should ensure vital needs can be met for both present and future members of a community. Communities are not static; they are dynamic, evolutionary organisms having an interest in their continued existence. This means that not only must imminent vital needs of a community be guaranteed, but so too must the conditions for their continued provision. Vital needs must be sustainable. Here the argument for first order interests dovetails neatly with a burgeoning area of environmental law and policy. There is an influential body of literature which proclaims a moral responsibility to future generations.[115] It advocates what is commonly referred to as 'intergenerational equity'. The idea, at least, seems incontrovertible and is manifest in a growing body of 'norms' that seek to actualise this responsibility.[116] However, despite the importance which is attached to the idea as a matter of policy, the move from a moral principle to a legal principle is more problematic.[117] As Lowe points out:

> equity is by definition a technique for ameliorating in the name of justice the impact of legal rules upon the *existing* legal rights and duties of legal persons.[118]

Generations other than the present do not exist and simply cannot appear to secure their 'rights'. At present, it is not entirely clear that future generations have been endowed with justiciable rights and there are infrequent instances of such being accepted by courts. The decision in *Oposa et al v Fulgencio S Factoran Jr et al* seems exceptional in this respect.[119]

[114] This is not to say they are unimportant because having a certain quality of life rather than a mere existence is a common and reasonable moral position to adopt.

[115] Rawls, n 99 above, 284–93; E Brown Weiss, *In Fairness to Future Generations* (Dobbs Ferry NY, Transnational Publishers, 1989); L Gündling, 'Our Responsibility to Future Generations' (1990) 84 *American Journal of International Law* 207.

[116] Principle 3 of the Rio Declaration on Environment and Development proclaims that '[t]he right to development must be fulfilled so as to equitably meet developmental and environmental needs of present and future generations.'

[117] V Lowe, 'Sustainable Development and Unsustainable Arguments' in A Boyle and D Freestone (eds), *International Law and Sustainable Development* (Oxford, Oxford University Press, 1999) 19, 26–30.

[118] *Ibid* 27 (emphasis added).

[119] GR No 101083, July 30 1993; reproduced in (1994) 33 *ILM* 173. One might argue that the notion of preserving conditions that allow people, including future generations, to meet certain needs is implicit in the public trust doctrine in US law. See, eg, *National Audubon Society v Superior Court of Alpine County* 658 P2d 709 (1983) 724.

Here the Philippines Supreme Court admitted a class action by a group of children on behalf of their own and future generations' interest in the preservation of rainforest habitats from rapid destruction. Notably, the court couched the decision in terms of an obligation to ensure the protection of the environment for future generations.[120] Lowe admits that such a duty might be readily pursued at the domestic level because centralised governmental authorities can make distributive choices legitimately.[121] Mechanisms such as trust law might also facilitate this by allowing representative decision-making on behalf of future persons. However, such a duty is problematic at the international level because there is an absence of institutional capacity and procedural rules to allow future concerns to be addressed. Although this seems to be a problem of implementation, rather than substance, it highlights how vital it is to have what Feintuck refers to as diligent agency: community institutions and procedures capable of representing the distinct interests of future generations.[122]

A second qualification arises because guaranteeing certain basic goods may not be a sufficient condition for sustaining life, at least directly, in modern communities. Many forms of contemporary social organisation feature a high degree of interdependency between the members of a society. The institution of private property is pervasive, so much of the world's resources and means of production are in private hands. This means that basic goods may not be readily available, other than through market mechanisms, welfare systems or other institutions of the State. Accordingly, ensuring access to and participation in these institutions is just as important as the basic goods.[123] The need to safeguard rights to access and participation in social institutions that lead to the satisfaction of basic needs is picked-up in kind by Charles Reich.[124] In his earlier

[120] 'Needless to say, every generation has a responsibility to the next to preserve that rhythm and harmony for the full enjoyment of a balanced and healthful ecology. Put a little differently, the minors' assertion of their right to a sound environment constitutes, at the same time, the performance of their obligation to ensure the protection of that right for the generations to come.' *Oposa* case, *Ibid* 185.

[121] Above n 117, 28.

[122] Feintuck, n 18 above, 13.

[123] The importance of such rights is acknowledged in a number of instruments, including Arts 22 and 25 of the Universal Declaration of Human Rights. Art 22 provides: '[e]veryone, as a member of society, has the right to social security and is entitled to realization, through national effort and international co-operation and in accordance with the organization and resources of each State, of the economic, social and cultural rights indispensable for his dignity and the free development of his personality.' Art 25(1) provides: '[e]veryone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control.' See also, Art 9 of the International Covenant on Economic Social and Cultural Rights.

[124] See C Reich, 'Beyond the New Property: An Ecological View of Due Process' (1990) *Brooklyn Law Review* 731.

work, he argued that certain benefits essential to individual survival ought to belong to the individual as property rights.[125] Although this extreme view of rights did not gain wider acceptance, the more moderate claim that sought adequate procedural protection of such rights was hugely influential. Again this shows the contingency of some first order interests on the existence of adequate institutional mechanisms and procedures, suggesting that the boundaries between first and second order interests are neither rigid nor absolute.

(iv) Second Order Public Interests

Second order interests are those interests that secure social order per se. At this point it is important to indicate the relationship between second and third order interests, that is between structural principles universal to all plenary legal communities and the interests particular to a community, which may pertain to the structure of the legal system. Despite this distinction it becomes clear in the following review that the boundaries between the two may be difficult to sustain in practice and that third order interests play an important role in shaping the particular application of second order interests, for example by the application of universal jurisdiction to certain fundamental norms. Whilst all communities have an interest in legal order, that order is usually for a purpose and not purely for its own sake.

It is suggested that there are three structural principles that are fundamental to all plenary legal communities: agency, reciprocity and jurisdiction. These principles provide a legitimate basis for public interest demands, and every legal system will seek to ensure that private transactions do not infringe them.

Every plenary legal community is comprised of persons capable of bearing of legal rights and duties.[126] The principle of agency (or personality) recognises the formal legal capacity of entities (agents) to participate in a plenary legal community. In most domestic legal systems, individuals are bestowed, either explicitly or implicitly, with formal legal equality, as in the case of France.[127] The core principle says nothing of the precise extent of such capacity, such as whether all men, women

[125] C Reich, 'The New Property' (1964) 73 *Yale Law Journal* 733.

[126] As Kelsen notes, 'there must be something that 'has' the duty or right': H Kelsen, *General Theory of Law and State* (Cambridge, Massachusetts, Harvard University Press, 1949) 93.

[127] Art 1 of the French Constitution of 4 October 1958 provides that 'F[rance] shall ensure the equality of all citizens before the law, without distinction of origin, race or religion.' Art 3 continues to provide that '[n]ational sovereignty shall belong to the people, who shall exercise it through their representatives and by means of referendum. No section of the people nor any individual may arrogate to itself, or to himself, the exercise thereof'.

or children enjoy full legal agency before the law. The precise contours of agency may properly be seen to comprise a third order interest. Thus different legal systems will have different ages of majority and different rules about legal capacity in general. Moreover, all formally recognised agents do not enjoy the same capacity to bear rights and duties in all circumstances. Any legal system may adjust a person's formal legal capacity so as to facilitate the particular aims of the community. Thus political leaders may receive enhanced authority to make decisions affecting the general populace whereas convicted criminals may have some attributes of their agency curtailed during their period of incarceration. We should also distinguish between the primary agents of a legal system and secondary legal personalities, such as corporate bodies. Secondary legal persons are endowed with a degree of agency that allows them to perform a particular and limited function, but they lack full legal capacity to hold as many rights and duties as primary agents. Although formal equality is not always the norm, each community must address the question of agency. Even for States, where political power is monopolised, there must be some rules which define the status of individual legal subjects in law.

The principle of agency operates at the international level, where States are the primary agents of the legal system. As in the case of domestic communities one may draw a distinction between formal and material equality, and note that the capacity of States to act may vary according to their ability to exert their political influence on formal legal process. However, this does not detract from the basic point that States enjoy, at least, formal equality as the primary agents of international law.[128] What is interesting and distinctive about the international legal community is the fact that the rules on agency are much more deliberative. Arguably, this is because the primary actors—States—are social constructs rather than biological facts. Accordingly, rules must exist on precisely what constitutes a State.[129] Whereas the identity of a natural legal person is easier

[128] See, eg, Art 2(1) of the United Nations Charter. As Brownlie states: '[t]he sovereignty and equality of states represent the basic constitutional doctrine of the law of nations which governs a community consisting primarily of States having a uniform legal personality.': Brownlie, n 55 above, 287.

[129] The factual criteria for statehood (population, territory, effective and independent government) have been well-rehearsed elsewhere. See, eg, J Crawford, *The Creation of States in International Law* (Oxford, Clarendon Press, 2006); C Warbrick, 'States and Recognition in International Law' in M Evans (ed) *International Law* 2nd edn (Oxford, Oxford University Press, 2006) 217. What may be more important to note are those rules that seek to give form to and preserve the agency of States. See, eg, Art 2(1) of the United Nations Charter and the Declaration on Principles of International Law concerning Friendly Relations and Co-operation among States in Accordance with the Charter of the United Nations (1970) UNGA Res. 2625 (XXV).

to define, juristic personality is contingent on constructive legal rules.[130] We must also acknowledge that the agency of the State must be distinguished from the agency of the natural persons that comprise it. Such a distinction is crucial because in international law States are both the creator and subject of the law. This means that entitlement to participate in the creation of the law is a consequence of their agency. The simple fact that sovereignty more immediately resides in the hands of States, rather than organs of (supra-national) government, means that much more care is taken to delimit the nature and scope of agency under international law. In short, the consequences of agency in international law are more far reaching than in domestic legal systems. Accordingly, one must treat rules that touch upon agency under international law with a higher degree of circumspection.

The principle of reciprocity is considered to be a fundamental feature of all forms of social organisation.[131] This extends to legal analysis.[132] As Franck notes:

> [t]he laws in a community thus evince not only the generally held belief that each must do what he or she is legally required to do, but also that each will discharge towards all others those obligations arising from the shared moral sense.[133]

Reciprocity flows from recognition of the formal equality of the participants in the legal system; that law is not unidirectional, but the product of transactions between the members of a community for what might be termed 'mutuality of gratification'.[134] Such transactions must embody an element of quid pro quo. It is in the public interest to ensure that private transactions or interests do not infringe the principle of reciprocity.

Despite its axiomatic status, commentators have mostly neglected to provide a systematic definition of reciprocity or explain its functional implications.[135] For our purposes, a useful model of reciprocity is provided by the international relations scholar, Robert Keohane.[136] Keohane's

[130] 'A State is not a fact in the sense that a chair is a fact; it is a fact in the sense in which a treaty may be said to be a fact: that is, a legal status attaching to a certain state of affairs by virtue of certain rules or practices.' Crawford, *Ibid* 5.

[131] See generally Alvin W Gouldner, 'The Norm of Reciprocity: A Preliminary Statement' (1960) 25 *American Sociological Review* 161.

[132] Fuller's account of reciprocity is the most notable attempt to systemise an account of reciprocity in general legal theory. L Fuller, *The Morality of Law* (New Haven, Yale University Press, 1969) 19–27.

[133] Franck, n 30 above, 11. See also Byers, n 86 above, 88–105.

[134] T Parsons and EE Shills, *Toward a General Theory of Action* (Cambridge, Massachusetts, Harvard University Press, 1951) 107.

[135] See Gouldner, n 131 above, 161–2.

[136] Robert O Keohane, 'Reciprocity in international relations' (1986) 40 *International Organization* 1.

approach is relevant to the present discussion, not only because it has parallels in legal literature, but because it provides a convincing normative account of how relationships operate within a community structure. Drawing upon social exchange theory, he defines reciprocity as

> exchanges of roughly equivalent values in which the actions of each party are contingent on the prior actions of the others in such a way that good is returned for good and bad for bad.[137]

Underpinning this is the idea that agents act voluntarily. Thus reciprocity complements the principle of agency, based as it is on the formal equality of the persons in a community. Notably, Keohane casts reciprocity in neutral terms: it does not necessarily require positive cooperation. Thus a harmful act may be reciprocated by another harmful act. However, even self-interested agents will appreciate the potential benefits of cooperative action.[138] Moreover, negative retaliatory acts can place pressure on agents to conduct themselves in accordance with generally accepted standards of behaviour.[139] Essential to reciprocity is the requirement that exchanges be roughly equivalent.[140] Without this, the relationship is no longer reciprocal, but merely a one-sided exercise of power. Of course, it is neither possible, nor necessary, to require strict equivalence because the values pursued in any exchange are subjectively appreciated. The result is that the quality and determination of this equivalence may be determined according to how one characterises the reciprocal relationship. At this point the distinction between specific and diffuse reciprocity becomes important.

Specific reciprocity refers to 'situations in which specified partners exchange items of equivalent value in a strictly delimited sequence'.[141] An example of this would be a simple contractual exchange. The exchange works because it is allied to the self-interest of the rationale agent to adhere to the terms of an exchange into which he enters voluntarily. Keohane admits of difficulties with application of specific reciprocity in complex

[137] *Ibid* 8. Although Keohane does not claim reciprocity as a universal principle of world politics, he suggests that it does not explain every form of action. However, given that he is not advancing a strict theory of reciprocity this seems incongruous with his subsequent claims concerning diffuse reciprocity. Unless agents can obtain their interests without reference to other agents, or be immune to the consequences of their actions, then they will have to observe some degree of reciprocity in their conduct by the mere virtue of entering into relations with other agents.

[138] See further R Axelrod, *The Evolution of Cooperation* (Hammondsworth, Penguin, 1990).

[139] See, eg, the rules on countermeasures under international law. 'Countermeasures are responses to an internationally wrongful act. They are intrinsically illegal, but are justified by the alleged failing to which they were a response.' D Alland, 'Countermeasures of General Interest' (2002) 13 *EJIL* 1221. Although not expressly sanctioned, Art 54 of the Articles on the Responsibility of States for Internationally Wrongful Acts leaves open the right of States to take action to ensure compliance with certain peremptory norms.

[140] Fuller, n 132 above, 23.

[141] Keohane, above n 136, 4.

multilateral situations.[142] For example, specific reciprocity, predicated as it is upon egoistic rational self-interest, cannot explain how public goods are created because there is no automatic guarantee of a return to actors for their investment in creating the public good. Neither can it deal with the free rider, such as the State which benefits from the agreement of two other States to reduce their carbon emissions at their own expense. Simply put, the parties to a specific agreement cannot ignore the impact of that agreement on other parties. This limitation is critical because legal systems are never comprised of purely bilateral relationships, but of networks of social relationships involving many and sometimes all agents within a legal order. Even bilateral relations, based upon specific reciprocity, may have consequences and create expectations across a community about how agents will conduct themselves. For example, one person cannot grant the same exclusive trading privileges to all people. This suggests that specific reciprocity alone is an insufficient basis for explaining voluntary cooperative behaviour in a plenary legal community. We require a notion of reciprocity that explains how legal relations may be sustained in a continuing and multitudinous legal community.

Diffuse reciprocity involves situations of exchange where the aspect of equivalence is measured not in the form of direct rewards, but through a commitment to generally accepted standards of behaviour. In other words, 'a pattern of diffuse reciprocity can be maintained only by a widespread sense of obligation'.[143] Where this sense of obligation stems from is unclear in Keohane's work, although drawing upon Blau and Gouldner, he indicates that it may evolve from sequential incidents of specific reciprocity.[144] Where agents are involved in an open-ended relationship, they are likely to have a stake in maintaining that relationship to secure the future possibility of mutually beneficial exchanges. Parisi and Ghei have suggested that where there is an element of randomness inherent in a system (so that agents cannot also plan accurately for future contingencies) or where there is a possibility of role reversal (thereby individuals may benefit from some transactions, but lose out in others), agents will cooperate in the expectation of a general reciprocal return in the future rather than an immediate specific reward.[145] Stochastic uncertainty encourages agents to act prudently and guard against future conflict or disadvantageous treatment under the law.[146] This reflects the

[142] *Ibid* 12 *ff*.
[143] *Ibid* 20.
[144] *Ibid* 21. See also P Blau, *Exchange and Power in Social Life* (New York, Wiley, 1964) 92 *ff*; Gouldner, n 130 above, 175.
[145] F Parisi and N Ghei, 'The Role of Reciprocity in International Law' (2003) 36 *Cornell International Law Journal* 93, 108–9.
[146] A highly relevant consideration here is the precautionary principle.

element of prudence inherent in Rawl's difference principle, the idea that just communities should enhance the life opportunities of the least advantaged.[147] In the original position, where an agent does not know the specific circumstances he will find himself in, he will seek to protect himself from adversity. It is a

> principle of mutual benefit. … The social order can be justified to everyone, and in particular to those who are least favoured; and in this sense it is egalitarian.[148]

In this sense, diffuse reciprocity contributes to general social stability and order, and may be regarded as countering some of the obvious structural problems associated with international law.

Specific reciprocity can evolve into diffuse reciprocity, which, in turn, becomes part of a formalised rule structure created by shared practices and reasoned argument occurring through sequential practices. The result is reciprocal relationships not only between agents, but also between the agents and the institutions of a society—between the citizen and the State. Drawing upon the work of the eminent sociologist Georg Simmel, Fuller observed that:

> there is a kind of reciprocity between government and the citizen with respect to the observance of rules. Government says to the citizen in effect, 'These are the rules we expect you to follow. If you follow them, you have our assurance that they are the rules that will be applied to your conduct.' When this bond of reciprocity is finally and completely ruptured by government, nothing is left on which to ground the citizen's duty to observe the rules.[149]

Law is not simply the direction of power by the State it is the product of what may be termed 'vertical reciprocity'.[150] As Brunnée and Toope observe:

> when understood as a purposive activity, law is inevitably a construction dependent upon the mutual generative activity and acceptance of the governing and the governed.[151]

Crucially, where the mutuality of any legal relationship is lacking, either through the absence of anticipated specific rewards, or through disaggregated (diffuse) rewards, then the relationship will lose its legitimacy. In

[147] Rawls, n 99 above, 75–83.

[148] *Ibid*, 102–3.

[149] Fuller, n 132 above, 39–40. See also Gerald J Postema, 'Implicit Law' (1994) 13 *Law & Phil* 361, 364.

[150] '[T]he existence of a relatively stable reciprocity of expectations between lawgiver and subject is part of the very idea of a functioning legal order.' Fuller, n 132 above, 209.

[151] J Brunnée and S Toope, 'International Law and Constructivism: Elements of an International Theory of International Law' (2000) 39 *Columbia Journal of Transnational Law* 19, 48.

this sense, reciprocity stands as a benchmark against which the legitimacy of a specific legal norm can be measured.

The obvious criticism is that this benchmark is too general to be of any use in measuring specific legality. This is where Fuller's eight requirements for the internal morality of law come in. Presented negatively as eight ways to make law fail, these are: (i) a failure to achieve rules per se, so that every matter is decided on an *ad hoc* basis; (ii) a failure to publicise rules; (iii) the abuse of retroactive legislation; (iv) a failure to make rules understandable; (v) the enactment of contradictory rules; (vi) rules requiring conduct beyond the powers of the subject of the law; (vii) introducing such frequent change so as to prevent citizens from orientating their conduct with the law; and (viii) a failure of congruence between the rules and their actual administration.[152] These rules present a benchmark for the standards of procedural fairness that ensure the conditions for diffuse reciprocity.[153]

Even if one disputes these general requirements, it is clear that the abstract principle of reciprocity underpins a number of actual and precise legal rules.[154] In domestic legal systems diffuse reciprocity tends to be formalised through rules and institutions that ensure that agents adhere to the same standard of behaviour in particular contexts.[155] Thus reciprocity is evident in the notion of principles such as *exceptio non rite adimpleti contractus,* consideration, and *sic utere tuo ut alienum non laedas*. Diffuse reciprocity is embodied in the idea of the rule of law, and, in particular, rules of public law.[156] Of course, in international law this formalisation of the abstract principle is less complete, but it can still be seen to apply in contexts such as international humanitarian law,[157] treaty reservations,[158] and bilateral trade arrangements. In contrast, diffuse reciprocity is often localised to situations where high degrees of common interest exist and the agents care about the future. This is particularly evident in the negotiation of the United Nations Convention on the Law of the Sea 1982. This treaty was negotiated as a package deal and a review of the negotiation process reveals how States were willing to accept

[152] Fuller, n 132 above, 39.

[153] See above, pp 76–77.

[154] See A Lenhoff, 'Reciprocity: The Legal Aspects of a Perennial Idea' (1954) 49 *Northwestern University Law Review* 619; Also DW Greig, 'Reciprocity, Proportionality and the Law of Treaties' (1994) 34 *Virginia Journal of International Law* 295, 298.

[155] As noted above, the abstract principle evolves into or is supplanted by specific rules.

[156] Arguably, the importance of a strong version of reciprocity is reflected in Feintuck's concern with endowing the public interest with strong democratic credentials. Feintuck, n 18 above.

[157] See T Meron, 'The Humanization of Humanitarian law' (2000) 94 *AJIL* 239.

[158] Art 21(1)(b) of the Vienna Convention on the Law of Treaties provides that 'reservation established with regard to another party … modifies those provisions to the same extent for that other party in its relations with the reserving State'.

non-specific returns in the expectation that they would benefit from a comprehensive, inclusive and universal regime regulating the use of ocean space and resources.[159] This indicates that diffuse reciprocity may be more difficult to ascertain in the international legal system because the heterogeneity of the international legal system and the absence of more formalised legal institutions mean that reciprocity cannot always be manifest as effectively as it is within domestic legal orders. Indeed, in the absence of constraints on action, or an alignment of interests, States may (and frequently do) resort to unilateral strategies which further their self-interests regardless of potential cooperative benefits. This reaffirms the earlier warning that international public interests should be carefully evaluated.

The third structural requirement is that of jurisdiction. The idea of jurisdiction is more readily understood than the notions of agency and reciprocity, so we need not dwell on a detailed account of jurisdiction, other than to note some general features and observe the particular aspects of it which give rise to difficulties in the context of public interests. The basic organising principles of jurisdiction are as follows. Every plenary legal community must define the limits of authority to engage in regulatory activities: rules that determine who can make law, adjudicate on breaches of the law or conflicts between rules, and enforce the law. These are known as *types* of jurisdiction. At a higher level of abstraction, jurisdiction is organised into *bases* of jurisdiction; spatial (territorial), personal and subject matter. For the most part, how jurisdiction is allocated is a matter of political choice. However, it is also clear that States do not enjoy the same extent of jurisdiction in all matters.

Different jurisdictional considerations arise in domestic and international contexts. Domestic legal orders are vertically structured and within most States the exercise of regulatory competence is monopolised by the State, typically by the institutions of the legislature, executive and judiciary. Of course, all individuals within a domestic legal community may have certain competences to enter into certain types of legal relationship and to generate personal obligations. However, we are not directly concerned with such private entitlements, although it is important to acknowledge that ultimately the law must have in place mechanisms to assure these legal relationships. Rather, we are concerned with plenary or public legal powers. Domestic legal orders have developed systems of public law that regulate the legal relationships

[159] See R Barnes, D Freestone and D Ong, 'Progress and prospects', in Freestone, Barnes and Ong (eds), *The Law of the Sea: Progress and Prospects* (Oxford, Oxford University Press, 2006) 1, 3–5.

between organs of government and between citizens and the State. This provides an important source of public interests. What is notable here is that this public law is very much the product of the third order values, ie the interests of a particular community.

In contrast, international law is a horizontal legal order. States are the principal agents of the legal order. This means that rules of jurisdiction are effectively rules about the competence of States and as such are closely bound up with issues of agency. Under international law, territorial jurisdiction is the pre-eminent basis of jurisdiction.[160] In part, this is derived from the agency of the State, ie territory is one of the core attributes of Statehood. Yet it also flows from the logical convenience of being able to divide jurisdiction into discrete and exclusive spheres of competence. This aspect of jurisdiction is of fundamental importance because it means that the boundaries of public authority between States are determined by international law.

States enjoy plenary territorial prescriptive jurisdiction, meaning that they can, in theory, legislate for any matter in respect of any person so long as they are within the territory of the State.[161] There are two variants on territorial jurisdiction. Subjective territorial jurisdiction allows the State to exercise prescriptive jurisdiction in respect of acts initiated within its territory but completed elsewhere. Objective territorial jurisdiction refers to acts completed within the territory, but initiated elsewhere. States have commonly asserted both forms of jurisdiction.[162] However, the application of the latter has given rise to problems when States have sought to extend its application to activities that have a no intra-territorial element, but only economic repercussions in the State's territory. For example, the US has made resort to the extra-territorial application of its antitrust law in order to attempt to control activities seen as harmful to the economic interests of US companies.[163] This indicates that issues of comity and cooperation between States may dictate the limits of public power.

[160] Brownlie indicates that this is at least a presumption: n 55 above, 287.

[161] Of course most States moderate this competence, and frequently exclude overseas citizens from certain fiscal duties, or preclude them from enjoying certain privileges, such as voting rights.

[162] For example, in *DPP v Doot* [1972] AC 807, the House of Lords allowed the DPP's appeal to permit the prosecution of five Americans for conspiracy to smuggle cannabis into the USA, even though the conspiracy was occasioned overseas.

[163] *US v Aluminum Co of America* 148 F 2d 416 (2nd Cir, 1945). See also *US v General Electric Co* 82 F Supp 753 (D NJ, 1949); *Continental Ore Co v Union Carbide & Carbon Corporation*, 370 US 690 (1962); *Re Uranium Antitrust Litigation; Westinghouse Electric Corporation v Rio Algom Ltd*, 617 F 2d 1248 (7th Cir, 1980). More recently, this approach was confirmed in *Hartford Fire Insurance Co v California*, 509 US 764 (1993). The court held that it is 'well established by now that the Sherman Act applies to foreign conduct that was meant to produce and did in fact produce some substantial effect in the United States': at 796 (Souter J).

The second base of prescriptive jurisdiction is jurisdiction over nationals. States have the right to extend the application of their laws to their citizens wherever they are located. It also extends to ships and corporate bodies registered in the State. Whilst States have a general freedom to fix the terms of any grant of nationality, this is not absolute. However, the limitations on this are not entirely certain in law. The *Nottebohm* case is sometimes mistakenly taken as authority for the position that there must be a genuine and close link between the individual and the national State for nationality to be effective.[164] However, the case turned on the narrower issue of whether nationality was effective for the purpose of diplomatic protection, and there is little doubt that States enjoy a wide authority to exercise prescriptive jurisdiction over individuals who are nationals of that State.

The third basis of jurisdiction is jurisdiction by consent. A number of treaties specifically provide for the exercise of extraterritorial jurisdiction.[165] Such treaties almost exclusively focus on the prosecution of certain criminal activities, and they commonly establish jurisdiction on the basis of the principle *aut dedere, aut iudicare* (the state in which the person is located must either prosecute or extradite to a state willing to prosecute the alleged offender). This form of jurisdiction shows how States are determined to extend the ordinary bases of jurisdiction to ensure that certain crimes are prosecuted. It also illustrates how susceptible jurisdiction is to third order interests.

A fourth basis of jurisdiction asserted by States is jurisdiction over acts which affect the security or vital interests of the State.[166] This is known as protective jurisdiction. The UK, for example, has used this principle

[164] *Nottebohm* case (second phase) [1955] ICJ Reports 4.

[165] Montreal Convention for the Suppression of Unlawful Acts Against the Safety of Civil Aviation 1971, 974 *UNTS* 177; United Nations Convention on Psychotropic Substances, 1019 *UNTS* 175; United Nations Convention on the Prevention and Punishment of Crimes against Internationally Protected Persons, including Diplomatic Agents 1973, 1035 *UNTS* 167; International Convention against the Taking of Hostages 1979, 1316 *UNTS* 235; Convention on the Physical Protection of Nuclear Material 1980, 1456 *UNTS* 246; UN Convention against Torture and other Cruel, Inhuman or Degrading Treatment or Punishment 1984, 1465 *UNTS* 85; Convention for the Suppression of Unlawful Acts against the Safety of Maritime Navigation 1988, 1678 *UNTS* 221; The Protocol for the Suppression of Unlawful Acts Against the Safety of Fixed Platforms Located on the Continental Shelf 1988, 1678 *UNTS* 304; Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances 1988, (1989) 28 *ILM* 493; International Convention for the Suppression of Terrorist Bombings 1997, (1998) 37 *ILM* 247; Convention for the Suppression of the Financing of Terrorism 1999, (2000) 39 *ILM* 270.

[166] Art 7 of the Harvard Draft Convention on Jurisdiction with Respect to Crime provides that '[a] State has jurisdiction with respect to any crime committed outside its territory by an alien against the security, territorial integrity or political independence of that State, provided that the act or omission which constitutes the crime was not committed in the exercise of a liberty guaranteed the alien by the law of the place where it was committed'. (1935) 29 *AJIL Supp*. 543. See also *US v Bowman*, 260 US 94, esp 98.

to prosecute aliens abetting illegal immigration on the high seas.[167] Similarly, Australia has validly extended its criminal jurisdiction for fishing offences committed outside its territory,[168] and the US relies upon it to control drug trafficking on the high seas.[169] Most commentators are agreed that the principle is well-established and sensible.[170] However, the category of vital interests is an open one, and whilst certain matters may be considered to fall within it, there are risks inherent in extending it beyond what are truly vital interests. The question then is to determine the category of interests that may be protected according to this jurisdiction. The principle of jurisdiction does not itself proscribe the limits to this base of jurisdiction. Rather this is contingent on the overarching aims of a community and is closely tied to the nature of the substantive issue justifying universal jurisdiction. Some activities are considered to be so morally reprehensible that all States have an interest in their repression.[171] For this reason States enjoy universal jurisdiction in a limited number of circumstances. As Lord Millet remarked in the Pinochet case:

> Every state has jurisdiction under customary international law to exercise extra-territorial jurisdiction in respect of international crimes which satisfy the relevant criteria… Customary international law is part of the common law, and accordingly I consider that the English courts have and always have had extra-territorial criminal jurisdiction in respect of crimes of universal jurisdiction under customary international law.[172]

Typically, universal jurisdiction includes crimes under international law such as genocide, serious war crimes and crimes against humanity. It also covers crimes that might otherwise go unpunished, such as piracy. Indeed, this is the original basis for the category of universal jurisdiction. Notably, the content of this category has developed over time, with more States being willing to resort to this form of jurisdiction as a means of addressing serious offences.[173] This indicates that universal jurisdiction cannot be considered a closed category. It would seem, as in the case of the protective jurisdiction, the scope of this jurisdictional base is contingent on the particular substantive goals of the international community.[174]

[167] *Molvan v Attorney General for Palestine* [1948] AC 531.

[168] *Giles v Tumminelo* [1963] SASR 96; *Munro v Lombardo* [1964] WAR 63; *Port MacDonnell Professional Fishermen's Assn Inc. v South Australia* (1989) 168 CLR 340.

[169] *US v Gonzalez* 776 F.2d 931 (1985).

[170] Brownlie, n 55 above, 302–3; V Lowe 'Jurisdiction' in M Evans (ed) *International Law*, 2nd edn (Oxford, Oxford University Press, 2006) 335, 347–8.

[171] L Reydams, *Universal Jurisdiction: International and Municipal Legal Perspectives* (Oxford, Oxford University Press, 2003).

[172] *R v Bow Street Metropolitan Stipendiary Magistrate, ex p Pinochet Ugarte (Amnesty International intervening)* [1999] 2 All ER 97.

[173] Lowe, n 170 above, 349.

[174] See the following section for a discussion of possible such interests.

Enforcement jurisdiction under international law is governed by a single clear principle: States may not exercise enforcement jurisdiction in the territory of another State without that State's consent.[175] This serves to reinforce the centrality of territory in matters of jurisdiction. As noted below, this has ramifications for the regulation of property and natural resources.

Structurally, the principle of jurisdiction is value-neutral and merely concerns the need for competence to be allocated. Yet it seems clear that the allocation of competence is closely bound up with the particular goals of a community. Domestically, these goals concern particular preferences for the organisation of organs of government, and the relationship between citizens and the State. For example, the separation of powers noted above is essentially a political choice of a community about the legitimate structure of government. In essence, jurisdiction is about competence and every plenary legal community must address this matter. From the above synopsis of jurisdiction, the most important limitations on jurisdiction arise from the interface between discrete plenary legal communities (States) and relate to limits imposed by international law on the exercise of competence by States. Indeed, as the Permanent Court of International Justice stated 'the jurisdiction of a State is exclusive *within the limits fixed by international law*'.[176]

At root these second order or structural principles are concerned with the parameters of order within society. As we have noted throughout order is a value neutral consideration. We are saying nothing as to what constitutes good or bad order, although we admit that the requirements of diffuse reciprocity are likely to compel positive cooperation and may evolve into more formalised rules structures that incorporate certain precepts of good moral order. However, for present purposes, all we are suggesting is that these core structural principles compel communities to articulate mechanisms and institutions that give effect to them.

(v) Third Order Public Interests

Third order interests are those interests that are particular to a given society and reflect its collective aims. A review of the literature on the public interest reveals a strong degree of consensus on the linkage between the public interest and a society's fundamental values. For example, Held

[175] Lowe, n 170 above, 356.

[176] *Nationality Decrees Issued in Tunis and Morocco* (1923) PCIJ Series B, No 4, 24. Emphasis added.

states that a policy 'cannot be in the public interest if it conflicts with the elements of the minimal value structures that define the society'.[177] Similarly, Bell argues that the public interest refers to the 'fundamental values [which] characterise the basic structure of society'.[178] By this he means:

> protecting government institutions, protecting recourse to the courts, protecting the institution of the family, protecting economic institutions, protecting certain constitutional values such as race equality, protecting certain moral values, and preventing fraud.[179]

He goes on to list as public interests:

> national security, providing for public order, providing for basic educational and welfare needs, and providing humanitarian help to those in need at home and abroad.[180]

The difficulty with this category of interests is that it is likely to be the object of much debate simply because, in much the same way as with occurrent desires, perceptions of what constitute the fundamental the goals of society vary considerably. Although it is not possible to provide a complete list of third order interests, we can allude to some values which are frequently perceived to be fundamental in contemporary society.[181]

A starting point would be to consider certain common basic constitutional principles. Most plenary legal communities have some form of written constitution embodying fundamental norms. Typically a constitution will allocate powers of government and provide for a clear separation of powers.[182] It may guarantee the equality of citizens.[183] It will offer certain guarantees, such as the protection of basic human rights,[184] the abolition

[177] Held, n 18 above, 222.
[178] Bell, n 28 above, 34.
[179] *Ibid*.
[180] *Ibid*. See further J Bell, 'Conceptions of Public Policy' in P Cane and J Stapleton (eds), *Essays for Patrick Atiyah* (Oxford, Clarendon Press, 1991) 98–102.
[181] The below examples of constitutional norms and *jus cogens* are not exhaustive of fundamental values. Such might include human rights. Indeed, one could have referred to a public interest in the operation of the free markets. States frequently intervene to correct market failures to ensure not only that the market delivers the potential for individual wealth maximisation but also a maximisation of general welfare. Interventions are justified to control monopolies, externalities, excessive competition, inequalities in bargaining power, moral hazard, rationalisation and scarcity. See Ogus, n 16 above, 29–46.
[182] See, eg, An Act to constitute the Commonwealth of Australia, 9 July 1900, 63 & 64 Victoria, Ch 12; Titles II, III, IV, V and VIII of the French Constitution; Part V of the Indian Constitution; Part II of the Constitution of the Federal Republic of Nigeria 1999.
[183] See, eg, Art 1 of the French Constitution 1958; Art 9 of the South African Constitution 1996; Art 22 of the Constitution of Afghanistan; Art 14 of the Indian Constitution; Art 27 of the Constitution of the Republic of Indonesia 1989.
[184] See, eg, Art 70 of the Kenyan Constitution; Art 11 of the Japanese Constitution of 1947.

of slavery,[185] the freedom of expression,[186] the guarantee of due legal process,[187] universal suffrage,[188] and guarantees against arbitrary search and arrest.[189] This does not purport to be anywhere near an exhaustive list of constitutional principles, nor does it presume that the precise rights and duties referred to in individual constitutions enjoy the same scope or protection in law. It is merely illustrative, and indicates that certain fundamental interests are frequently articulated, sometimes as higher law, and that these interest share familial resemblances. However, as Daintith points out, for a constitution to provide a measure of the public interest it must provide some clear, and, perhaps, explicit, parameters.[190] This approach to third order interests suggests a degree of linkage between third order interests and operative public interests. Thus the absence of relatively clear and explicit constitutional norms in the UK may undermine the claim that they are public interests norms. This may be contrasted to the US, where the constitution frames fundamental rights much more explicitly. Absolute parameters are not necessary. Although the examples of public interests provided may be contestable, they are no more so than many private rights.[191] What does seem clear is that third order interests in domestic law may be more readily identified by considerations of form, rather than substance. This may be contrasted with third order interests under international law.

Under international law there exists a category of norms that embody the fundamental interests of the international community. These peremptory norms or *jus cogens* admit no derogation, and include the prohibition of acts of aggression, the prohibition of torture, the prohibition of slavery and piracy, the prohibition of genocide, the prohibition of racial discrimination and apartheid, the basic rules of humanitarian law, and self-determination.[192]

[185] See, eg, Art 6 of the Malaysian Constitution; Art 24 of the Constitution of the Republic of the Fiji Islands.

[186] See, eg, Art 15–6 of the South African Constitution; Art 19 of the Indian Constitution; Art 39 of Constitution of the Federal Republic of Nigeria 1999; Art 21 of the Italian Constitution.

[187] See, eg, Art 27 of the Constitution of Afghanistan; Art 35 of the Constitution of the Federal Republic of Nigeria 1999; Art 167 of the Constitution of the Republic of Cameroon.

[188] See, eg, Art 3 of the French Constitution; Art 19 of the South African Constitution; Section 37 of the Constitution of the Argentine Nation.

[189] Art 9 of the South African Constitution; Art 41 of the Constitution of the Arab Republic of Egypt; Art 99 of the Constitution of the Kingdom of Norway.

[190] T Daintith, 'Comment on Lewis: Markets, Regulation and Citizenship' in Brownsword (ed), n 28 above, 139, 141.

[191] See Bell, n 28 above, 34.

[192] See the comments of the International Law Commission. [1963] *Yearbook of the ILC*, vol II, p 199. More specifically, on acts of aggression see the *Nicaragua* case (*Merits*) [1986] ICJ Rep 14, [191] *ff*. On torture see *Filitarga v Peña-Irala*, 630 F 2d 876 (2nd Cir 1980) and *Al Adsani v Government of Kuwait* (1996) ILR 536. On genocide see Lauterpacht's Separate Opinion in the *Application of the Convention on the Prevention and Punishment of the Crime of Genocide, Provisional measures*, [1996] ICJ Rep 325 at 440. Humanitarian norms are considered as peremptory in the *Nuclear Weapons* case, [1996] ICJ Rep 226, [78]–[83]. However, the ICJ did not pronounce on this. On self-determination, see *East Timor (Portugal v Australia)*, [1995] ICJ Rep 90, [29].

However, whilst there is general agreement about which norms constitute *jus cogens*, the matter of how to ascertain a peremptory norm in general is somewhat more problematic.[193] Also, there is obviously a link between the list of *jus cogens* and the category of operative public interests. So, to avoid the criticism that this category is descriptive or apologetic, rather than normative, one is obliged to put forward some criteria for identifying *jus cogens*. There is occasional reference to the quality of the norm in question as a determinative factor. Thus, the ICJ noted that 'the question whether a norm is part of jus cogens relates to the legal character of the norm'.[194] This reflects the approach of the ILC, who were of the view that it

> is not the form of a general rule of international law but the particular nature of the subject matter with which it deals that may … give it the character of *ius cogens*.[195]

Unfortunately this is too wide. Although it indicates that some inherent quality of the norm is vital to its status, it provides no a priori criteria for determining the content of the category.

A number of authors have sought to establish such criteria.[196] Uhlmann, for example, suggests four decisive criteria: an absolute character, acceptance by the vast majority of the State community, the protection of a State community interest, and a foundation in morality.[197] Let us consider these in turn. The most commonly noted feature of peremptory norms is their absolute status—they admit no derogation and apply without qualification.[198] However, this characteristic is a *consequence* of status, not a *condition* of status. Rather we should view non-derogability as evidence of the status of a norm. General acceptance is a requirement set out under Article 53 of the Vienna Convention. It has also attracted some academic support.[199] However, as noted above in respect of preponderance accounts of public interest, this may result in minority positions being marginalised. For this reason it cannot be regarded as determinative. Like the first criterion, it is suggested that general acceptance might best be regarded as evidence of status. More promising is to look at whether or not a norm protects certain fundamental community interests. Indeed,

[193] See A McNair, *The Law of Treaties* (1961) 215; S Kadelbach, '*Jus Cogens*, *Obligations Erga Omnes* and other Rules—The Identification of Fundamental Norms' in C Tomsuchat and J-M. Thouvein (eds), *Fundamental Rules of the International Legal Order* (Leiden, Nijhoff, 2006) 21.

[194] *Nuclear Weapons* case, n 192 above, [83].

[195] Report of the International Law Commission, [1966] Ybk ILC vol II, 248.

[196] WT Gangl, 'The Jus Cogens Dimensions of Nuclear Technology' (1980) 13 *Cornell International Law Journal* 63, 74–77.

[197] Eva M Kornicker Uhlmann, 'State Community Interests, Jus Cogens and Protection of the Global Environment: Developing Criteria for Peremptory Norms' (1998) 11 *Georgetown Internatioanl Environmental Law Review* 101, 104 *ff.*

[198] See Art 53 of the Vienna Convention on the Law of Treaties.

[199] See L Hannikainen, *Peremptory Norms in International Law. Historical Development, Criteria, Present Status* (Helsinki, Finnish Lawyers' Publication Co, 1988) 210 *ff.* M Bos, 'The Identification of Custom in International Law' (1982) 25 *German Yearbook of International Law* 43.

most writers regard the key criterion of *jus cogens* to be that the norm is in the interests of all States.[200] It is embodied in the view of the ICJ in its Advisory Opinion to the *Reservations to the Convention on the Prevention and Punishment of the Crime of Genocide*:

> [i]n such a Convention, the contracting states do not have any interests of their own; they merely have, one and all, a common interest.[201]

Further, in the *Barcelona Traction* case, the ICJ referred to the prohibition of genocide, the basic principles protecting the individual, such as the prohibition of slavery and racial discrimination, to illustrate the 'obligations of a state towards the international community as a whole'.[202] Similarly, the reference to 'common concern of humankind' in the preamble of the Convention on Biological Diversity indicates the linkage between community interests and the preservation of biodiversity.[203] The basing of a norm of *jus cogens* in morality also seems to be essential. Thus Uhlmann argues that peremptory norms occur at the intersection of ethical and legal norms.[204] Her approach follows that of a number of important writers, including Fitzmaurice, [205] McNair,[206] Verdross and Cassese.[207] Indeed, she explicitly draws upon Verdross who regarded *jus cogens* as an '*ethical minimum* recognised by all the states of the international community'.[208] Of course, law is not synonymous with morality, so the mere link between a legal rule and a principle of morality cannot be enough to give it a higher status. Indeed, as Lauterpacht notes, law often enforces duties that may be regarded as ethically unconscionable or unpardonable.[209] Rather only the most serious immorality 'such as to render its enforcement contrary to public policy and to socially imperative dictates of justice' suffices.[210] This begs the question what degree of morality is relevant? Whilst a

[200] A Verdross, 'Forbidden Treaties in International Law' (1937) 31 *AJIL* 572. Also Verdross, '*Jus Dispositivum* and *Jus Cogens* in International Law' (1966) 60 *AJIL* 55–63; Hanikainen, n 199 above, 4; O Schachter, *International Law in Theory and Practice* (London, Nijhoff, 1991) 343; A Orakhelashvili, *Peremptory Norms in International Law* (Oxford, Oxford University Press, 2006) 47, 67.

[201] *Reservations to the Convention on the Prevention and Punishment of the Crime of Genocide* [1951] ICJ Rep 15, 23.

[202] *Barcelona Traction, Light and Power Co. (Belgium v Spain)*, [1970] ICJ Rep 3, [33]–[34].

[203] (1992) 31 *ILM* 822

[204] Uhlmann, n 197 above, 109.

[205] G Fitzmaurice, [1958] *Yearbook of the ILC*, vol II, p 41.

[206] McNair, n 193 above, 213.

[207] A Cassese, *Self-determination of Peoples* (Cambridge, Cambridge University Press, 1995) 174.

[208] Verdross, 'Forbidden Treaties' n 200 above, 574.

[209] H Lauterpacht, *International Law*. Arranged and edited by E Lauterpacht (Cambridge, Cambridge University Press, 1970) vol 1, 358.

[210] *Ibid*. He then goes on to note the lack of international safeguards against abuse of power 'veiled in morality'. For a consideration of this issue see Franck, n 30 above, and the accompanying text.

precise answer may be difficult to articulate, one approach is to look at the linkage between first and third order interests. This is self-evident in the context of *jus cogens*, where most, if not all, norms pertain to fundamental interests in individuals' life and welfare. This should not be surprising: any community must have the protection of its members' basic life and welfare as its primary function. As the ILC has noted, these obligations

> arise from those substantive rules of conduct that prohibit what has come to be seen as intolerable because of the threat it presents to the survival of States and their peoples and the most basic human values.[211]

(vi) The Relationship Between Orders of Public Interest

Having considered the different orders of interest, we should now consider the relationship between these orders and other values. The first assumption is that first order interests take priority over second and third order interests. Individuals are unlikely to form or join a community that would require them as a matter of principle to subsume their own vital needs to those of the community as a whole on a regular and ongoing basis. Whilst certain sacrifices may be required from time to time, or by some individuals on behalf of others, such a reversal of priorities is exceptional. This prioritisation of first order interests is reaffirmed when we look at the relationship between vital needs and occurrent desires.

If vital interests are pivotal to survival it seems reasonable to infer that vital interests in this sense ought to take priority over occurrent desires. However, there are not infrequent examples of individuals sacrificing their vital interests for other reasons, such as a hunger striker or suffragette.[212] This is likely because many occurrent desires are grounded in particularly weighty moral values, such as autonomy of choice. For example, an individual may eschew food or medical treatment in the pursuit of religious belief.[213] Despite this occasional prioritising of certain interests over vital needs, one cannot accept their general prioritisation at the community level. As Malnes states, no-one should have to undergo death or physical harm just so that another person can have their desires satisfied.[214] Vital interests must take normative priority, because in the

[211] Art 40, Commentary, para 3. Reproduced in J Crawford, *The International Law Commission's Articles on State Responsibility: Introduction, Text and Commentaries* (Cambridge, Cambridge University Press, 2002) 246.

[212] See J Griffin, *Well-Being: Its Meaning, Measurement and Moral Importance* (Oxford, Clarendon Press, 1986) ch III.

[213] See, eg, *R v Blaue* [1975] 2 All ER 446, where vital medical treatment was refused on religious grounds.

[214] Malnes, n 113 above, 44.

longer term they are essential to the existence of individuals and society. Whilst individuals may elect to prioritise certain moral values at their own cost (eg, a hunger striker), a community at large cannot require this prioritisation of interests. Furthermore, as seen in the liberty account of property, providing a certain level of subsistence allows for effective political interaction. It guarantees the political agency which is the basic building block for social order. For these reasons, first order interests may be *presumed* to take priority over other orders of interest.

Of course an extreme application of the priority of vital interests may result in difficulties. It might require that the health of even a single person be maintained at the expense of the desires of a large number of people. For example, hospital visiting times might be limited in order to save money to pay for the palliative care of a cancer patient. Malnes notes that even if we consider that vital needs take priority, such a scenario calls into question the limits of this approach. Of course, a rigid approach to priority of interests is perhaps misleading, for it is only in individual circumstances that hard choices must be made between vital needs and occurrent desires, and often decisions can be made that accommodate both types of interest. Thus we permit risks to health to occur when the only means of avoiding such would be a disproportionate sacrifice to the fulfilment of occurrent desires. Both Malnes and Griffin appreciate the need for a flexible account of needs. Thus Griffin adopts a modified concept of need where 'well-being is the level to which basic needs are met so long as they are important',[215] and Malnes suggests that decisions about vital needs must be desire-sensitive. In the context of natural resources, this suggests a more calibrated, contextualised determination of resource allocation. Therefore the priority of first order public interests can be stated thus: a person's vital needs should be met unless there are powerful and compelling reasons for depriving that person of their vital needs. Of course, such a distinction between vital needs and powerful occurrent interests may be hard to make in practice. However, the purpose of a framework for the public interest is not to prescribe absolute relationships between all interests, but rather to provide a normative structure for the evaluation of such interests. Ultimately the precise outcome of such decisions will be highly contextual, as the next chapter indicates.

One final point to make about the priority afforded to first order interests is that judgements about the level of availability of these goods beyond the minimum level for survival are in fact qualitative judgements about the quality of life within a community. As such, any decision as to essential resource allocation beyond that necessary to ensure survival should be determined according to third order public interests.

[215] Although rejecting a needs-based account of well-being, Griffin places them with the category of informed desires.

The second order principles seem to operate at such a level of generality or have such fluid boundaries so as to make their precise application as public interests impossible. In each case, the precise delineation of agency, reciprocity and jurisdiction seems to be contingent on the particular interests of a plenary legal community. This is particularly so with principles of jurisdiction.[216] Although this contingency seems to weaken the argument for taking these second order principles into account, they retain a further and important function. As structural requirements for a legal system, second order interests cannot be disregarded without compromising the integrity of the system. They are a structural necessity—whatever form they may take. This suggests that third order interests which serve these structural requirements become prioritised by proxy. Accordingly, any interests within a legal community appear to enjoy a degree of normative priority that correlates to the degree to which they are viewed as protecting or furthering the core functions of the second order interests. For example, freedom of expression tends to obtain a high level of legitimacy (and normative priority) in a community bound by liberal democratic ideals because it advances the principle of agency. This relationship between second and third order interests is also evident in the operation of the principle of agency in international law. Here, agency is embodied in the principle of the sovereign equality of States. More specific, but third order interests that relate to this principle include Articles 2(4) and 2(7) of the United Nations Charter. These seek to preserve the territorial integrity and reserved domain of domestic jurisdiction of States respectively. To the extent that agency used to be more closely associated with exclusive territorial sovereignty, these rules presented a considerable restraint on the scope of State action.[217] It is interesting to note that the agency of States has become more refined over time to such an extent that agency now includes elements of legitimacy, such as respect for the right to self-determination, protection of human rights and, possibly, adherence to democratic principles. Presently, States which engage in egregious violations of human rights cannot shield themselves from scrutiny and challenge behind principles of sovereignty and domestic jurisdiction. It is

[216] For example, universal jurisdiction has evolved to meet the demand for jurisdiction to control a growing range of international crimes and serious breaches of international law. See, eg, Belgium's attempt to assert jurisdiction in the *Arrest Warrant* case [2002] ICJ Rep 3.

[217] As Huber stated in the *Island of Palmas* case: '[s]overeignty in the relations between States signifies independence. Independence in regard to a portion of the globe is the right to exercise therein, to the exclusion of any other State, the functions of a State. The development of the national organization of States during the last few centuries and, as a corollary, the development of international law, have established this principle of the exclusive competence of the State in regard to its own territory in such a way as to make it the point of departure in settling most questions that concern international relations.': *Netherlands v US* (1928) Permanent Court of Arbitration 2 RIAA 829.

at least arguable that States may now intervene in other States to protect such interests.[218]

Whilst each order of interests is conceptually discreet, it is clear that each has an influence on the other, and, in particular, it has been indicated that the quality of third order interests may be closely related to the extent to which they further first and second order interests. This is not to suggest that third order interests collapse into first and second order interests. Thus the prohibition of piracy does not appear to be immediately explicable according to first and second order interests stated, but instead derives from the desire to ensure that trade is not impeded by criminal activities. Rather what is suggested is that third order interests are reason dependant. They are generally contestable and so must be justified. This approach is adopted by Bell, who argues that claims to both rights and public interests must take the form a rational and coherent argument from principle.[219] For example, the right to free speech is typically grounded in the idea of individual autonomy or the need to provide a market place of ideas.[220] In the same way a public interest in protecting a particular resource may be grounded in need to ensure that minimum levels of subsistence are ensured for members of a society. The degree to which third order interests are capable of being rationalised according to universal principles found in first and second order interests is determinative of their weighting in a decision-making context.

3. PUBLIC INTERESTS AND THE PUBLIC FUNCTION OF PROPERTY

The public function of property describes those property relationships that facilitate certain public or community objectives. The public function of property is rooted in the maintenance of social order. Indeed, all justifications of private property acknowledge a minimal public function of property or some restriction on the scope of private rights, be it to protect certain basic needs or to allocate authority or to order society. This public function is marginalised in most accounts of property, with the exception of 'propriety theories' which address the matter directly. Such marginalisation of the intrinsically social function of property distorts property discourse, which may result in legitimate State or community demands on property being construed as unjustified interferences with

[218] See, eg, W Michael Reisman, 'Coercion and Self-Determination: Construing Charter Art 2(4)' (1984) 78 *AJIL* 642.

[219] Bell n 28 above, 32–4. Also R Alexy, *A Theory of Legal Argumentation* (Oxford, Clarendon Press, 1989) 202–5.

[220] See A Harel, 'What Demands are Rights? An Investigation into the Relation between Rights and Reasons' (1997) 17 *Oxford Journal of Legal Studies* 101, 104–5.

private rights. It may also result in concentrations of ownership at levels that lead to other rights and liberties being infringed. This makes the construction of a credible account of the public function of property absolutely necessary. It locates a discussion of property in its proper societal context and it provides a structured and principled approach to justifying the use of property for public purposes, thus presenting a framework for evaluating what public interest demands may legitimately affect property holdings. The concept of the public interest provides an appropriate vehicle for framing an account of the public function of property because it is fundamentally concerned with articulating and protecting public or community based values. Indeed, most accounts of the public interest are concerned with the regulation of property or private property based institutions such as the free market.

As property is a social construct, the values that determine the content of the institution are those of the community in which the institution is located. Even the self-regarding interests associated with private property are socially contingent. And whilst a particular community may adopt a particular balance between private and public interests that favours the former, it cannot ignore the latter. In short the public function of property is an essential feature of property.

Each and every community must have a decision-making structure that addresses the public and private functions of property. Each and every community will have a legal system that puts these functions into practice. This is evidenced by the routine prescription and adjudication of property rules that delimit public and private rights and duties in respect of property. Of particular importance are those rules which regulate markets and deal with the failure of markets to protect social objectives, rules pertaining to the regulation of the conservation and management of natural resources and the environmental law more generally. Such prescriptions are fundamentally associated with protecting the basic interests of a community.

Public interests are necessarily contingent; they are always the product of a community. This invests them with a plurality of values, but it also means that the different structure and composition of a discreet community will produce discreet public interests. In other words the public function of property will vary across different communities. By community we are referring to a plenary legal community. Typically this community is a State. However, it is absolutely essential to emphasise the role of the international community of States in shaping the public function of property. This is because international law has a central role to play in the regulation of important natural resources, including fish and other marine resources, international areas such as Antarctica, and global commons. It is also a driving force in the setting of environmental standards, including binding norms and procedures for the protection

of biodiversity and adoption of the ecosystem approach. These may be categorised as public interest demands and necessarily shape property rights under domestic law.

As indicated above, operative public interests are a common feature of domestic and international legal systems. However, these present only atomised and unprincipled examples of the practical application of the public interest demands. They are only in the public interest if they can be justified by reference to the following arguments of principle. According to the first order of public interests, any property rules must be responsive to a community's need to guarantee a minimal level of subsistence.[221] Subsistence refers to vital needs—the basics of survival—food, water and shelter. The nature of modern society is such that direct subsistence may be substituted with the provision of the means to obtain subsistence, such as welfare. It may also extend to essential infrastructure that ensures the ready supply of such goods to the market place. Furthermore, communities are dynamic organisms. This means that this the guarantee of subsistence should extend to future generations of the community. This requires measures to be taken that maintain the conditions necessary for the provision of subsistence in the future. It is this imperative, to ensure the conditions necessary for the ongoing provision of the pre-requisites of life, which provides an important justification for many measures designed to protect the environment and natural resources.

Second order public interests are structural requirements essential to the proper functioning of a legal system: agency, reciprocity and jurisdiction. Primarily, agency determines which persons may be the holders and objects of rights, and the extent of the same, within a legal system. In property terms they determine who can own goods, and the extent of ownership. A consequence of agency is the need to ensure effective agency, and the capacity of legal persons to properly enjoy their rights and liberties and to be capable of performing their duties. Thus, the principle of agency reaffirms the need for effective physical and political autonomy. It justifies more particular rules that seek to protect agency. This has important consequences for property, for example, by justifying rules that limit aggregations of private property that impede effective agency, or controlling the use of property so as to prevent it from undermining agency, as in the case of control on the ownership of the media. The principle of agency shapes the application of property rules as they pertain to agents of a legal system. For example, it is relevant to rules that deal with ownership of persons (slavery), rules on transactions concerning human body parts and rules on genetic resources. Under international law the principle of agency is particularly important. As indicated, it not

[221] See above section 2(b)(iii).

only provides legal capacity, but entitlement to participate in rule making. The traditional or orthodox rules of agency under international law, that is the criteria for statehood, require a State to possess territory. In terms of property rules an important adjunct to this is the concept of sovereignty over natural resources. Sovereignty over its natural resources reinforces a State's sovereignty and permits it to function more effectively.[222] However, such capacity to act gives rise to certain responsibilities and it is notable that sovereignty over natural resources now entails certain duties in the treatment of private property, including the conservation of natural resources, the non-discriminatory treatment of foreign owned property, and minimum conditions attaching to the expropriation of property.[223]

The principle of reciprocity explains and governs transactions that give rise to legal obligations. It requires that transactions proceed upon the basis of quid pro quo. This should involve some degree of equivalence, which serves to reinforce the principle of agency. In general, reciprocity stands as a benchmark of the legitimacy of a specific legal norm. Similarly, it is in the public interest that property rules should be in accordance with the principle of reciprocity. This requires a degree of equivalence in property relations and transactions. This should not be construed as requiring strict equality of holdings and in property transactions (specific reciprocity). However, many transactions will proceed upon this basis. Rather reciprocity requires that property holdings and transactions respect generally accepted standards of behaviour (diffuse reciprocity).[224] Reciprocity has important implications for the operation of property. For example it explains why private property rights should only be sacrificed for clearly understood and significant public benefits, and that when such sacrifices are made, they should be adequately compensated. The nature of diffuse reciprocity is such that it encourages participants in a plenary legal community to act prudently. Stochastic uncertainty demands that persons guard against future conflict or disadvantageous treatment. This provides a further and compelling justification for measures to ensure the means for future subsistence and economic progress. It justifies the conservation of certain natural resources.

Jurisdiction determines the applicable law and enforcement mechanisms. Whilst jurisdiction may be adapted to meet certain fundamental concerns, as in the case of universal jurisdiction, the general rules of jurisdiction remain quite fixed. In the context of property rights the most important facet of jurisdiction is the principle of territorial jurisdiction.

[222] See Schrijver, n 73 above.
[223] *Ibid* ch 10.
[224] At a minimum this may entail ensuring Fuller's eight conditions for the internal morality of law.

An adjunct of this is that property is for the most part governed by the *lex situs* rule. This provides that transactions governing the transfer of property are governed by the place where the property is situated, with the result that public interest considerations are also governed by the *lex situs*.[225] The rule is supported by reason of its simplicity and certainty.[226] However, this rule has been subject to some criticism, indicating that it does not deal with all forms of property, and especially intangible properties such as shares and other securities.[227] This line of criticism may be extended to natural resources regulation taking place outside the territory of a State, thereby lacking a *lex situs*, and forms of property which lack material qualities, such as quotas or licences.[228] A further limitation on the *lex situs* rule is that it may be discounted in situations where the *lex situs* is contrary to public policy. The traditional approach has been to treat this exception quite cautiously, as in the case of *Oppenheimer v Cattermole*.[229] However, the House of Lords broke new ground in the case of *Kuwait Airways Corp v Iraqi Airways Co*.[230] Here the court refused to apply the *lex situs* rule when faced with the question of title to aircraft expropriated by Iraq during the invasion of Kuwait in 1990. The Iraqi law, which vested title to the aircraft, was considered to be 'a gross violation of established rules of international law',[231] and as Lord Hope stated:

> there is no need for restraint on grounds of public policy where it is plain beyond dispute that a clearly established norm of international law has been violated.[232]

Whilst this approach may be compelling as a matter of principle, and certainly on its particular merits in the case, it also raises some particular problems for the regulation of property. International law does not address the default position, ie specifying which law will regulate property where the *lex situs* is contrary to public policy. That said, there are principles relevant to the regulation of natural resources under international law. These are considered further in chapter 5.

[225] In *Winkworth v Christie Manson & Woods* [1980] Ch 496, a painting stolen in England and sold in Italy gave the purchaser good title where the paining was purchased bona fides. See also *Cammell v Sewell* (1860) 5 H & N 728. *Luthor v Sagor* [1921] 3 KB 532 (CA) confirms the application of this rule to property expropriated abroad.

[226] As Maugham J stated, 'anyone can doubt that, with regard to the transfer of goods, the law applicable must be the *lex situs*. Business could not be carried on if that were not so': *Re Anziana* [1930] 1 Ch 407, 420.

[227] See generally, M Ooi, *Shares and Other Securities in the Conflict of Law* (Oxford, Oxford University Press, 2003).

[228] See further, ch 8, below.

[229] [1976] AC 249.

[230] *Kuwait Airways Corp v Iraqi Airways Co* [2002] UKHL 19.

[231] *Ibid* [29] (Lord Nicholls).

[232] *Ibid* [140].

The public function of property should seek to ensure that third order public interests are protected. These are interests that are fundamental to a particular society. In domestic legal systems these interests tend to be articulated as higher order legal principles, such as constitutional norms or mandatory rules. In this sense they are operationalised and their application will result as a matter of due legal process. Under international law, such interests lack a precise legal form as a result of the different structure of the international legal system. Higher order norms of the international legal community (*jus cogens*) are much more immediately reason dependent to determine their privileged status. That is to say, they are considered to be non-derogable because they enshrine community interests and can be derived from higher order principles, such as first order public interests. An important and burgeoning area of concern pertains to environmental norms, and how these contribute to the provision of basic needs, and beyond. Whilst it must be doubted that any norms of *jus cogens* exist in respect of the protection of the environment, there is little doubt that the obligation to prevent harm to the environment is directed at the international community as a whole.[233] In any event because third order interests are reason dependent, and their normative force depends upon the extent to which they can be derived from higher principles. The application of such principles to property is considered further in chapter 5.

Questions concerning the regulation of property necessarily involve the interface of both the public and private functions of property. In specific legal disputes or debates about the proper balance between the two functions, decision-makers will start with any private rights and public interest demands as set out in law. These operative rules may readily resolve the matter at hand according to established precedent. However in most cases such questions can only be resolved by resort to arguments of principle, that is to say by reference to higher order justifications. Chapter 2 provided an account of the private justifications of property and this chapter has outlined how the public functions of property operate. The next chapter considers how these interests are weighed against each other, and how the balance between public and private may differ in international and domestic fora.

[233] P Birnie and A Boyle, *International Law and the Environment*, 2nd edn (Oxford, Oxford University Press, 2002) 111–12.

4

Reconciling the Private and Public Functions of Property

1. INTRODUCTION

The argument presented so far is that property is a bivalent concept: that, despite property's characteristic association with private interests and the notion of excludability, it cannot be understood apart from its public function.[1] In chapter 2, it was shown how the excludability of property is limited by physical, legal and moral considerations. The subsequent review of moral justifications of property, apart from sustaining notions of autonomy and preference satisfaction, revealed a strong concern with maintaining certain core community values: typically basic welfare needs and minimal requirements of social order. In chapter 3, an account of the public function of property was presented. The public interest was shown to derive from certain essential structural requirements of a plenary legal community. Central to the idea of the public interest, and therefore the public function of property, is security of the basic needs of members of a community and the facilitation of certain core public order goals. These core values justify varying degrees of control and in some cases the positive use of property for public purposes. In short, these two chapters demonstrate that we must not form too narrow a view of property merely as the right to exclude. Indeed, we should perhaps more accurately be talking about property holdings rather than property rights, an expression which more accurately reflects property's broader function.

Acknowledging this function is particularly important in the context of the regulation of natural resources, where public interest considerations frequently provide strong grounds for limiting the extent of private rights and imposing duties upon the property holder. Indeed, many legal systems require the conservation and management of natural resources in

[1] Crommelin points out that even 'private property has a public law character'. M Crommelin 'Economic analysis of property', in DJ Galligan (ed) *Essays in Legal Theory* (Melbourne, Melbourne University Press, 1984) 78.

some form, and specific examples of this will be explored in subsequent chapters. Before doing this, however, it is necessary to explain how the public and private functions of property interface at a conceptual level. It is imperative that we understand how rights and public interest are generally delimited through the law because this will dictate in a significant way the shape of particular property holdings. In the next section, we provide a brief typology of the possible relationships between private rights and public interest demands. This considers the prima facie priority of rights, the prima facie priority of public interest demands, the coincidence of private rights and public interest demands, and a contextual approach. Pervading this schematic is the argument that both private rights and public interest demands are necessarily reason dependent, or in other words how the law serves to advance other values. The approach favours a contextual approach to determining the relationship between private rights and public interests. For this reason we return to the idea that physical, legal and moral factors shape excludability (the core attribute of private claims) and show how these factors are contextually determinative of the relationship between private rights-based claims or public interest demands that arise in respect of the objects of property law. Once the influence of these factors is detailed, their influence on particular forms of property is then briefly considered, with a particular emphasis on stewardship. It is suggested that for a number of physical, legal and moral reasons, natural resources are particularly susceptible to this type of holding.

2. THE INTERFACE BETWEEN PRIVATE AND PUBLIC FUNCTIONS OF PROPERTY

The relationship between the public and private functions of property may be determined in one of four ways. First the private and public functions may work in harmony so that the same instrumental outcome is desired for the application of property in some particular context. Secondly, the private function may be prioritised over a conflicting public interest demand. Thirdly, the public interest demand prevails over the private function. Fourthly, the balance between public and private functions is a priori indeterminate. This means that in a dispute between private rights and public interests, determination of the matter will depend upon context and the arguments brought to bear on the dispute. As indicated above, the latter approach is preferred. This is because it provides a more calibrated and flexible account of property, one that reflects the practice of property law. However, even though absolute versions of property according to private or public interests are discounted, this does not dispense with the need to explore the relationship further. Despite rejecting

the idea of absolute priorities of private or public types of interest, it may be the case that the way law works, results in 'weight' being afforded to certain types of interest, thereby structuring decisions about the use of property, and more specifically decisions concerning the use of natural resources.[2] Each of these possibilities will now be explored in turn.

(a) The Coincidence of Private Rights and Public Interests

When the public interest and the interests of an individual coincide this seems to provide a compelling reason for adopting a particular course of action. This is because there is no reason not to respect the interests of both the individual and the wider community. If we recall our analysis of property rights in chapter 2 and public interests in chapter 3, we can identify several areas of apparent coincidence. In general, all the justifications of private property and the basic requirements of the public interest coalesce in the requirement that property institutions guarantee everyone in society a minimum level of subsistence. Both sets of interests appear to support the autonomy enhancing function of property that enables individuals to pursue worthwhile political lives. Furthermore, it is consistent with both interests to prohibit the use of property in ways which are harmful to other persons. In addition to these general coincidences, there may also arise some coincidence between particular justifications of private property and particular aspects of the public interest. For example, it is in both the public and private interest (according to the labour/desert theories) to reward socially productive labour. It may also be in the public and private interest (according to utility and economic theory) to allocate property in a way which reduces waste and inefficiency in the utilisation of resources. Clearly, then, there are many potential areas of coincidence between the public and private interest which support the regulation of property in a particular fashion.

However, if we are realistic, we must acknowledge that there is far more likely to be a lack of coincidence between private and public interests in the regulation of property. First, if we accept that property is justified by a plurality of justifications then it is possible for any private rights-based claim to property and, indeed, any public interest demand, to be couched in terms of several irreducible values. Whilst some of the underlying values

[2] As Twining and Miers have noted, we must take care to recognise the limits of metaphors such as 'weighting' or 'balancing' when it comes to indicating our rational preference for one argument over another: W Twining and D Miers, *How to Do Things with Rules*, 3rd edn (London, Weidenfeld and Nicolson 1991) 271. Whilst we argue below that our choices are structured by the form of law, and by other physical and moral considerations, we would concede that there is not always any absolute or exact measure of such preferences.

might coincide, it is quite unlikely that all such values will do so. Secondly, in many cases public interest demands will result in the abrogation or limitation of private rights. In these cases the affected person(s) must appeal to other grounds in order to mount a legal defence of their rights. This may include refuting its application to the present case, or appealing to alternative conceptions of public interest, or challenging the accepted understanding of the alleged public interest in light of new or different factual considerations. Thirdly, and on a related point, the socially contingency of rights and interests means that they are not static concerns. Inevitably rights and interests will evolve to meet new circumstances. This increases the scope for potential disputes about the balance between public and private interests. Finally, we do not presume that any interest possesses a precise or absolute content. For example, although we would argue that first order interests are immutable in general, it is also clear that the precise delimitation of basic needs is a contestable matter. The same is true about the content of rights. Rights are seldom delimited with sufficient precision to discount alternative and conflicting interpretations about the meaning of the right as it pertains in every possible circumstance. It may be readily observed that the areas of coincidence outlined above remain at a high level of generality. This means that competing and potentially conflicting interpretations about the detail or application areas of shared interests may arise. That said rights and public interests in an abstract form still have an important role to play in giving legal systems coherence by structuring the basic values that the law seeks to advance.

In all these cases the scope exists for challenging the meaning of the area of coincidence. Ultimately this means that we cannot rely upon a coincidence of public and private interests to determine uses of property. In cases where public and private interest conflict, or where current understandings of the public interest or private rights are challenged, then we must adopt an alternative strategy for resolving new and conflicting meanings within the law. This is considered further in section 3 below.

(b) Rights as Trumps

This approach is taken by Laura Underkuffler to be typical of most property regimes. She argues that there are two conceptions of property at work in law: the 'common' conception of property, which represents the traditional view of property as a protected sphere of influence against the collective, and the 'operative' conception of property, in which the potential to reconfigure property relations forms part of the initial configuration of the property right.[3] According to the former account,

[3] L Underkuffler, *The Idea of Property* (Oxford, Oxford University Press, 2003) 65 *et seq*.

rights are stringently protected and remain constant at all times with the result that private property rights have normative priority.[4] This does not mean that private rights trump every time, rather they can only be overridden for compelling reasons.[5] Under the 'operative' conception of property, rights may be adjusted time after time to meet new demands and circumstances.[6] In this view, there is no presumptive power for private property rights over competing public interest claims. Rather the competing private right and public interest will be evaluated in the circumstances of the case as a whole. The operative view of property is understood to have the capacity for change built in. We shall return to this view of property below, but for now we need to show why the common or 'rights trumping' conception of property is unsatisfactory.[7]

Underkuffler presents a model of rights (and property rights) which seeks to explain, why property rights are stringently protected in some instances of property but not in others.[8] According to this model, in some cases ('Tier One cases'), rights do and should take presumptive priority over competing public interests. This occurs when rights, or rather the core values associated with the rights, are challenged by public interest demands that are underpinned by values different in kind. Examples of Tier One cases include property claims according to the common view of property, such as land titles, patents and similar individual interests.[9] In other cases ('Tier Two cases'), where the same core values underpin both the claimed right and public interest demand, then no presumptive priority is afforded to the right or public interest. Logically, this is because there can be no question of priority when the same value is in dispute. Tier Two cases relate to the operative view of property, and typically include cases concerning environmental laws and zoning or planning control.[10] Whether or not one can accept that two different accounts of property exist in this way, it is important to note that Underkuffler commits herself to a view of rights (and interests) as reason dependent. In line with this approach, it is the quality of the reasons underlying the property right that are determinative of property rights disputes. This approach has considerable merit in the context of property rights because we know that property rights exist not for their own sake but because they facilitate

[4] See, eg, the approach adopted by James Harris. *Property and Justice* (Oxford, Clarendon Press, 1996).

[5] See Underkuffler, n 3 above, 87–94.

[6] This latter view of property more closely reflects our view of property as a bivalent concept encompassing certain essential public functions.

[7] See section 2(d) below.

[8] Underkuffler, n 3 above, ch 6.

[9] See, eg, *Loretto v Teleprompter Manhattan CATV Corp* 458 US 419 (1982).

[10] See, eg, *Lucas v South Carolina Coastal Council*, 505 US 103 (1992).

certain states of affairs. This much was considered in the two preceding chapters.

At this stage it might be sufficient to adopt Underkuffler's operative view of property because it is a convenient fit with our bivalent view of property. Both accounts of property possess the capacity to adapt existing rights to meet certain public interest demands, and in the present context of resource use and environmental law this might be good enough. However, we would go further and suggest that there is little reason for affording private claims presumptive priority in general. First, as we will establish below, there is nothing about rights per se which justify them being prioritised over public interest claims. Secondly, adopting a bifurcated view of property seems to raise the unnecessary spectre of classification problems. This is because challenges can always be raised about whether the operative facts of a dispute instantiate one normative premise or another. In Underkuffler's own terms, do we treat a particular dispute as a matter to be determined by either the common or operative conceptions of property? It certainly seems probable that in any given case, both of these conceptions of property are capable of applying to the dispute, especially given the plurality of values that property rules advance. Such classification problems present great difficulties in the practical resolution of property and legal disputes more generally.[11] For these reasons, we are not content to present the regulation of natural resources or the environment as a special case of property rights. Rather we are locating them squarely within an institution of property, an institution that structurally requires them to be regulated in a particular way.

In order to justify why rights in Tier One cases (traditionally strong property claims) enjoy presumptive power, Underkuffler presents a theoretical and empirical defence of the presumptive power of rights. Her principal argument is that if rights are to have any significance at all then they must enjoy a certain threshold protection against competing social goals.[12]

[11] A recent and important example of classification problems arose in the context of the EC-Chile Swordfish dispute. Here, Chile regarded restrictions on the access of EC fishing vessels to its ports to be a matter determined by the conservation and management rules set forth in the Law of the Sea Convention. The EC regarded the restrictions as an infringement of trade rules under the WTO. The characterisation of the dispute as either a conservation or trade matter would have practical implications for both the determination of the correct fora and the application of substantive international law. See further A 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 Fishing Vessels Fishing for Swordfish on the High Seas' (2002) 3 *Melbourne Journal of International Law* 79.

[12] Even if we were to concede that rights necessarily have some prima facie weight, if we look behind the surface appearance of any right, to the reasons that justify the claim, then such weight matters little. As Raz observes rights have value, not because they protect individual self-interests, but because of the value the right secures for others. See nn 25–27 and the accompanying text.

Here she draws upon Dworkin, who famously argued that rights give individuals the power to block policies based upon impermissible considerations.[13] Thus rights are 'trumps over some background justification for political decisions that states a goal for the community as a whole'.[14] Both Dworkin and Underkuffler provide an escape route, which permits rights to be overridden where there are sufficiently compelling reasons.[15] Initially, Dworkin limited this to circumstances when the rights of other individuals were at stake.[16] However, he later seems to refine this position and suggests that a consideration is impermissible on the narrower grounds that someone should suffer a disadvantage as a result of who he is or is not, or because others care less for him because of this, eg racist or homophobic grounds.[17] Likewise, Underkuffler is careful to stress that the presumptive power of rights is in no way determinative; it merely serves to reinforce the importance that attaches to particular values protected by particular rights. Ultimately, however, this view of rights as 'trumps' remains unconvincing. The fact is that rights are rarely, if ever, absolute, and they are frequently subject to a range of qualifications or restrictions in practice. Dworkin's audacious account strays considerably from the practice of rights, and rights are often limited for reasons that are far wider than Dworkin seems to permit.[18] Similarly, Underkuffler does not account convincingly for all cases where the presumptive power of property rights fails despite being faced with interests of a different kind. To save her model of rights, Underkuffler regards these as exceptional cases, cases where private rights are abrogated in 'the most dire and unequivocal of circumstances'.[19] However, to include in this category cases such as *Mugler v Kansas*, where the previously lawful operation of a brewery was curtailed under prohibition laws is clearly to afford too much latitude to the exceptional nature of such interests.[20] It also runs counter-intuitively to the point that both rights and interests are reason dependent, something which Underkuffler is otherwise keen to emphasise. Indeed, as Underkuffler concedes, perceptions of property are socially constructed and so susceptible

[13] R Dworkin, *Taking Rights Seriously* (London, Duckworth, 1977) xi.

[14] R Dworkin, 'Rights as Trumps' in J Waldron (ed) *Theories of Rights* (Oxford, Oxford University Press, 1984) 153.

[15] *Ibid* 191. Underkuffler, n 3 above, 67.

[16] Dworkin, n 13 above, 194.

[17] Dworkin, n 14 above, 161–2.

[18] See the criticisms by R Pildes, 'Why Rights are not Trumps: Social Meanings and Expressive Harms and Constitutionalism' (1988) 27 *Journal of Legal Studies* 725, 729. One might concede that certain human rights (eg, the right not to be tortured) might be considered absolute immunities in one sense of rights intended by Dworkin. However, it seems doubtful that such an approach is appropriate when talking about property rights.

[19] Underkuffler, n 3 above, 46.

[20] 123 US 623 (1927).

to change.[21] If so, and we firmly believe this to be the case, then this applies to all property rights. Accordingly, *all* property rights possess the potential to be reconfigured, not just those claims that fall into a so-called operative conception of property. Admittedly there may be fewer reasons for adjusting certain delimitations of property rights. However, this does not justify carving up property; it simply requires us to appreciate that the values underlying certain property claims are settled in a particular way and for particular reasons for the time being within a plenary legal community.

If we reject that idea that claims are somehow fortified by virtue of their status as rights then are we denuding rights of any meaning? An alternative view of rights (and interests) which preserves their role suggests that rights and interests possess a structural function. Richard Pildes, a leading proponent of this view, argues that rights serve to channel the reasons that can be used to justify interference with rights: 'the work that rights rhetoric actually does is to constrain *the kind of reasons* that government can act on when it seeks to regulate or intervene in some sphere of activity'.[22] We adopt a similar approach to the question of delimitation of rights and interests below in section 3.

(c) Public Interests as Trumps

The second approach views public interests as trumping private rights. This approach may be associated with the Platonic and Hegelian traditions, where the interests of the community (ideal ethical communities, rather than actual communities) take absolute priority over the individual, or are at least to be taken as ideal goals which subsume the interests of the individual. Of course, if we are to maintain our position that rights and interests are reason dependent, then any simplistic, a priori prioritisation of public interests must be rejected out of hand. This approach must fail for much the same reasons as the view that prioritises rights. The obvious criticisms are that it rules out any conflict with individual interests and so subsumes the individual to the will of the State and its machinery. It denies any scope for moral theories that ascribe weight to individual interests, such as will-based theories of rights. Ultimately, it results in paternalism. It dictates to individuals what ought to be in their interest and the risks of totalitarianism are all too apparent.

A more calibrated approach to the authority of public interests is to argue that certain individual rights are worth protecting not because they are merely of value to the individual, but because their protection

[21] Underkuffler, n 3 above, 93.
[22] *Ibid* 731.

contributes towards social goals or the 'common good'. One way to do this is to look at individual interests in terms of collective interests. The idea that interests should be considered at the same level of generality or specificity was advanced by the American jurist, Pound:

> When it comes to weighing or valuing claims or demands with respect to other claims or demands, we must be careful to compare them on the same plane. If we put one as an individual interest and the other as a social interest we may decide the question in advance in our very way of putting it.[23]

Pound did not necessarily commit himself to transforming individual interests into general interests, although he preferred this approach:

> In general … [one should] put claims or demands in their most generalized form, ie, as social interests, in order to compare them. … When we have recognized … an interest, it is important to identify the generalized individual interest behind and giving significance and definition to the legal right. When we are considering what claims or demands to recognize and within what limits, and when we are seeking to adjust conflicting and overlapping claims and demands in some new aspect or new situation, it is important to subsume the individual interests under social interests and to weigh them as such.[24]

Pound's primary concern here is with process, rather than the intrinsic quality of the interests. It is simply concerned with ensuring that like is treated with like, thereby ensuring due and equal consideration is given to competing interests.

A variation on this approach can be found in the work of Joseph Raz, which is much more explicit in its portrayal of individual interests as collective interests. In his detailed consideration of rights, Raz rejects the idea that it is merely the interest of the right holder which justifies the right.[25] He points to the well-noted failure of rights to match precisely interests, and argues that the weight of a right depends upon the value the right secures for others, not merely the right holder.[26] If we are to give weight to rights then we must do so in terms of their value to others. This approach is persuasive because we can understand that rational agents within a community are only likely to accept individual rights that they would desire for themselves or that do not operate to their own detriment. Rights as distinct from interests are claims that can be universalised, so the members of a community that endorses any right must be willing to accept the

[23] R Pound, 'A Survey of Social Interests' (1943) 57 *Harvard Law Review* 1, 2–3. See also Justice Blackmun's dissenting opinion in *Oregon v Smith*, 494 US 872, 910–11 (1990).

[24] Pound, *Ibid*.

[25] See generally J Raz, 'Rights and Individual Well-Being' in J Raz, *Ethics in the Public Domain* (Oxford, Clarendon Press, 1994) 29.

[26] 'Though he gains from the benefit the right secures to others, the weight and importance of the right depends on its value to those others, and not on the benefit that this in turn secures to the right-holder.': *Ibid* 36–7.

consequences of the right's acceptance. By extension, this view of rights/interests suggests that private property rights are valued not because they are manifestations of individual self-interests, but because they serve to benefit the broader community.[27] Thus, private property rights have weight because they serve to secure social order or increase the efficient use of resources or provide an incentive to productive use of things.

Two observations may be made about this approach. First, although the interests underpinning individual rights may be recast in terms of collective interests, there is nothing about this approach that commits us to the position that public interests that will always trump interests that are initially cast in terms of individual or private rights. This approach is open as to the weight that particular interests may have, so it is quite conceivable that certain types of interest with more immediately direct benefits to individuals, such as respect for individual political autonomy, will be given priority over the interests of a majority. Ultimately, any question of priority will turn on the meaning and content of the interests put forward in each particular case, and on the view of a community about what comprises the 'common good'. Second, what makes this approach convincing is not the fact that it compels us to a particular vision of the common good.[28] Rather, Raz's view of rights is compelling because it structures the reasons for respecting the right in a particular way; it does so by recasting the right in terms of an universalisable interest, which as a matter of practical reason is more compelling than relying on a claim based exclusively upon mere self-interest. This point is important because it alludes to those factors which are truly relevant in determining the weight to be given to particular claims about private rights and public interests. It suggests that compelling reasons are those that are capable of being framed in universal terms, rather than left as mere self or sectional interests. Further consideration is give to such reasons in section 3(b) below.

(d) A Determinable Relationship between Rights and Interests

Our final way of looking at the relationship between rights-based claims and public interest demands is to view their relationship as determinable. This means that a variety of factors such as the nature of the right,

[27] See ch 2, s 3(e).

[28] It might conceivably do this, and Raz is certainly of the view that most rights are intended to serve the 'common or general good': see Raz, n 25 above, 52. The term 'common good' as used by Raz refers not to the sum of individual interests, but to interests that serve the good of the community in a non-exclusive way. Likewise, Pildes stresses that the value of this approach (the 'structural approach') is to make it clear that the point and justification of constitutional rights is not to enhance autonomy or atomistic self-interest, but rather to realise various common goods. See Pildes, n 18 above, 732.

the nature of the public interests demand, their underlying reasons and contextual application will be determinative of the outcome of any dispute. This approach rejects that there is any a priori quality of rights or of public interest demands that gives them strict priority in law. However, it does not preclude some evaluation of the factors relevant to determining the relationship between rights and public interests as they may arise in potential cases.

As seen above, the idea that rights or public interest claims must be weighted independent of the interests that they embody is quite misleading. Instead it is suggested that it is the pragmatic and dialectical nature of legal process which dictates where burdens lie. Initially, any such weighting that results from the use of the term 'right' or 'public interest' should be regarded merely as the product of propositional discourse.[29] Consider the following example: 'B cannot do x because it will breach A's right'. It is suggested that this rights-based claim merely serves to structure any subsequent discourse about the validity of B's actions. So, if B wishes to justify his action, then he must either claim that no such right exists, or that the right does not apply in the present circumstances, or that there is an exception to the right. In the absence of any definition of x, or of A's right, there is at this stage no indication of the strength of the legal position of either A or B. This is contingent on the meaning of the claimed right and the context within which it arises. Stated in the abstract, the claim by A merely has propositional weight. This means that A's claim has no greater weight than the following: 'B cannot do x because it will not be in the public interest'. Again any counterclaim will require B to assert that there is no such interest, or that it does not pertain to the present dispute, or that there are exceptions to it. Thus it falls upon some other interested party to raise an effective challenge to A's claim. The point is that, at least in legal terms, no special weight can flow from the simple assertion that something is a right. For example, the right not to be subject to inhuman of physically degrading treatment has weight because of the values that underpin the right, not because the claim is framed as a right. Only once a right or public interest demand is given flesh can we begin to evaluate it and to explore its relationship with other rights and public interests. In this sense, the terms 'right' and 'public interest' operate as macros, linking a particular claim to a complex milieu of arguments and considerations which are relevant to the determination of the claim in the immediate

[29] As MacCormick observes, it would be 'absurd if it were the case that a party relying on [the conditions or a rule] bore the burden of first imagining and then disproving every possible defeating condition that might make these inoperative.' N MacCormick, *Rhetoric and the rule of law. A theory of legal reasoning* (Oxford, Oxford University Press, 1995) 244.

case. If rights or public interest have weight, then it is because they tap into existing value structures embodied in legal systems.

If a person makes the claim that x is a protected right, then this is at its most immediate level a legal claim: a claim that is countenanced by law. Of course, it may be underpinned by extremely important moral interests. However, in strictly legal terms, and apart from any indeterminacy inherent in that particular claim or allowing for any prescribed scope for resorting to 'extra-legal values' in determining that claim, the claim remains one that is to be governed by legal rules. And if we look for a general rule of law that addresses the weight of rights-based claims, we should be surprised to find a general rule that ascribes rights in the abstract any particular weight or even presumptive weight. Indeed, if one cares to reflect upon property law, one is likely to find that basic property rules are quite agnostic about the weight of rights and interests. Take for example, Article 1 of Protocol 1 of the European Convention on Human Rights, which sets forth a right to property:

> Every natural or legal person is entitled to the peaceful enjoyment of his possessions. No one shall be deprived of his possessions except in the public interest and subject to the conditions provided for by law and by the general principles of international law.
>
> The preceding provisions shall not, however, in any way impair the right of a State to enforce such laws as it deems necessary to control the use of property in accordance with the general interest or to secure the payment of taxes or other contributions or penalties.

Clearly, there is no explicit weight attached to either rights or interests. Indeed, exploration of the origins of this provision reveals that this right is rooted in a view of property having a strong social function.[30] Further investigation of this form of property shows it to have parallels with constitutional approaches to property that are common to continental legal systems, no more so evident than in Germany, where Article 14(2) of the *Grundgesetz* states that '[o]wnership entails obligations. Its use should also serve the public weal'. Alexander argues that the German view of property is one with a strong civic and moral dimension. Thus

> property is protected insofar as it serves the purpose of providing the material foundation for maintaining the proper social order, defined according to a scheme of values rather than in terms of the satisfaction of individual preferences.[31]

[30] See, eg, the comments by Azara (Italy), Travaux, Vol V, 246, and the comments by Bastid (France), Travaux, Vol VI, 116: cited in A Riza Çoban, Protection of Property Rights within the European Convention on Human Rights (Aldershot, Ashgate, 2004) 132–3.

[31] G Alexander, 'Constitutionalising Property: Two Experiences, Two Dilemmas' in J McLean (ed), *Property and the Constitution* (Oxford, Hart, 1999) 88, 95.

This further suggests that in many legal systems the relationship between private property rights and public interest demands is simply not reducible to a crude prima facie weighting of 'rights' or 'interests'.

It may be appropriate to look for some detailed account of the relationship between rights and interests in specific legal provisions. Thus for example, one might find an absolute prohibition on the possession of handguns or a high degree of protection afforded to the home. It is perhaps this particular resolution of private rights-based claims and public interest demands one way of the other which has mistakenly resulted in the induction of a more general conclusion about the weight of rights and interests. However, one should not assume that because rights have been afforded weight in one particular context, or even several legal contexts, that they necessarily have prima facie weight in general. An exhaustive review of property rules does not reveal any general disposition of private and public interests. Moreover, this approach ignores the dynamic and contingent nature of legal rules. The institution of property comprises a constellation of rules, including those based upon private rights and public interests. Although the application of this constellation of rules to any given dispute occurs at a single point in time, this does not mean that the delineation of rights and interests is to be regarded as static. We might concede that, to date, the evolution of property rules has tended to reflect a stronger concern for private rights. However, these concerns are neither necessary nor constant. For example, a typically strong respect for private property rights is evident in the case of *Monsanto v Tilley*, where the landowner sought and received an injunction against protestors threatening to trespass upon his land and dig up genetically modified crops.[32] The claim by the protestors to be acting in the public interest so as to protect persons from the harm that genetically modified crops might cause was rejected. However, this may be readily contrasted with provisions under the EC Habitats Directive.[33] For the purpose of ensuring biodiversity through the conservation of natural habitats and wild flora and fauna, the EC Habitats Directives requires States to take measures 'designed to maintain or restore, at favourable conservation status, natural habitats and species of wild fauna and flora'.[34] On the basis of certain special physical criteria set out in the Directive, States are required to designate a number of special areas of conservation (SAC). In these SACs, States shall establish necessary conservation measures, involving where appropriate, management plans and other control mechanisms.[35] Although the Habitats Directive does not address the issue

[32] [2000] Env LR 313.

[33] Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora: [1992] OJ L206/7.

[34] Art 2.

[35] See Art 6.

of property rights squarely, it is clear that its measures may significantly limit the property holder's autonomous right to use and manage his property. Furthermore, the legal burden falls upon the owner or developer to show that any proposed use does not have a significant adverse affect on the SAC. What may also be significant is that limitations on private rights should be advanced through public fora. Thus in *Monsanto v Tilley*, the Court of Appeal observed that the appropriate channel of redress for the protestors was through the Department of the Environment or judicial review of its licensing decision.[36] Similarly, conservation measures and controls over property within an SAC under the Habitats Directive are mediated through a public planning and consultation process. In any event, what is clear is that new constellations of rights and interests can evolve within property institutions and there is nothing inherent in the quality of rights or interests that alone dictates how this will proceed.

3. DELIMITING JUSTIFICATIONS

There is no presumptive weight attaching to either private rights or public interests purely as a matter of legal form. The resultant contextual approach to the determination of disputes between private rights and public interests is consistent with a large body of jurisprudence.[37] So, in any number cases we can point to decisions that have ultimately prioritised public interests over private interests.[38] Similarly, in any number of cases we can point

[36] [2000] Env LR 313, 338 (Mummery LJ).

[37] This point must be caveated by observation that the disputes do not always readily fall into simple public/private disputes. In many cases, such interests may underpin the dispute or form the object of the parties' claims, not form part of the immediate dispute about the law. For example, whilst US courts often address the resolution of conflicts between public and private interest squarely, other legal systems tend concern themselves with the process of decision-making and whether or not a decision-maker vested to resolve the initial conflict has been reasonable in his evaluation of the interest at play. See, eg, *R (Tesco Stores Ltd) v Secretary of State for Environment Transport and the Regions,* [2000] All ER 1473. This is the approach adopted by the ECHR, with its procedure of deference to national bodies in determining the most appropriate balance between private rights and public interests. See *James v UK* (1984) 6 EHRR CD 475. It has reiterated its respect for national determinations of the public interests except where they are manifestly unreasonable in all subsequent decisions. See J Frowein, 'The protection of property' in R St J Macdonald, F Matscher, and A Petzold, *The European System for the Protection of Human Rights* (London, Nijhoff, 1993) 515.

[38] For example, *Attorney-General and Newton Abbot Rural District Council v Dyer* [1947] Ch 67; *Grape Bay Ltd v Attorney General of Bermuda* [2000] 1 WLR 574; *R v Oxfordshire CC, ex p Sunningwell Parish Council* [2000] 1 AC 335; *James v UK* (1984) 6 EHRR CD 475; *Illinois Central Railroad Company v Illinois* 146 US 387 (1892); *Penn Central Transportation Co v City of New York* (1978) 438 US 104; *Kelo v City of New London*, 545 US 469 (2005); *Victoria Park Racing and Recreation Grounds Co Ltd v Taylor* (1937) 58 CLR 479; *Newcrest Mining (WA) Ltd v Commonwealth of Australia* (1997) 147 ALR 42. This may also be evident in prescriptive measures. Thus, the Banking (Special Provisions) Act 2008 nationalised Northern Rock building society in order to protect both account holders and the banking system from the risk of the bank collapsing.

to decisions that have prioritised private interests over public interests.[39] Although we consider the relationship between private rights and public interests demands to be determinable, this does not mean that only an *ex post facto* rationalisation of the relationship on a case by case basis is possible. In the preceding sections we have alluded to some of the factors that are relevant to the process of resolving legal claims, such as the degree to which a claim in respect of property can be universalised. These factors shall now be expanded upon. Recalling our analysis of excludability in chapter 2, we relied upon Gray's explanation of how physical, legal and moral factors constrained the application of private property rights by placing limits on what can be excluded. If these factors limit excludability, then they must also play a decisive role in shaping the interface between private property rights and public interest demands because the latter are essentially non-exclusive considerations determining the use of property.

(a) Physical Factors that Shape the Relationship between the Private and Public Functions of Property

There are many apparent links between the physical qualities of a resource and the form its regulation takes. As Canute learned, there is little point in trying to rule contrary to the laws of natural science. And so we do not lay down laws that require waves to cease ebbing or flowing. We might legislate so as to prevent coastal erosion, but we do not generally require people to do things that are quite beyond their control. Being more pragmatic, as any economist would agree, the condition of scarcity is generally a precondition for the emergence of private property rights.[40] And so we do not implement private property rights for resources that are not depleted through our consumptive pursuits. Of course it may be pointed out that scarcity results from human use, but it is also the product of the fact that a resource is finite and/or non-renewable. These two examples illustrate, first how the physical qualities of a resource may place absolute parameters on the possible types of regulatory regime imposed upon it, and second, how the physical attributes of a resource provide some necessary or sufficient reason for the regulation of a resource in a particular way.

It is a common theme in property that when a thing cannot be physically circumscribed then it becomes difficult if not impossible to reduce it to private property.[41] There is little point in giving exclusive rights to that

[39] *Wood v Leadbitter* (1845) 13 M & W 838; *Southwark Borough Council v Williams* [1971] 1 Ch 734; *Loretto v Teleprompter Manhattan CATV Corporation*, 458 US 419 (1982); *Nollan v California Coastal Commission*, 483 US 825 (1987).

[40] R Cooter and T Ulen, *Law and Economics*, 2nd edn (Reading, Massachusetts, Addison-Wesley, 1997) 10.

[41] See *Victoria Park Racing and Recreation Grounds Co Ltd v Taylor* (1937) 58 CLR 479.

which cannot be excluded to others. Indeed, as we show in the following chapter, the perception that the open seas were boundless underpinned the legal regime of the freedom of the high seas (an open-access regime) for centuries and served as a bulwark against measures of (private or exclusive) appropriation by coastal States. We might also observe that airspace is generally free of property rights,[42] and note that neither mere facts nor the 'news' may be subject to property rights.[43] This conditioning influence of physical factors has since been extended to outer space and other celestial bodies.[44] In all of these cases the difficulty of physically excluding others is a component reason for the non-application of private property rights. Of course, some of these examples might be recast as authority for the position that property rights are limited by moral considerations such as the need to maintain lines of communication and freedom of expression. However, the existence of moral reasons for not excluding others does not deny the influence of physical qualities of the object of regulation.

This leads us to consider the relationship between facts and normative judgements, which should not be conflated. One of the most basic precepts in jurisprudence is the idea that the fact of a thing does not entail its regulation in a particular way.[45] For example, the syllogism 'John is a man, therefore John must be treated with dignity' is incomplete. It lacks the major premise that contains a normative statement that might read as follows: 'all men must be treated with dignity'. Formally speaking, the major premise is independent of the fact that John is a man. However, we surely can observe that the fact that because John is a man, and that men possess certain attributes, is reason for the existence of the major premise. The influence of such facts, which include the physical qualities of the object of regulation, should not be underestimated. This can be illustrated with an example. In the State of Eden there is a single source

[42] *Bernstein of Leigh (Baron) v Skyviews & General Ltd* [1978] QB 479.

[43] *Sports and General Press Agency, Ltd, v 'Our Dogs' Publishing Co Ltd* [1916] 2 KB 880. See also *International News Service v Associated Press* 248 US 215 (1918). Although the court held that a news agency could protect their reporting of news, this was based upon commercial considerations rather than any sense that the news was a property right. Holmes J, dissenting, pointed out that '[p]roperty depends upon exclusion by law from interference, and a person is not excluded from using any combination of words merely because someone has used it before, even if it took labor and genius to make it' (at 246). Brandeis J, delivering a strong dissenting opinion, was critical of the implications of the decision being to create a form of property in news.

[44] See Art 11(3) of the Agreement Governing the Activities of States on the Moon and Other Celestial Bodies 1979. (1979) 18 *ILM* 1434. Whilst this may be a desirable political state of affairs the simple fact is that enforcement of property rights in outer space would be impossible.

[45] See D Hume, *A Treatise of Human Nature*, LA Selby-Bigge (ed) (Oxford, Clarendon Press, 1978) 469.

of food—the tree—which provides a limited but sufficient supply of food for the population of Eden. In order that everyone may eat the people of Eden establish a rule (comprising the major premise) that allows each person to take three pieces of fruit from the tree per day (arguably this reflects a form of common or public property rule). Here we see how the physical qualities of the tree generate certain rule types. If the source of food were multiple or infinite, then a different type of premise would be generated for the use of the food supplies. Of course, one may observe that the three pieces of fruit rule could easily be supplanted by a rule allocating food according to status or need, rather than formal equality. Going further, one might concede that a rule that simply excludes some people from the food supply is a possibility. However, such a rule would be ultimately self-defeating or ephemeral as the starving would either die out (leaving a rule of inclusion) or challenge the rule and alter its application. So it remains the case that physical attributes of a unique and finite source of food necessarily influence the formulation of any of those major premises.

We might remark upon a possible caveat to this position. Even though a resource cannot be physically bounded, this does not necessarily preclude it or aspects of it from becoming private property. Intellectual property rights are the paradigm example of this. Similarly, although property rights cannot be established for specific fish in the wild, fishing quotas are common in practice.[46] Although these rights might represent a more limited right of capture or exclusive use right, they effectively exclude access to a resource to holders of a quota and so have the hallmarks of stronger and more complete property rights. Notably, in both instances legal institutions serve as a means of prescribing and enforcing excludability. In effect, legal excludability serves as a proxy for physical excludability. Of course in contemporary legal systems it is usually the case that legal excludability is ultimately determinative of property rights in law. However, this only results when it is appropriate and expedient to have the law delimit private property rights. Whether or not this occurs is always shaped by consideration of the physical attributes of a resource.[47]

There is also the position where a resource is capable of being reduced to private property, but certain qualities attaching to that resource are reserved from the scope of the private property rights because they do not lend themselves to excludability. This complex position arises in respect of biodiversity. Here, although a living natural resource may be owned,

[46] See ch 8 below.
[47] See K Gray, 'Property in Thin Air' (1991) *Cambridge Law Journal* 252, 272.

the 'attribute' of the resource that contributes to biological diversity is reserved from the exclusive control of the property holder to the extent that it is necessary to ensure that the resource is not used in a way that depletes biological diversity. Some more detailed consideration of biodiversity is necessary at this point because it not only illustrates how physical factors generate reasons for particular legal arrangements, but because all living resources contribute in some degree to biodiversity. This means that biodiversity considerations now form a key aspect of most natural resource regimes.

The protection of biodiversity is concerned with the protection of diversity within species, between species and of ecosystems.[48] So strictly speaking biodiversity is an attribute or quality, rather than the actual physical resource itself.[49] It is a quality that attaches to the whole. This means that the focus of regulation is on variability and diversity among components of the ecosystem, rather than on the components themselves. Presented thus biodiversity bears the hallmarks of a common pool resource and this leads to some unique regulatory challenges. The law on biodiversity must respect the particular interests that the States or the holders of the components of biodiversity have in the actual natural resource that forms a component of biodiversity, whilst at the same time ensuring the wider (public) interest in conserving variability or, perhaps, more specifically genetic potential. The public interest in the conservation of biodiversity and the complex nature of the threats to biodiversity require new approaches to the regulation of natural resources; a regulatory regime that is more sophisticated than mere private property. Under international law, this is achieved through the Convention on Biological Diversity (CBD).[50] The CBD starts by recognising the principle of the permanent sovereignty of States over their natural resources, that is to say exclusive rights over their territory and the resources therein.[51] However, this is then qualified by a series of more detailed requirements of conservation and sustainable use.[52] One of the most significant provisions requires States, where appropriate, to take measures to conserve biodiversity *in situ*.[53] Here, the CBD does not require or preclude the use of property rights in any particular form. However, what it does require is a complex balance between sovereign rights and conservation duties, or between exclusive use rights and the

[48] See further ch 6, s 4(a).

[49] L Glowka *et al*, *A Guide to the Convention on Biological Diversity* (Cambridge, IUCN, 1995) 16–24.

[50] The Convention on Biological Diversity 1992 (1992) 31 *ILM* 818.

[51] Art 3.

[52] Arts 6–20.

[53] Art 8.

preservation of certain basic or essential interests.[54] What it also points to is that the components of biodiversity may not be exhausted where this will result in a loss of biodiversity. These provisions place significant limitations on how living natural resources are to be regulated and require certain 'public interest' constraints on the ownership of the components of biodiversity.

What is distinctive about property rules is that they constitute relationships between people in respect of things. Thus the *rem* is a necessary component of the legal relationship, albeit a latent one. This means that the normative legal relationship must be compatible with the thing regulated. The above examples go some way to showing how the physical properties of a given *rem* establish necessary or sufficient conditions for establishing a moral or legal limit on excludability. Or, put another way, private right-based claims and public interest claims cannot be sustained in the face of countervailing reasons that flow from the basic physical qualities of the object of property rights. The above examples also show that in practice complex accommodations between the two will result from the physical qualities of most natural resources. This sophisticated balance is further complicated by the introduction of legal and moral factors.

(b) Legal Factors that Shape the Relationship between the Private and Public Functions of Property

The day to day operation of law as a practical discipline may also determine, or influence in a significant way the relationship between private rights and public interest. By way of clarification, we are not concerned here with specific or operative legal rules: rules that explicitly define the legal weight to be given to a particular interest.[55] Although such rules may be important in practice, they operate in a particular way and apply

[54] It is notable that this balance is not static. For example, Art 1 of the International Undertaking on Plant Genetic Resources described plant genetic resources as 'a heritage of mankind and consequently should be available without restriction': Resolution 8/83, Twenty-second Session of the FAO Conference Rome 1983. This broadly categorises plant genetic information as common property. However, since then private property rights have been much more prominent in measures to regulate and facilitate access to genetic information, arguably so as to provide commercial incentives to research. By 2001, the Undertaking had been overtaken by the International Treaty on Plant Genetic Resources. Available online at <http://www.fao.org/ag/cgrfa/itpgr.htm#text> accessed 14 October 2008. Implicit in Art 12 is the idea that genetic information will be propertied through intellectual property rights, albeit subject to guarantees that this shall not limit access to the resource or their genetic parts or components.

[55] Such an approach was considered in ch 3, section 2(b)(i). See, eg, the provisions of the Commons Act 2006. Also Gray, n 47 above, 273–80.

on a case-by-case or limited basis. What we are concerned with are the general attributes that legal rules possess and which influence how the balance between private rights and public interests is determined. It is suggested that there are two aspects of legal rules that are determinative of how private claims and public interest demands may be put forwarded and resolved. First, limits may flow from limits in the exercise of legal authority per se. Most crucial here is how limits in the exercise of jurisdiction may limit the scope for certain types of proprietary claim. For example, the absence of sovereignty and so any guarantee of rights to exclude would appear to preclude claims of private property.[56] Secondly, law operates as a special case of practical reasoning. Practical reason is concerned with the reasons that justify what one ought to do and so give rise to action. Practical reason is guided by the fact that reasons possess certain qualities that make them more or less compelling. Typically, these reasons include whether or not a claim can be universalised, whether or not it is consequence sensitive, whether it is reasonable, and whether or not it is coherent.[57] So, as a department of practical reason, it follows that legal arguments (and perforce legal rulings) must also possess the same qualities that make reasons in general more or less compelling.[58] By extension, the extent to which a private rights-based claim or public interest demand possesses such attributes will render it more or less compelling.

Let us consider limits to jurisdiction and legal authority first. Property rights are rights *in rem*, rights which are good against the entire world and not just against specific persons. An important aspect of this is the need for the State to act as the guarantor of title.[59] Put another way, property rights (at least in positive law) cannot exist without a supporting legal

[56] However, we should also be aware of the limits that the principle of agency and reciprocity may place upon the extent of property rights. See ch 3 above, section 2(b)(iv). Thus most legal systems prohibit the ownership of persons, as in the case of Art 4 of the UK Human Rights Act 1998. They also seek to ensure the autonomy of individuals to according to free will. See eg, *Royal Bank of Scotland v Etridge* (AP) [2001] UKHL 44. Also K Barker, 'Theorising Unjust Enrichment' (2006) 26 *Oxford Journal of Legal Studies* 609, 624. Most legal systems place limits on transactions that are inconsistent with the notion of reciprocity (understood as requiring some degree of equivalency in transactions). This principle underpins contract law and justifies control of monopoly practices. See, eg, I Macneil, 'The Many Futures of Contracts' (1974) 47 *Southern California Law Review* 340, 347.

[57] These criteria are drawn from the work of Neil MacCormick, n 29 above.

[58] Arguably this form of constraint on the determination of private right-based and public interest demands could be regarded as a general moral limit. However, the peculiarities of legal reasoning as distinct from the requirements of practical reason more generally suggest that it is better consider as a peculiarly legal factor.

[59] For early recognition of this see Locke, *Two treatises of Government* (1690), ed JM Dent (London, Dent, 1924) vol II, s 5, 45.

system.[60] Typically this is domestic law, although in exceptional cases international law may serve this function. More specifically, property rules are dependent on the notion of territorial sovereignty. This is evident in the *lex situs* rule, which provides that property relationships are determined by the law of the place where the property is located.[61] One consequence of this has been a reluctance to accept the existence of private property rights arising beyond the territorial authority of States.[62] A brief overview of some of the cases in which such rights have been claimed, reveals the tendency or need to subsume such claims within a territorial domestic legal order. Where this occurs it is worth noting that such claims tend to be limited or based upon certain grounds. This poses particular problems for the possibility and conditions under which property rights in marine resources may arise, as most occur in zones where such authority is qualified (the Exclusive Economic Zone) or in areas beyond sovereignty (the high seas).[63]

Early cases suggest a degree of uncertainty as to the whether or not property rights could arise beyond the limits of territorial sovereignty. In *Jacobsen v Norwegian Government*, the Supreme Court of Norway held that the Government was legally obliged to uphold Jacobsen's proprietary claim arising in the territory of Jan Mayen, even though it arose at

[60] This view is very much in the positive legal tradition of Bentham, Hume and Rousseau. '[T]here is no such thing as natural property … it is entirely the work of law. … Property and law are born together, and die together. Before laws were made there was no property; take away laws, and property ceases.'; J Bentham, *Theory of Legislation*, trans CK Ogden and & R Hildreth (London, Routledge, 1931) 111–13 . 'Property is nothing but those goods, whose constant possession is establish'd by the laws of society; that is, by the laws of justice. … Tis very preposterous, therefore, to imagine, that we can have any idea of property, without fully comprehending the nature of justice, and shewing its origin in the artifice and contrivance of man.': D Hume, *A Treatise of Human Nature,* ed LA Selby-Bigge (Oxford, Clarendon Press, 1958) Pt 2, § 2, at 491. Jean-Jacques Rousseau, *Discourse on the Origin and Foundation of Inequality Among Men*, reprinted in Jean-Jacques Rousseau, *The Social Contract and Discourse on the Origin of Inequality*, ed LG Crocker (New York, Washington Square Press, 1967) 211. There is an alternative view of property in a natural law tradition, which shows the institution to have preceded the emergence of the State. John Locke, *Two Treatises of Government* (1690), 2nd edn, ed Peter Laslett (Cambridge, Cambridge University Press, 1960) bk 2, 305–06. For Locke, government was formed to protect property (pp 342–3) and it is as such free from interference from government (p 378). Also, H Grotius, *De Jure Belli ac Pacis Libri Tres*, trans Francis W Kelsey (Oxford, Oxford University Press, 1925) bk 2, ch 8, § 1, 295; S Pufendorf, *De Jure Naturae et Gentium Libri Octo*, trans Oldfather (Oxford, Clarendon Press, 1934) bk 4, ch 4, § 14, 555–6. It seems unnecessary to take a position on this matter for we may note that to all intents and purposes, the State has subsumed authority to regulate property at least practically speaking.

[61] See *Inglis v Usherwood* (1801) 1 East 515; *Re Anziani* [1930] 1 Ch 407; *Winkworth v Christie Manson & Woods* [1980] Ch 496.

[62] Similar problems may exist with respect to Antarctica, the Deep Sea-bed and Outer Space.

[63] See further, chs 5 and 6.

a time before Norway asserted sovereignty over the islands.[64] The Court suggested that this would only be justified when acts 'sufficient to fulfil the conditions for the commencement of an effective occupation had occurred'.[65] Although this suggests that the court accepted that private property rights could exist independent of a domestic legal system, this was not explicit in the court's judgement. Moreover, the whole point of the litigation was to secure recognition of a legal right under Norwegian law. A second example concerns a claim by the American based Polarfront Company in 1927 in respect of its ownership of two fox farms on Jan Mayen which were established before Norway secured sovereignty over the islands.[66] Polarfont's claim was supported by the American government and subsequently recognised by Norway. However, the exact nature of the proprietary interest claimed in this case is also unclear. The US State Department expressed the view that ownership constitutes the use and enjoyment of the property owned to the exclusion of all others in its use and enjoyment.[67] Crucially, it noted that this is secured to the owner under the authority of the government exercising sovereignty in relation to the island and its inhabitants.[68] However, at the same time they were unwilling to deny that Polarfront lacked proprietary rights in the absence of a territorial sovereign. Clearly, the US Government was torn by two competing versions of property, one under natural law, and another traditionally understood as emanating from the State.[69] Ultimately, the practical effectiveness of such rights could only be guaranteed through positive law, and it should be emphasised that the litigation was a necessary step towards this.

More significant, perhaps, is the result of protracted negotiations to resolve the problem over competing claims by American, British, German, Norwegian and Russian companies to significant coal deposits on the Spitzbergen archipelago. In order to resolve the conflicting private claims in territory regarded as *terra nullius*, the interested nations agreed to the Treaty on the Spitzbergen Archipelago.[70] This treaty provided that title to resources could only be secured by following the procedures set

[64] 7 *ILR* 109.
[65] *Ibid* 111.
[66] 1 Hackworth, *Digest*, 475–76.
[67] Letter from the Department of State to Mr Ekerold, 16 Feb 1927. Quoted in Hackworth, *Ibid*.
[68] *Ibid*.
[69] On the one hand, it argued that the neglect of a government to sanction and protect such rights made it impossible for the company to acquire title to property as ordinarily understood. On the other hand, it was unwilling to condemn the company as a mere trespasser, arguing that the company's labours had created a property right, if not a title as ordinarily understood: *Ibid* 476.
[70] 2 *LNTS* 7.

forth in the treaty and its annex. In order to mediate any conflicting property claims, a tribunal was founded, and its decisions ultimately led to Norway recognising a number of pre-existing ownership claims.[71] Again it must be emphasised that title to private claims was only possible after Norwegian sovereignty over the islands was recognised. The negotiating parties made it clear that any solution that recognised property rights without first establishing a sovereign authority was unworkable.[72] This is echoed in the opinion of a number of leading authorities, such as Lauterpacht and Brownlie, who are also sceptical as to the existence of property claims without the sanction of States.[73]

In a slightly different context, one perhaps best viewed in the context of a widening recognition of indigenous rights, Australia has had to address the matter of ownership claims predating the annexation of Australian territory and the extension of the common law thereto.[74] In the case of *Milirrpum v Nabalco Pty Ltd*, the court rejected the plaintiff's claim that they possessed some form of native title that predated the settlement of the lands of New South Wales by the Crown.[75] Although Blackburn J. did not explicitly refer to *terra nullius*, this seems implicit in his finding that from the moment of the foundation of a settled colony, English law applied in its entirety to the whole of the colony.[76] It followed that as there was no doctrine of communal native title in the common law, then there was no question of recognising the plaintiff's claims.[77] In *Mabo v Queensland (No 2)*, certain pre-existing claims to land were recognised.[78] However, the decision turned not on the issue of whether the land was *terra nullius*, but on a rejection of the claim that the acquisition of sovereignty, through

[71] These are noted in MF Lindley, *The Acquisition and Government of Backward Territory* (London, Longmans Green and Co, 1926) 320.

[72] FK Neilsen, 'The Solution of the Spitzbergen Question' (1920) 14 *AJIL* 232, 233. Also R Lansing, 'A Unique International Problem' (1917) 11 *AJIL* 763, 770–71.

[73] Both assert that only States may claim title to territory, so excluding the establishment of property rights outside of the State system. H Lauterpacht, *Oppenheims International Law*, 6th edn (London, Longmans Green and Co, 1947) 507; I Brownlie, *Principles of Public International Law*, 5th edn (Oxford, Oxford University Press, 1998) 174. See also Gerstenblith, who notes that 'it is clear that the nation defines property as an inherent incident of its sovereignty and utilizes its legal regime to protect it.': P Gerstenblith, 'The Public Interest in the Restitution of Cultural Objects' (2001) 16 *Connecticut Journal of International Law* 197, 235. According to Singer, property imposes rights on the owner and responsibilities on non-owners, which are enforced by the government. Therefore private property cannot exist without a government to enforce the system. JW Singer, 'Sovereignty and Property' (1991) *Northwestern University Law Review* 1, 47.

[74] See R Van Krieken, 'From *Milirrpum* to *Mabo*: The High Court, Terra Nullius and Moral Entrepreneurship' (2000) 23 *UNSW Law Journal* 63.

[75] (1971) 17 FLR 141.

[76] *Ibid* 244.

[77] *Ibid* 262.

[78] (1992) 175 CLR 1.

whatever means, automatically resulted in the extinction of native title.[79] Underpinning this was a finding that the territory was not absent some form of native legal system, even if it was incomparable to the common law.[80] In justifying this position, Brennan observed that if international law had rejected the idea that inhabited land could form *terra nullius*, then the common law could not retain an antiquated view of other legal cultures, ignoring peoples 'low in the scale of social organization'.[81] As such *Mabo* sidestepped the possibility of property rights in a legal vacuum, a matter which remains problematic. As a post-script to this case, it may be observed that indigenous people's claims have now been more effectively secured through the adoption of the Native Title Act 1993.

These examples demonstrate the difficulty of asserting proprietary claims in the absence of some *lex situs* or supporting legal system. In cases where property claims arise in a legal vacuum, States and tribunals have either rejected the suggestion that there is a legal vacuum, or subsumed such claims within positive legal structures in order to achieve certainty and formal recognition of the rights.[82] This suggests that in areas beyond sovereignty strong private property claims will prove difficult to sustain, simply because there is no mechanism for securing exclusion. An extension of this approach, which will be explored in the next two chapters, is that when sovereignty is challenged or qualified there is a strong tendency to draw upon a wide range of values to resolve claims and to resort to more inclusive use regimes.

To the extent that property claims are advanced in legal form, they must do so according to what is acceptable as part of legal discourse. In both adversarial and inquisitorial legal systems, law possesses a dialogical character moving from assertion to denial, and assertion to counter-assertion, to a point when either the assertions are exhausted or further degrees of iteration are barred.[83] We can observe this process at work in any claim concerning the use of property and natural resources. It is an inherent quality of law as a social process, but one that results in a

[79] *Ibid* [53] (Brennan J).
[80] *Ibid* [38].
[81] *Ibid* [41]–[43].
[82] This process has the propensity to destroy or override much of the substance of the earlier claims, unless they are couched in terms appreciable by the superseding legal system. This is illustrated by the Treaty of Waitangi 1840, which provided for the basis for Crown authority in New Zealand. Art II provides that 'Her Majesty the Queen of England confirms and guarantees to the Chiefs and Tribes of New Zealand and to the respective families and individuals thereof the full exclusive and undisturbed possession of their Lands and Estates Forests Fisheries and other properties which they may collectively or individually possess so long as it is their wish and desire to retain the same in their possession'. The treaty is available online at: <http://www.waitangitribunal.govt.nz/treaty/english.asp> accessed 15 October 2008.
[83] MacCormick, above n 29, 239.

tension between legal certainty or determinacy and adaptability. Even if it is desirable that law is systematic and ordered, it may be observed that no legal system is complete or unchanging. First, one can observe the association of absolute rules with totalitarianism and uncritical adherence to the law. So, it is a positive state of affairs that law is an arguable field because it means that its rules and propositions are constantly tested and exposed to critical scrutiny. Second, rules do not exist to cover every eventuality and existing rules may change to meet new values. Even if we could prescribe against every future contingency and lay down the law against a certain and immutable framework of values, it seems that the indeterminacy of language presents another obstacle to certainty or finality in law.[84] For good reason such precision or finality may be undesirable, and rules are frequently drafted in the form of open-ended or general rules that are capable of applying to similar but distinctive factual circumstances in varying degrees. The point is that these variables give law a defeasible character.[85] This refers to a quality of rules that entails their defeat, disapplication or qualification under certain conditions. This generally occurs when circumstances reveal there to be overriding reasons for not applying the normal rule. Yet the function of defeasibility is more than simply explaining the contingency of legal propositions. As Epstein observes, defeasibility allows for the sequential development of basic propositions into far more complex rule structures.[86] Through the iteration and recognition of qualifications and exceptions law is thereby capable of being calibrated to the complex realities of everyday life. As was observed above, law has the function of regulating social coexistence in the pursuit of aims and values that are independent of law.[87] The defeasible character of law is consistent with our view of law as reason dependent. In part, the determinable relationship between private rights and public interests is a symptom of the defeasible quality of law, albeit a necessary one that allows law to adapt to meet social aims and goals.

That law comprises a range of defeasible concepts does not mean that it is reduced entirely to a discretionary or atomised institution.[88] As Hart

[84] HLA Hart, *The Concept of* Law, 2nd edn (Oxford, Clarendon Press, 1994) ch VII, s 1. Also B Bix, *Law, Language, and Legal Determinacy* (Oxford, Clarendon Press, 1993).

[85] HLA Hart, 'The Ascription of Responsibility and Rights' (1948–9) 49 *Proceedings of the Aristotelian Society* 171, 174. See also GP Baker, 'Defeasibility and Meaning' in PMS Cacker and J Raz (eds), *Law, Morality and Society: Essays in Honour of HLA Hart* (Oxford, Clarendon Press, 1977) 26; F Atria, *On Law and Legal Reasoning* (Oxford, Hart, 2001) esp chs 4 and 5; RS Tur, 'Defeasibilism' (2001) 21 *Oxford Journal of Legal Studies* 355.

[86] RA Epstein, 'The Not So Minimum Content of Natural Law' (2005) 25 *Oxford Journal of Legal Studies* 219.

[87] See comments by Lyons noted above, ch 3, p 30.

[88] JC Hage, *Reasoning with Rules. An Essay on Legal Reasoning and Its Underlying Logic* (London, Kluwer Academic Publishers, 1997) 116.

famously observed: '[a] rule that ends with the word "unless …" is still a rule'.[89] Legal rules may be arguable, but they must also be structured in a way that gives them meaning. For this reason, there are constraints upon what may validly constitute a legal argument. It is generally accepted that practical reasoning in general and legal reasoning in particular require claims to possess certain attributes that make them compelling.[90] Legal claims will stand or fall depending upon both the context of the claim and the quality of the reasoning used to sustain that claim. We know that in any given dispute over the relationship between private rights and public interests, the affected parties will seek to characterise a dispute in some way favourable to their cause (freedom of speech versus protection of public morality; protection of the environment versus development). They will then issue and counter challenge the meaning and application of any relevant rules put forward. In order to resolve these matters requires that we provide reasons, reasons that are compelling, reasons which explain in ways acceptable what has to be done and why. Most immediately these reasons must convince a legal audience, but they should also appeal to the wider plenary legal community. Compelling reasons possess certain characteristics. They must be universalisable. They have to be tested in light of their consequence. They must be reasonable and they must be coherent, in both a normative and narrative sense. These requirements shape how legal claims are made and determine their persuasiveness. These qualities have been explored at length and with great lucidity by Neil MacCormick so need not be rehearsed in too great a detail here.[91] However, what can be stressed at this point is that these requirements of legal reasoning are not some arcane criteria; they are the basic requirements of law as taught to students, as practiced by lawyers, and as used by judges to reach decisions. Countless numbers of cases and pieces of legislation display these techniques at work. Such limits of form shape the content of all legal rules and by extension the relationship between public interests and private rights as they are advanced as legal claims. By favouring certain types and quality of argument, these factors play an essential role in delimiting the relationship between private rights-based claims and public interest demands on property.

Universalisation is depicted in recent scholarship as capturing the essential normative character of reasons.[92] It requires one to commit oneself to the consequence of one's decision in all cases; that is to say

[89] Hart, n 84 above, 139.

[90] See, eg, R Alexy, *Theory of Legal Argumentation* (Oxford, Clarendon Press, 1989); MacCormick, n 29 above; Atria n 85 above.

[91] Above n 90.

[92] See G Pavlakos, 'Non-Individualism, Rights, and Practical Reason' (2008) 21 *Ratio Juris* 66, 76 *ff*.

when the same operative facts arise, the same normative conclusion should follow.[93] By requiring that the grounds of a decision be repeated in future similar cases, the requirement commits us to the impartial application of legal rules. It serves to avoid *ad hoc* or *ad hominen* decisions. For these reasons it provides the formal basis for a system of precedent. As MacCormick notes, it does not dispense with the need for particular reasons in particular cases.[94] This remains a possibility, for we have noted that legal concepts are defeasible, and so more sophisticated applications of a general rule may evolve to meet new or unforeseen circumstances. However, this says little about what justifies a universalised proposition. MacCormick suggests this is done by looking at the consequences of adopting the proposition.[95] This recognises the fundamental link between consequences and the requirement of universability. Of course, by treating like cases alike, any decision necessarily has consequences in terms of the treatment of future similar cases.

For MacCormick, only certain consequences are relevant considerations.[96] At one extreme one must disregard certain consequences that are too remote as to be unknowable. At the other, one cannot act in ignorance of the foreseeable consequences of decisions. MacCormick admits that consequentialism is controversial and he takes care to address two key objections. First, that it is difficult to delimit precisely what consequences should be taken into account, and secondly, that it is difficult to weigh up various consequences once these have been ascertained. In response to the first obstacle, MacCormick argues that a ruling must be shown to be consistent with pre-existing rules or principles of law. We know this to be wholly plausible because it happens every day within the institutionalised setting of legal decision-making. However, it is also clear that this alone is not enough, particularly in so-called 'hard cases', where the law is uncertain or the case involves a complex or novel situation. Here resort must be had to what Rudden has termed juridical consequences and behavioural consequences.[97] In the former, the judge will consider the consequences of establishing a rule that will be available in every like case.[98] This requires the judge to consider future hypothetical cases that

[93] See Kant's formal rule of universality. I Kant, *Groundwork of the Metaphysics of Morals*, in I Kant, Practical Philosophy, ed MJ Gregor (Cambridge, Cambridge University Press, 1996) 421.

[94] Above n 29, 78 and 97 *ff*.

[95] *Ibid* 100.

[96] *Ibid* 101–2.

[97] B Rudden, 'Consequences' (1979) 24 *Juridical Review* 193.

[98] By way of illustration, MacCormick refers to the case of *R v Dudley and Stephens* (1884) 14 QBD 273, where the court was unwilling to admit a rule which allowed a person to kill another person in (subjectively determined) conditions of extreme necessity.

would be covered by the rule in order to assess the acceptability of the decision at hand. Behavioural consequences are those that result from the influence of decisions on how people subsequently conduct themselves in light of the law. Of course, such consequences are very much a matter of conjecture, and for this reason MacCormick is cautious about how much weight should attach to them, merely indicating that as a rule of thumb greater weight should attach to those consequences which are more likely to be generated by a rule.[99] Ultimately, consideration of the consequences of their decision will commit judges to the unenviable task of accounting for a wide range of values. Fortunately for the judge, MacCormick suggests that these are limited in practice, in part by the branch of law that is implicated by the question, and in part by certain values that are fundamental to legal systems: to live honestly, to harm nobody and to treat all persons with the respect due to them.[100] At this point we would add consideration of the principles of jurisdiction, agency and reciprocity outlined in the previous chapter, for these too reflect what may be regarded as fundamental requirements of a legal system.

MacCormick recognises the difficulties inherent in making judgements about such values and weighing up such values.[101] This much is perhaps unsurprising and seems to place a potentially insurmountable burden on the decision-maker. Here it is instructive to appreciate that evaluations such as this frequently occur beyond a purely judicial remit. Indeed, an evaluation of consequences, or rather risk assessment, now forms a quite explicit and significant part of the legislative and decision-making process more generally. For example, all new legislative proposals must go through a legislative impact assessment, which considers broadly the potential impact and costs of various legislative possibilities.[102] More importantly, in the context of resource regulation and environmental decision-making, impact assessments now form a core part of decision-making.[103] Such assessments will take into account a wide range of behavioural and other consequences from any proposed decision. Notably these readily include some form of cost benefit analysis.[104] One notable

[99] MacCormick, n 29 above, 110.

[100] *Ibid* 115 *ff*.

[101] *Ibid* 117.

[102] See the 'Hampton Review': *Reducing administrative burdens: effective inspection and enforcement* (London, HM Treasury, 2005). Also Better Regulation Commission, *Risk, Responsibility and Regulation—Whose risk is it anyway?* (London, Better Regulation Commission, 2006).

[103] Of particular note are EC Directive 85/337 on the Assessment of the Effects of Certain Private and Public Projects on the Environment (as amended by 97/11/EC and 2003/35/EC), and Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment. See also Art 6 and Annex II of the Convention on Environmental Impact Assessment in a Trans-boundary Context 1991, (1991) 30 *ILM* 802.

[104] See, eg, Art 174(3) of the consolidated EC Treaty.

consequence of this, certainly in the UK, is that courts now tend to focus not on the substance of environmental decisions, but rather review of the decision-making procedure.[105] In this sense the practical rather than legal implications of any decision have already been considered outside the judicial process.

The third requirement of legal reasoning is that of reasonableness. Here MacCormick adopts a traditional approach, referring to the well-known structure of reasonable decision-making in public law.[106] Thus every public power of decision-making should be exercised with due regard to relevant considerations and without any regard to irrelevant considerations.[107] Such relevance is dictated by the terms of the legal authority from which a discretionary power is drawn,[108] and only if the decision reached was one that no reasonable person could have reached after a reasonable evaluation of the relevant factors may the decision be challenged.[109] By circumscribing the factors that may be taken into account, reasonableness clearly constrains legal reasoning. However, the limits imposed by reasonableness are highly context-dependent:

> [t]he very thing that justifies the law's recourse to such a complex standard as reasonableness in the formulation of principles or rules for the guidance of officials or citizens is the existence of topics or focuses of concern to which a plurality of value-laden factors is relevant in a context-dependent way.[110]

To the extent that relevant considerations may be dictated by statute or case law, one set of variables at stake in determining whether or not a decision is reasonable is reduced to interpreting the legal source. For example, section 1 of the Sea Fisheries (Wildlife Conservation) Act 1992 provides that a Minster in discharging his functions shall:

> so far as is consistent with the proper and efficient discharge of those functions—
> (a) have regard to the conservation of marine flora and fauna; and
> (b) endeavour to achieve a reasonable balance between that consideration and any other considerations to which he is or they are required to have regard.[111]

This illustrates how legislation may dictate, at least in part, the relevant factors to be taken into account in delimiting reasonableness.

[105] See *Berkeley v Secretary of State for the Environment, Transport and Regions* [2001] Env LR 16.
[106] MacCormick, n 29 above, 181 *ff*.
[107] *Anisminic v Foreign Compensation Commission* [1969] 2 AC 197.
[108] *Padfield v Minister of Agriculture*, [1968] AC 997.
[109] *Associated Provincial Picture Houses Ltd v Wednesbury Corporation* [1948] 1 KB 223.
[110] MacCormick, n 29 above, 173.
[111] See *further R v Minister of Agriculture Fisheries and Food, ex p Hamble (Offshore Fisheries) Ltd*, [1995] 2 All ER 714, on the extent to which legitimate expectations may shape a decision to limit fishing opportunities.

An important parallel to this approach has been adopted by the European Court of Human Rights in its treatment of property cases. Although the court admits that States have a wide margin of discretion to determine whether or not an interference with private property rights is in the public interest, it has held that such interference must strike a fair balance between the protection of the individual's rights and the interests of the wider community.[112] To determine whether or not a State measure that interferes with property is legitimate, the ECHR subjects that measure to the test of proportionality. The subsequent jurisprudence of the ECHR has developed this test in some detail, and held that factors such as the existence of legitimate expectations,[113] procedural guarantees,[114] and undue delay or uncertainty over the extent of measures of interference are relevant indicators of proportionality.[115] These factors again indicate how law can determine the values relevant to the exercise of decision-making competence.

The need for coherence is well-observed in practice, and has attracted much attention from commentators.[116] For the present purposes coherence may be understood to mean the capacity of a norm to make sense or fit within the structure of an accepted set of higher order principles or values.[117] One aspect of coherence is that it requires a degree of consistency in the application of norms, that they should not contradict each other. This is important because rules should establish a known and intelligible basis that permits people to plan and carry out their affairs. This is not possible if the law comprises a series of disaggregate and/or contradictory propositions.[118] Members of a plenary legal community cannot know in full every detail of every rule that may guide their conduct, but are still expected to act in conformity with the law. However, individuals can reasonably be expected to make sense of fewer general and guiding

[112] *Sporrong and Lönnroth v Sweden* (App no 7151/75) (1983) 5 EHRR 35; Also *James v UK* (App no 8793/79) (1986) 8 EHRR 123.

[113] *Van Marle v Netherlands*, (App no 8543/79) (1986) 8 EHRR 483.

[114] *Hentrich v France,* (App no 13616/88) (1994) 18 EHRR 440.

[115] *Erkner and Hofauer v Austria*, (App no 9616/81) (1987) 9 EHRR 464.

[116] See the authorities canvassed by S Bertea, 'The Arguments from Coherence: Analysis and Evaluation' (2005) 25 *OJLS* 369. For an international law perspective, see T Franck, *Fairness in International Law and Institutions* (Oxford, Clarendon Press, 1995) 38–41.

[117] MacCormick, n 29 above, 193. This is evident in the reasoning process of all decisions, although seldom mentioned explicitly. *Cf Sullivan v Moody; Thompson v Connon* [2001] HCA 59, [55].

[118] Few legal systems are free of all possible contradictions between rules. This is a result of the plurality of values that direct law, and the fact that many of these may be incommensurable. That said one of the functions of law as a system is to reconcile such conflicts or contradictions as far as possible. In this sense the pursuit of coherence may be regarded as a process.

principles, with which detailed rules must be coherent.[119] In this sense coherence justifies a legal argument because it makes the law intelligible and ascertainable in the absence of full knowledge.

Yet coherence is more than this, it requires rules to hang together for good reasons.[120] In this sense coherence contributes to law as a purposive enterprise. So, coherence is determined by reference to a structure of higher order principles that reflect in some way a view of what constitutes a good or satisfactory way of life. This much should be evident from the foregoing discussions about the justification of private property and the three orders of public interest. These higher order values, the reasons from which law is dependent, play a pivotal role in shaping the coherence of particular rules and claims. It may be observed at this point that law does not represent a perfect system, it is constantly evolving towards the better pursuit of existing and new values in light of changing circumstances. This means that as the higher order values that direct coherence evolve, so too must any new norms and claims that are advanced as part of the legal system. In the context of property rights an important development in this respect has been the increasing relevancy of human rights norms and their introduction to the field of environmental protection. This merits some brief consideration because a body of human rights-based environmental jurisprudence has emerged that justifies significant limitations of property rights or regulation of natural resources in a way that facilitates certain public interests.

The starting point here is Principle 1 of the Stockholm Declaration, which provides that:

> [m]an has the fundamental right to freedom, equality and adequate conditions of life, in an environment of a quality that permits a life of dignity and well-being, and he bears a solemn responsibility to protect and improve the environment for present and future generations.[121]

This has in turn influenced a number of legal instruments, including the Aarhus Convention and Article 37 of the European Union Charter on Fundamental Rights. The linkage between human rights and the environment is also now a feature of a number of constitutional provisions.[122] The effect of these developments has been to render human rights norms a relevant factor in determining the coherency of property claims, ie decisions concerning the use of property should be coherent with the

[119] MacCormick, *Ibid* 201–2.

[120] *Ibid* 230.

[121] Principle 1 of the Stockholm Declaration on the Human Environment: UN Doc A/CONF 48/14/Rev 1 (16 June 1972).

[122] See the brief survey in A Boyle, 'Human Rights or Environmental Rights? A Reassessment' (2007) *Fordham Environmental Law Review* 471, 479–82.

values associated with human rights. This approach is increasingly evident in the jurisprudence of both the ECHR[123] and the IACHR.[124] These decisions serve to reinforce the claims made in chapter 3, section 2(b) about first order public interest and concern with guaranteeing the conditions necessary for a person's existence and agency.

Let us summarise the discussion so far. Foremost it must be stressed that law is a normative institutional order. It is a system of rules that enables people to regularise their conduct. Law serves to advance a range of values. Yet it also must provide a coherent and sound basis upon which persons can plan their actions. At a general level, limits on the exercise of legal authority, particularly jurisdiction, may place important limits on how a resource may be used, predisposing certain natural resources to either exclusive or inclusive use regimes. As we will see in the next three chapters, this is particularly important in the context of marine resources. In some cases, the law may explicitly dictate the relationship between public and private interests. However in many cases this is absent or lacking in sufficient detail to resolve legal disputes over conflicting use-claims. The absence of precise rules that fully delimit the private and public uses of property is not fatal to its regulation. Here we may observe how law places limits on the kinds of arguments and quality of arguments that can be brought to bear in a decision-making context. Thus requirements of universability, consequence sensitivity, reasonableness and coherence serve to structure the way in which compelling and ultimately successful delimitations of private rights and public interests may be presented.

(c) Moral Factors that Shape the Relationship between the Private and Public Functions of Property

The vitality of moral explanations of and prescriptions for property reverberate strongly in current discussions about the privatisation of education, healthcare provision, and access to natural resources. Much of the previous two chapters has been concerned with articulating the moral justifications for private and public use of property. Such justifications may place limits on the scope of private property to ensure that persons are able to satisfy their basic needs, to protect and enhance personal

[123] See, eg, *Lopez Ostra v Spain* (1995) EHRR 277.

[124] See, eg, *Maya indigenous community of the Toledo District v Belize*, Case 12.053, Report No 40/04, Inter-Am CHR., OEA/Ser.L/V/II.122 Doc 5 rev 1 at 727 (2004) esp [154]–[155]. Also *Sawhoyamaxa Indigenous Community of the Enxet People v Paraguay,* Case 0322/2001, Report No 12/03, Inter-Am CHR, OEA/Ser.L/V/II.118 Doc 70 rev. 2 at 378 (2003); *Comunidad Mayagna (Sumo) Awas Tingni Case*, Order of the Court of September 6, 2002, Inter-Am Ct HR (Ser E) (2000).

autonomy, to promote the efficient use of resources, and reward socially beneficial activities. These justifications also seek to promote social order. Their importance cannot be simply separated from the regulation of property in practice. This is because legal reasoning necessarily takes into account moral considerations.[125] Indeed, some writers believe that morality may take precedence. Thus Richard Tur argues that legal norms may be overridden by equitable and other overrides.[126] However, I adopt a narrower view of the role of moral reasons. Whilst I accept that law is reason dependent and that this commits us to an inclusive approach to legal reasoning, I reject the idea that law in some way entertains a free-ranging moral discourse as part of the legal process. Law may be infused with moral values, but this does not mean that law equals morality. Neither does it mean that all laws are moral laws, or that all moral values are laws. As MacCormick rightly points out, judges (and law-makers one might add) have to ascertain and apply rules in the context of an established legal order.[127] This means that moral considerations must be examined through a legal filter, a filter which determines what forms a relevant consideration.

Of course this begs the question as to how we 'filter' the content of 'legal morality'. The answer to this is to look again at the legal rule, or matrix of rules, and to scope out the particular space left for moral considerations. This may be a challenge but it is not insurmountable, and it is possible to illustrate cases that admit moral considerations (or one might just as readily use the terms justice or 'equitable and over overrides'). As a general rule it seems reasonable to infer that when legal values are imprecise or open there is greater scope for moral reflection.[128] So at one extreme the linkage and reduction of moral values to legal values is quite explicit. Thus the rather appositely named doctrine of moral rights preserves for artists limited rights in their works that survive transfer and which prevent certain changes to their work in order to promote both respect for artists and artefact preservation.[129] Ultimately this represents a reduction of moral values associated with agency and personhood into law. The interface

[125] See R Alexy, 'On Necessary Relations between Law and Morality' (1989) 2 *Ratio Juris* 167.

[126] Above n 85, pp 367–8.

[127] MacCormick, n 29 above, 148. Similarly, Underkuffler notes the difficulties in identifying the core values to be associated with property claims. She also seeks to defend her position by focusing on value claims not as they might be conceived, but as they are used and understood in law: Underkuffler, n 3 above, 82.

[128] See Y Feldman and A Harel, 'Social Norms, Self-Interest and Ambiguity of Legal Norms: An Experimental Analysis of the Rule vs. Standard Dilemma' (2008) 4 *Review of Law & Economics 81*.

[129] See Art 6*bis* of the Berne Convention for the Protection of Literary and Artistic Works (Paris revision of 1967) 828 *UNTS* 221. See further P Masiyakurima, 'The Trouble with Moral Rights' (2005) 68 *Modern Law Review* 411.

between property rights and human rights appears to be rather fertile ground for this type of inclusive reasoning and the development of moral constraints on property holdings. Thus in *Gerhardy v Brown*, much of the court's times was spent evaluating the validity of certain land rights in light of competing values drawn from anti-discrimination legislation and the protection of the indigenous peoples values.[130] This approach is particularly evident in the jurisprudence of the Inter-American Commision on Human Rights, where the court has been assiduous in its protection of cultural and spiritual values.[131] In other instances judges' reliance upon moral values to justify decisions is more subtle, perhaps no more so than when they resort to consequentialist decision-making. For example, in *Scaramanga v Stamp*, Cockburn CJ famously accepted the prompting of humanitarian considerations in the context of rescue at sea:

> [t]o all those who have trust themselves to the sea, it is of utmost importance that the promptings of humanity in this respect should not be checked or interfered with by prudential considerations.'[132]

It is inevitable that decisions reached in a consequence sensitive manner will do so by reference to a wide range of moral considerations.[133] At present, it is neither necessary nor an effective use of our time to engage in a full ranging review of how specific legal fields accommodate moral values. It is enough to admit this possibility. Its operation in the specific context of fisheries and natural resources will be considered in subsequent chapters.

4. FORMS OF PROPERTY

Property is a fluid concept, a power relationship that may exist in graduated degrees and be reflected in the specific composition and intensity of the incidents of property. Although real world property relations are complex and variable, it is common to find property organised into broad types that share familial characteristics: private property, common property and collective property. In addition to traditional triumvirate of forms, there is stewardship. Stewardship is characterised by certain public responsibilities inherent in the holding and it is increasingly used to describe the regulation of natural resources. Most States possess mixed property systems which include a range of property forms. Whether or

[130] (1985) 159 CLR 70, esp Deane J at 150. See also the reasoning of Brennan J in *Mabo*, n 78 above, at [42].
[131] See, eg, Maya, n 124 above.
[132] [1880] 5 CPD 295, 304.
[133] See ch 2, s 3 and ch 3, s 2(6) above.

not a specific form of property is used to regulate a particular thing is very much determined by context. For example, as indicated in chapter 2 private property only emerges when the object of property is susceptible to a certain degree of physical, legal or moral excludability. It emerges in societies that value individual liberty and so vest the power to determine access to and control of things in individuals. An individual is guaranteed exclusive control of access to the property and over the bundle of social accepted uses. It is suggested that the application of other forms of property are also determined by these factors.

The hallmark of common property is that the owners have no right to exclude others from use of a resource.[134] Thus common property is defined by rights of access rather than exclusion. Internally, access to the property is governed according to the idea that the resource is available for every member of the group alike. Externally, common property may resemble private property if access is limited to members of a particular group. Examples of common property include the high seas or grazing rights over land. Common property regimes may arise for a number of reasons. It simply may not be possible to exclude people from a resource, such as the oceans. Or it may be impractical to restrict access. It may be that common property regimes emerge in the absence of formal and structured systems of property. Alternatively, common property rights may be created in order to ensure access to vital resources, such as grazing land. There has been a resurgence of interest in the concept of common property as an alternative means of regulating natural resources.[135] Much of this is focused on disputing the suggestion that commons are inefficient and likely to result in conflict.[136] Ostrom has been particularly critical of the view that the commons are inherently tragic. In *Governing the Commons* she sharply distinguishes common property regimes from common pool regimes and provides a number of examples from around the world to show that people can organise themselves in ways which

[134] See, eg, *R (Beresford) v Sunderland City Council* [2004] 1 AC 889.

[135] See generally P Grossi, *An Alternative to Private Property: Collective Property in the Juridical Consciousness of the Nineteenth Century* (Chicago, University of Chicago Press, 1981); BJ McCay and JM Acheson (eds), *The Question of the Commons: The Culture and Ecology of Communal Resources* (Tucson, University of Arizona Press, 1987); F Berkes *et al* 'The Benefits of the Commons' (1989) 340 *Nature* 91; DW Bromley, *Economic Interests and Institutions: The Conceptual Foundations of Public Policy* (Oxford, Basil Blackwell, 1989); GG Stevenson, *Common Property Economics: A General Theory and Land Use Applications* (Cambridge, Cambridge University Press, 1991).

[136] This was largely inspired by Hardin's seminal article on the 'tragedy of the commons'. As indicated above, much of the problem has resulted from a casual use of the term 'commons', when in fact what was being critiqued was an open access regime: G Hardin, 'Tragedy of the Commons' (1968) 162 *Science* 1243.

allow commons to be used productively.[137] The core of her argument is that if common property has the same structure of ownership as private property then externalities can be internalised and so common property may result in efficiency or utility. Of course this is contingent on well developed internal rules. Acheson, writing on the lobster fishery of Maine, provides a useful concrete example.[138] Here a system of joint or communal property was informally established by the lobster fishing community over an open-access resource.[139] The lobster gangs controlled entry into the resource, policed boundaries and enforced fishing rules such as line cutting and trap dumping. Although the system was not entirely successful it partially mitigated a tragedy of the commons.[140]

The organising idea of a collective property system is that the needs of society as a whole take precedence over those of individuals considered on their own. Examples of public property include national parks and military bases. A fishery could be regarded as collective property because access to it is limited and utilization of the resource is determined according to the use that is most conducive to the collective interests of society. The terms 'State property' or 'public property' are often used to described collective property because the State, or some public agency, is responsible for controlling the property.[141] Vesting ownership in a public agency makes public property a particularly good vehicle for protecting or serving public interests because ownership is detached from the usual self-serving interests associated with private property. The structure outlined appears to reduce collective property to a special form of private property, with the State cast in the role of owner. As a result some commentators, such as Arendt and Berki, have been critical of collective property, arguing that it does not generate a specific normative meaning.[142] This becomes apparent when we consider the incidents of ownership. In a collective property regime, a public authority typically may enjoy rights

[137] E Ostrom, *Governing the Commons: The Evolution of Institutions for Collective Action* (Cambridge, Cambridge University Press, 1990).

[138] JM Acheson, *The Lobster Gangs of Maine* (Hanover, University of New England Press, 1988).

[139] The regime demonstrates how property may arise without the law. Ellickson notes how such informal arrangements may arise. RC Ellickson, *Order Without Law: How Neighbors Settle Disputes* (Cambridge, Massachusetts, Harvard University Press, 1991).

[140] Arguably another commons problem lurks within the communal system established. Unless the community establishes limits on the member's rights to use the resource then a smaller but equally harmful open access regime will continue. See JL Krier 'The Tragedy of the Commons, Part II' (1992) 15 *Harvard Journal of Law and Public Policy* 325, 332.

[141] CB Macpherson, 'The meaning of property' in CB Macpherson (ed), *Property, Mainstream and Critical Positions* (Oxford, Blackwell, 1978) 5–6. Also S Munzer. *A Theory of Property* (Cambridge, Cambridge University Press, 1990) 25.

[142] Arendt argues that because the public cannot exercise anything like the rights of an individual over property it makes no sense to talk of public property. H Arendt, *The Human Condition* (Chicago, University of Chicago Press, 1958) 256–7. Berki notes that public property

of possession, use, management, income and capital. For example, the public authority determines who can use the library and how; it may levy charges on users or sell the library or its books on the open market. This approach leads Harris to suggest that the real difference between private property and collective property lies not in the structure of ownership but in the way in which interest in the property is held.[143] The importance of the distinction is clearly drawn by Reeve who focuses on the way in which the right must be exercised.[144]

> Under a regime of private property, the owner has a general right to exclude others from the use of his property, but grants the right to use to others, normally in return for value received. In the case of public transport, the owner usually has the duty to make use available to the public, but may nevertheless make charges and employ rationing procedures to discriminate amongst those who might wish to take up the option.[145]

Although public property is structured in the same way as private property, it is clear that title is vested in an agency responsible for controlling the property in the interest of the public. The public agency that holds the property must establish use and access rules to establish ensure that the property is used to promote social objectives.

Realisation that property may be structured in such a way, with the prioritising of its public function, leads us to consider another form of holding that possesses a strong public function—stewardship.[146]

5. STEWARDSHIP

Stewardship has been described as an

> approach towards problem solving that includes a long-term perspective, a focus on sustainability, and a deliberate attempt to understand and respect the delicate balance of the earth's ecosystem.[147]

In this sense it is an approach, or policy, which advocates a responsibility towards the environment. Stewardship has a long theoretical heritage,

refers to such a wide range of arrangements, such as cooperatives, public corporations and nationalised enterprises, that it does not have any concrete meaning. RN Berki, *Socialism* (London, Dent, 1975) 10.

[143] JW Harris, *Property and Justice* (Oxford, Clarendon Press, 1996) 50. It is notable in England that communal property rights over land exist as use or access rights over land that is either privately owned or owned by the State. See, eg, *Bettison v Langton* [2001] UKHL 24.

[144] A Reeve, *Property* (London, Macmillan, 1986) 33.

[145] *Ibid*.

[146] The difference being that in stewardship the holder of the property is a private agent, rather than a public agent.

[147] R Bratspies, 'Finessing King Neptune: Fisheries Management and the Limits of International Law' (2001) 25 *Harvard Environmental Law Review* 213, 214, fn 4.

albeit an ambiguous and marginal one, which has struggled in the shadow of the stronger 'pro-dominion' approach to the control of resources.[148] It is typically characterised as having a number of features: a responsibility towards the environment,[149] the duty to conserve the resource,[150] the duty to protect resources,[151] and a duty towards other people in respect of the resource, which may extend to future generations.[152] The fact that such interests are couched in the language of rights and duties suggests that stewardship is more than a mere perspective or policy.[153] Of course, the real task then is distinguishing stewardship from other forms of property holding.

As a form of property holding, stewardship, like private property, can be broken down into its component parts or incidents. Many of stewardship's incidents are the same as for property in general and

[148] See A Gillespie, *International Environmental Law, Policy and Ethics* (Oxford, Oxford University Press, 1997) 68–71. Passmore argues that Christian and philosophical discourse about natural resources, up until the 20th century, has been characterised by two approaches—man as the despot and man as the steward. *Man's Responsibility for Nature*, 2nd edn (London, Duckworth, 1980). The pro dominion approach is typified in the contemporary institution of private property, which Macpherson labels a form of possessive individualism. *The Political Theory of Possessive Individualism: Hobbes to Locke* (Oxford, Clarendon Press, 1962). The moral acceptability of the individuals as the repository of the benefits of ownership is supported by the notion of man as the master of the earth.

[149] Much of the development of environmental consciousness took place outside the field of law. Writers such as Aldo Leopold and Henry David Thoreau did much to embed the value of the environment in popular culture and thought. See A Leopold, *A Sand County Almanac* (Oxford, Oxford University Press, 1949); H D Thoreau, *The Maine Woods* (London, Harper and Row, 1987) and *Walden* (1971). This has in turn filtered in to municipal law. See J Sax, 'Property Rights and the Economy of Nature: Understanding *Lucas v South Carolina Coastal Council*' (1993) 45 *Stanford Law Review* 1433; RJ Goldstein, 'Green Wood in the Bundle of Sticks: Fitting Environmental Ethics and Ecology into Real Property Law' (1998) 25 *Boston College Environmental Affairs Law Review* 347. It has also become an important part of international law. There is widespread acceptance that international obligations to protect the environment do exist. See D Freestone, 'The Road from Rio. International Environmental Law after the Earth Summit' (1993) 6 *Journal of Environmental Law* 227; G Dunoff, 'From Green to Global: Toward the Transformation of International Environmental Law' (1995) 19 *Harard Environmental Law Review* 241.

[150] EB Weis, *In Fairness to Future Generations* (Dobbs Ferry, New York, Transnational Publishers, 1989) 50–3.

[151] See generally, TM Swanson, *Global Action for Biodiversity* (London, Earthscan, 1997); D Worster, *The Wealth of Nature* (Oxford, Oxford University Press, 1993); RD Munro and JG Lammers, *Environmental Protection and Sustainable Development* (London, Graham and Trotman, 1987).

[152] Eg, EB Weis, 'The Planetary Trust: Conservation and Intergenerational Equity' (1984) 11 *ELQ* 495. Also EB Weis n 150 *above*, ch 2.

[153] This point is perhaps controversial. For von Zharen it appears to be a broad policy that encompasses a range of international, regional and national regimes that protect the environment: WM von Zharen, 'Ocean Ecosystem Stewardship' (1998) 23 *William and Mary Environmental Law and Policy Review* 1. Similarly, Skene *et al* suggest that the move from stewardship rhetoric to reality is yet to be made, and that such a move would not be straightforward. DW McKenzie Skene, J Rowan-Robinson, R Paisley and DJ Cusine, 'Stewardship: From Rhetoric to Reality' (1999) *Edinburgh Law Review* 151, 175.

it is not necessary to consider them all independently. Commentators on stewardship acknowledge that the steward may retain considerable rights in respect of possession, use, management, income, security, and term over the property.[154] Accordingly, we may narrow our focus onto what makes stewardship distinctive. Distilling the literature on stewardship down to its most refined form reveals two key features: the duty to conserve and the duty to preserve. It is worth noting that these duties alone are insufficient to establish stewardship unless supplemented with other incidents of ownership.[155] However, these duties have a profound impact on two particular incidents, the right to the capital (which includes the right to exclude) and the prohibition on harmful use. The former must be seriously constrained and the latter emphasised if stewardship is to have any meaning. For present purposes, stewardship may be regarded as a form of holding subject to overriding duties of conservation and preservation. It is a form of property holding with significant legal and moral limits affecting its excludability.

Conservation is the keeping of resources for posterity, as distinct from preservation, which is the saving of resources from harm.[156] What makes conservation problematic is the difficulty of defining future needs and then balancing them with those of the present.[157] Even if they are given credible weight, this does not mean that people will readily sacrifice immediate needs for them. This difficulty increases as the needs of the future become more remote. Yet such difficulties do not deny the possibility of conservation. At the level of policy, conservation is a matter of choice and as moral philosophers have admitted, such a choice is not inconsistent with rational human behaviour. For example, Kant argued that posterity was a concern of men:

> Human nature is such that it cannot be indifferent even to the most remote epoch which may eventually affect our species, so long as this epoch can be expected with certainty[158]

[154] See McKenzie Skene, *et al*, n 153 above, 155; Lucy and Mitchell, n 171 below, 584.

[155] For example, I may be under a duty not to harm others, but this is not the same as saying that our respective positions are determined by property rules.

[156] Passmore, n 148 above, 73.

[157] Weis provides a more developed concept of conservation under the ambit of the principle of intergenerational equity. This is articulated through three sub-principles. The principle of conservation of options requires the conservation of the diversity of the natural and cultural resource base so that future generations are not unduly restricted in their ability to solve their problems and satisfy their needs. They should be entitled to diversity comparable to previous generations. The principle of conservation of quality requires the maintenance of the quality of the planet so that it is passed on in a condition that is no worse than when the present received it. The principle of conservation of access requires equitable rights of access to members of the community to the legacy of past generations: n 150 above, 38.

[158] I Kant, 'Idea for a universal history with cosmopolitan purpose', Proposition 8, in HS Reiss and HB Nisbett (eds), *Kant's Political Writings* (Cambridge, Cambridge University Press, 1970) 50.

This may be overly optimistic about the nature of man and his capacity to act towards the ideal but it is not an isolated view. Utilitarian doctrine allows for posterity to feature in the equation where it is sufficiently certain, and where the effects of acts are predictable and probable.[159] For Rawls, acting for posterity is consistent with the principle of justice.[160] Of course, he freely admits the difficulty of reconciling the interests of the here and now with the interests of the future, but gets round this by proposing the 'just savings principle'.[161] According to this, people put aside for their immediate successors some suitable amount of capital accumulation.[162] Conservation clearly contributes to the protection of first order interests, as outlined in chapter 3, and is recognised as a legitimate legal objective in a burgeoning body of rules that seek to protect important natural resources or the environment more generally.[163]

Stewardship entails preservation—the maintenance of the earth in good condition. The extreme preservationist position demands that as natural resources have an inherent value apart from man, they should be preserved even to the detriment of man. This position is clearly objectionable, as it may lead to the situation where any action is impossible.[164] Any meaningful notion of preservation is one that must be compatible with the practical reality of man's relationship with the environment. It requires a balance between meeting man's needs and maintaining the earth in good condition. Thus, a more persuasive argument for preservation points out that environmental degradation risks the loss of any resource potential. The earth should be maintained because it has an instrumental value to man; it provides among other things economic goods, the means to pursue research and aesthetic pleasure. Like conservation, preservation

[159] TL Sprigge, 'A utilitarian reply to Dr McCloskey' in MD Bayles (ed) *Contemporary Utilitarianism* (Garden City, New York, Anchor Books, 1968). Cited in Passmore, n 148 above, 84.

[160] J Rawls, *A Theory of Justice* (Oxford, Clarendon Press, 1972) 284 *ff*. See also H Sidgwick, *The Methods of Ethics*, 7th edn (London, Macmillan, 1907) bk 4, ch 1, p 414.

[161] Rawls, *Ibid* 286.

[162] To act for posterity does not require us to consider all future generations, for this would lead to absurdities. Accordingly, Rawls concedes that only immediate successors should be considered. This is consistent with justice, for all generations do not know their place in time in the original position and so will reach the same conclusion about just outcomes: *Ibid*.

[163] By way of illustrating this, reference may be had to any number of instruments, including the World Charter for Nature, GA Res 7, para 36 UNGAOR Supp (No 51) at 17, UN Doc A/51 (1982); the Convention for the Protection of World Cultural and Natural Heritage 1972, 1037 *UNTS* 151; the Convention on Wetlands of International Importance 1971, 996 *UNTS* 245; the Convention on the International Trade in Endangered Species of Wild Flora and Fauna 1973 (CITES), 993 *UNTS* 243; the Convention on the Conservation of Antarctic Marine Living Resources (1980) 19 *ILM* 837.

[164] Passmore, n 148 above, 126. Arguments based on inherent value are often derived from the claim that animals and wildlife form part of a common natural community and that they should be attributed independent worth, and rights, accordingly. This fails because they do not form a community capable of generating ethical duties—there is no common interest: *Ibid* 116.

contributes to first order interests. These prevail over other interests and dictate how property rights may evolve in respect of particular natural resources. This rationale of preservation resonates clearly in a number of political and legal declarations including the Rio Declaration and Agenda 21.[165] Doctrinally it is being articulated in other principles. Most obvious among these is the precautionary principle.[166]

Although conservation and preservation are cogent concerns, the question remains how to accommodate stewardship within existing legal institutions and processes. More precisely, is it merely something that is grafted onto existing property structures, or is stewardship a distinctive form of holding? Commentators appear to be divided on this matter. Adopting the former approach, Yannacone regards stewardship as embodied in the notion of social property.[167] 'Social property' is

> property which has become vested with the public interest to such an extent that the property itself can be considered dedicated to public use.[168]

US agricultural lands are a prime example of this 'social property'.[169] Similarly, Karp notes that 'the duty of stewardship requires that the owner use and maintain the land in a manner that will not interfere with any significant natural resource value that it may contain'.[170] In this sense, stewardship appears to be ownership subject to certain duties. On the other hand Lucy and Mitchell argue that stewardship is wholly inconsistent with the notion of private ownership:

> The hallmark of stewardship is landholding subject to responsibilities of careful use, rather than the exclusive rights to exclude, control and alienate that are

[165] UN Declaration of the UN Conference on Environment and Development, UN Doc A/CONF 151/26/Rev 1. Available in (1992) 21 *ILM* 874; UNCED, Report of the United Nations Conference on Environment and Development Rio de Janeiro, 3–14 June 1992 (1993).

[166] See generally T O'Riordan and J Cameron (eds), *Interpreting the Precautionary Principle* (London, Cameron May, 1994); D Freestone and E Hey, *The Precautionary Principle and International Law* (London, Kluwer International, 1996). Principle 15 of the Rio Declaration provides that: '[i]n order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation': n 165 above. The status of the principle remains a matter of contention. Bodansky has argued that uncertainties as to its application prevent it emerging as a principle of international law. D Bodansky, 'Scientific Uncertainty and the Precautionary Principle' (1991) 33 *Environment* 4.

[167] VJ Yannacone, 'Property and Stewardship—Private Property Plus Public Interest Equals Social Property' (1978) 23 *South Dakota Law Review* 71, 74.

[168] *Ibid*.

[169] *Ibid*.

[170] JP Karp, 'A Private Property Duty of Stewardship: Changing Our Land Ethic' (1993) 23 *Environmental Law* 735. See also L Caldwell, 'Rights of Ownership or Rights of Use?—The Need for a New Conceptual Basis for Land Use Policy' (1974) 15 *Willian and Mary Law Review* 759, 775 and 'Land and the Law: Some Problems in Legal Philosophy' (1986) *University of Illinois Law Review* 319, 323.

> characteristic of private property. The steward is in essence a duty bearer, rather than a right-holder.[171]

They continue to argue that the steward does not enjoy the fullest extent of the trinity of rights essential to private property: control, exclusion and alienation.[172] As the thrust of stewardship is so contrary to the typical incidents of private ownership, it cannot be regarded as a form of private property. What is important to note is that each approach highlights the problems of establishing a holding that combines a complex blend of rights and duties that may come into conflict, and that traditional forms of property ownership structures are not suited to accommodating this. Significantly, the former approach fails to consider the point that stewardship is incompatible with the entire ethic of private property, ie absolute individual rights. Holdings subject to overriding public duties are normally held as collective property with some public agency cast in the role of owner. However, it is clear that stewardship includes property privately held, as most natural resources are not in State ownership. As such neither private property nor collective property readily account for stewardship type holdings. Common property is even less well-suited to frame stewardship responsibilities, given the high degree of regulation required to conserve and preserve natural resources. Exclusion from natural resources forms a necessary means to these ends. It is suggested that stewardship may be distinguished from other forms of property as constituting a form of individual holding that is subject to overarching public duties.[173]

A number of stewardship commentaries seize onto the idea of the public interest to provide an account of the public duties that define the

[171] WNR Lucy and C Mitchell, 'Replacing Private Property: The Case for Stewardship' (1996) 55 *CLJ* 566, 584. Earlier, they rely on Waldron's assertion that the key organising idea of property is the idea that the resource belongs to some individual. See J Waldron, *The Right to Private Property* (Oxford, Clarendon Press, 1988) 38–9.

[172] The trinity is the rights of control, exclusion and alienation: *Ibid* 569.

[173] Such regimes are not at all uncommon. Gray has demonstrated that property institutions are easily capable of incorporating common interests. K Gray, 'Equitable Property' (1994) 47 *Current Legal Problems* 157. For example, in common law systems the notion of 'equitable property' has emerged to ensure access to quasi-public property or traditional lands. See, eg, *Robins v Prune Yard Shopping Centre* (1979) 592 P2d 34. In Canada the Supreme Court, in *The Queen in Right of Canada v The Committee for the Commonwealth of Canada* (1991) 77 DLR (4th) 385, has moved in a similar direction. In Australia in particular the courts have come round to the idea that the State owes a distinctive fiduciary obligation to deal with land for the benefit of its native people. See *Mabo v Queensland*, (1992) 175 CLR 1, 42. In America this function has often been served by the public trust doctrine. See *Illinois Central Railroad v Illinois (1892)* 146 US 384. Traditionally this was confined to State ownership of navigable waters and tidelands, but it has gradually been expanded. The Supreme Court of California has stated that the public trust doctrine is 'more than an affirmation of state power to use public property for public purposes. It is an affirmation of the duty of the state to protect the people's common heritage of streams, lakes, marshlands and tidelands. See *National Audubon Society v Superior Court of Alpine County* 658

duties by which the individual holding in defined.[174] However, Lucy and Mitchell are critical of this approach.[175] First, they suggest that the public interest is too vague to be of any use. Secondly, if it refers to a particular substantive policy or set of policies, then this begs the question, how do we ascertain those policies? Thirdly, if it signifies the majority view, how is this reconciled with individual interests? The concept of the public interest outlined in chapter 3 answers these criticisms, suggesting that the public interest has both a coherent content and structure, both of which can be ascertained through provisions of positive law. Without too much controversy, the following may be put forward as the minimum content of the community interest in natural resources: satisfaction of basic human needs, the existence of a healthy and sustainable environment,[176] the maintenance of biodiversity,[177] and the reasonably efficient use and production of resources.[178] Stewardship is most potent in the context of natural resource regimes because such resources have a more immediate connection with first order interests, ie natural resources comprise the core focus of first order interests.[179] In this sense, their physical attributes predispose

P2d 709, 724 (1983). Sax has been particularly influential in advocating this approach. JL Sax 'The Public Trust Doctrine in Natural Resource Law: Effective Judicial Intervention' (1969–70) 68 *Michigan Law Review* 471 and 'Liberating the Public Trust Doctrine from its Historical Shackles' (1980–1) 14 *University College Davis Law Review* 185. See also JE Van Tol, 'The Public Trust Doctrine: A New Approach to Environmental Preservation' (1978–9) 81 *West Virginia Law Review* 455; A Reiser, 'Ecological Preservation as a Public Property Right. An Emerging Doctrine in Search of a Theory' (1991) 15 *Harvard Environmental Law Review* 393. On the use of trust-based mechanisms under international law, see C Redgwell, *Intergenerational trusts and environmental protection* (Manchester, Manchester University Press, 1999).

[174] See Karp, n 170 above, 750; Yannacone, n 167 above, 74; Caldwell n 170 above, 759.

[175] See Lucy and Mitchell, n 171 above, 587 *ff*.

[176] Thus the World Charter for Nature describes terrestrial and marine ecosystems as life support systems. 1982, UNGA Res 37/3 (XXXVII). (1983) 32 *ILM* 455. By and large most accounts of the human condition recognise that certain basic human needs are to be secured. See eg, Rawls who has his 'floor thesis', n 160 above, ss 8–9; See generally, A Sen *et al*, *The Standard of Living* (Cambridge, Cambridge University Press, 1983).

[177] Whether one has an anthropocentric perspective or an essentialist view of the environment, it remains true that a certain minimum quality of physical environment is a precondition for continued human life.

[178] One of the principal benefits of private ownership is that it generates a degree of efficiency in holdings. Where these do not interfere with other community interests then they are an attractive benefit to the community and should not be rejected out of hand. Of course this raises questions about how possibly competing community benefits, eg efficiency and conservation, are to be reconciled. See CM Rose, 'A Dozen Propositions on Private Property, Public Rights, and the New Takings Legislation' (1996) 53 *Washington and Lee Law Review* 265; BH Thompson Jr, 'Conservation Options: Toward a Greater Private Role' (2002) 21 *Virginia Environmental Law Journal* 245.

[179] Beyond the question of natural resources, stewardship may have a role to play in securing other community interests. This may include a community's particular aesthetic standards, religious doctrine, cultural values, and so on. In such cases, the mutable and subsidiary quality of the interests suggest that the legal duties of the steward may be less intrusive than that for natural resources.

them to regulation in a particular way. Legal and moral limits on exclusive use were outlined above, and are evident in a burgeoning body of environmental norms. The result is that the regulation of natural resources is frequently characterised by the priority afforded to vital needs (first order interests). This may not always be apparent because there is frequently a coincidence between private and public interests in stewarding resources. For example, crops are grown to be sold on the open market. Thus the individual benefits from a profitable enterprise and society is ensured of a supply of basic foodstuffs. However, in cases of conflict, community interests will generally require some limitation of exclusive use rights. This is evident in pollution controls and habitat protection regimes.

Stewardship is invariably a complex legal arrangement. First, the public interests and duties must be carefully established. This may involve the design of not just substantive rules on the protection, conservation and use of natural resources, but also the development of complex forms of stakeholder involvement to ensure that the public interest is actually legitimately drawn and capable of adapting to changing social and factual contingencies. Secondly, private and public interests are not always aligned. Therefore individuals must have incentives or carefully drawn duties to act in the public interest. As a form of property holding these duties and incentives need to be consistent with other property rules.[180] There may need to be sanctions against the steward for failing to meet their duties. There must also be limits upon the extent to which public bodies engage in decisions about the use and management of natural resources, otherwise stewardship will effectively collapse into a form of collective property. This points towards a careful calibration of the typical incidents of ownership between the individual holder of a resource and the public agencies that are involved in the determining the public interests to which a natural resource regime is put.

6. CONCLUSIONS

In the context of natural resources, recognition of the public function of property is particularly important because a failure to grasp the fact that property has an inherently public function which may pursue a range of goals, goals which are not always consistent with the allocation of strong private property rights, or which place limits on use of property, may render calls for strong (highly exclusive) private property rights as flawed. The foregoing sections have shown that in law there is no a priori reason for favouring private rights over public interests in the regulation

[180] As we shall see in ch 8, constitutional rules on regulatory takings have had a particular influence on the design of property-based regimes for marine living resources

of property. Ultimately, the reason dependency of legal norms commits us to the position that the relationship between private rights and public interests is determinable. This is because there are no strict priorities of interest (moral values) within a pluralist setting. Despite this we are able to rely upon certain qualities of reasoning, both legal and moral, to shape the form and 'weight' of claims to use property in either an exclusive or inclusive way. The degree to which inclusive, exclusive and shared claims to property possess these factors, ie the attributes of universability, consequence sensitivity, reasonableness and coherency, will render them more or less compelling as a matter of legal reasoning. These constraints of practical reason, in combination with certain limitations that flow from the inherent physical qualities of a resource shape will determine the eventual rule structure that regulates property. The influence of these factors is evident in the various forms of property, and the predisposition of natural resources to stewardship-based forms of holding.

5

The Influence of Property Concepts in the Development of Sovereign Rights over Ocean Space and Resources

1. INTRODUCTION

If we look at the development of the law of the sea, and, in particular, the development of coastal State authority over marine spaces and resources, we can see strong historical parallels between this and the development of property rights more generally. Although international law of the sea is conceptually discreet from private law institutions under domestic law, its early doctrinal development borrowed heavily from domestic law concepts to give form to its nascent institutions and rules. This should not be unsurprising, given that both property and some key elements of the law of the sea are concerned with exclusive control over things. Moreover, if we bear in mind that both international law and domestic law are forms of practical reason, then we can appreciate how rules and norms can be advanced and extended in their field of application through principled, analogical reasoning.

This chapter explores the role of property concepts in the development of the law of the sea, and aims to show how physical, legal and moral considerations, which are determinative of property uses in general, have been instrumental in defining the limits of coastal State authority over ocean spaces and resources. In doing so it will show how the relationship between private/exclusive claims and public/inclusive claims to ocean space and resources has been regulated in law. It proceeds by analysing the development of the law of the sea through its key phases: the 'Grotian phase', which endured between the early to mid 17th century; the 'freedom of the seas phase', which prevailed between the late 17th and early 20th centuries; the 'coastal waters phase', which marked a period of expanding coastal State jurisdiction during the nineteenth and twentieth centuries;[1] and the 'resource regime phase', marked by the emergence the continental shelf and

[1] The second and third phases are by no means chronologically distinct. Indeed, coastal State jurisdiction over a marginal belt of coastal water and freedom of the high seas developed alongside each other throughout most of the 19th and 20th centuries.

exclusive economic zone in the 20th century. In each of these phases, we can see how developments in science and technology have changed our understanding of how the marine environment operates and how it can be controlled. We can also see how changes in legal methodology shaped the way in which potential claims could be advanced and secured. Finally, we can see how developments in moral and political philosophy shaped the limits and forms of control that could be exercised over marine natural resources.

2. THE GROTIAN PERIOD: THE *MARE CLAUSUM–MARE LIBERUM* DEBATE

From its inception, the development of the law of the sea has been dominated by the tension between the freedom of the seas and the exercise of coastal State control or, put another way, between inclusive and exclusive claims in respect of ocean space. Our examination of the interplay of property concepts and the law of the sea commences at the genesis of this tension in the early 17th century, during the seminal debates between Hugo Grotius, William Welwood and John Selden.[2]

(a) Background

Although the Grotian debates took place in the 17th century, they were actually rooted in events occurring more than one hundred years earlier. Following Columbus's discovery of the New World in 1492, the papal *Inter caetera* 1493 and the Treaty of Tordesillas 1494 designated vast areas of the Atlantic Ocean and beyond subject to the exclusive sovereignty of Spain and Portugal.[3] In the early 17th century, the newly formed Dutch East India Company sought to break this monopoly which was stymieing their commercial ambitions to establish trading routes with the East Indies. The subsequent struggle for control of the maritime trading routes possessed a critical doctrinal/legal dimension as each side sought to justify their claims and secure public support for their cause.[4] Spain and

[2] This debate is widely regarded as marking the emergence of the foundations of modern international law. Thus Knight notes that Grotius is given the tribute of 'father of international law'. WS Knight, *The Life and Works of Hugo Grotius* (London, Sweet and Maxwell, 1925) 112. Aside from the three protagonists discussed below, brief mention should be made of Seraphin de Freitas, who also produced a scholarly reply to Grotius' claims. In *De Justo Imperio Lusitanorum Asiatico*, he argued that States could acquire rights of jurisdiction over the seas and that although the sea may be *res communis* this did not prevent exclusive claims of control. See CH Alexandrowicz, *An Introduction to the History of the Law of Nations in the East Indies, 16th, 17th and 18th Centuries* (Oxford, Clarendon Press1967) 67 *ff*.

[3] TW Fulton, *The Sovereignty of the Sea* (London, Blackwood, 1911) 106. A fuller account of this is period available in AT Walker, *History of the Law of Nations* (1899).

[4] See generally, MJ van Ittersum, *Profit and Principle: Hugo Grotius, Natural Rights Theories and the Rise of Dutch Power in the East Indies 1595–1615* (Boston, Brill, 2006).

Portugal advocated exclusive rights or a theory of *mare clausum*, which was founded upon papal authority and the above agreement between Spain and Portugal. In response, the Dutch East India Company called upon Grotius, who crafted a sophisticated and inclusive theory of ocean use or *mare liberum*.[5] This was his celebrated polemic, *Mare Liberum*.[6]

At around the same time, States were becoming increasingly aware of the socio-economic importance of fisheries. This resulted in exclusive fishing rights and maritime dominion becoming a key feature of States' foreign policy and, as such, a determinative factor in the development of the law of the sea.[7] The two principal protagonists were the Dutch and British. When James I ascended to the British throne he soon realised the parlous state of decay which had set into the English domestic fisheries, particular in the face of technically superior Dutch practice. As he carried with him the Scottish tradition of exclusive fishing, he vigorously pursued a policy of exclusive fishing rights that would secure the Dutch advantage for domestic fishing interests.[8] In 1609, he issued a proclamation that excluded unlicensed foreign fishermen from the coastal fisheries of Scotland, England

[5] Generally speaking, *mare liberum,* or the freedom of the seas, equated the oceans with a regime of *res communis.* In contrast, *mare clausum* proceeded on the basis that the seas were *res nullius*. *Res communis* suggests that the sea is common property and unsusceptible to private ownership, whilst *res nullius* suggests that the sea is the property of no one and so may be appropriated. If the seas were *res communis* then they were free to be used by all, thus giving rise to the doctrine of freedom of the seas. If the seas were susceptible to appropriation, then they were closed to other States once appropriated, eg by first occupation or divine mandate. However, care has to be taken with the use of these concepts. Throughout history different meanings have been attached to each concept and if nothing else, this has obfuscated doctrinal development. See the comments by DM Johnston, *The International Law of Fisheries* (New Haven, Yale University Press, 1965) 308–9.

[6] H Grotius, *Mare Liberum* 1608, trans RVD Magoffin (Oxford, Oxford University Press, 1916). An introductory note by James Brown Scott notes that *Mare Liberum* was actually part of a more comprehensive legal opinion written by Grotius titled *De Jure Praedae Commentarius* (1604), trans GL Williams (Oxford, Clarendon Press, 1950), in which the author defended the capture of a Portuguese galleon by the Dutch in 1602. This more comprehensive work was only discovered in 1864 and published in 1868.

[7] On the historical development of the law of the sea see Fulton, n 3 above; PB Potter, *The Freedom of the Seas in History, Law and Politics* (London, Longmans Green and Co, 1924); CJ Colombos, *The International Law of the Sea*, 6th edn (London, Longmans Green and Co, 1967) chs 1–2; DP O'Connell, *The International Law of the Sea*, 2 vols (Oxford, Clarendon Press, 1982, 1984); WE Masterson, *Jurisdiction in Marginal Seas* (New York, Macmillan, 1929); G Marston, *The Marginal Seabed: UK Legal Practice* (Oxford, Clarendon Press, 1981); PT Fenn, *The Origin of the Right of Fishery in Territorial Waters* (Cambridge, Massachusetts, Harvard University Press, 1926); CBV Meyer, *The Extent of Jurisdiction in Coastal Waters* (Leiden, AW Sijhoff, 1937); RP Anand, *Origin and Development of the Law of the Sea: history of international law revisited* (London, Nijhoff, 1983).

[8] Prior to James I, there was no question of the English claiming exclusive fishing rights. As early as 1274 fishermen from France and Flanders fished freely in English waters. In 1496, a treaty, subsequently known as the *Intercursus Magnus*, between Henry VII and the Duke of Burgundy reaffirmed the earlier freedom to fish in perpetuity. During the reign of Elizabeth this practice was continued despite a visible decline in the strength of domestic fishing industry, and it was only when James I ascended to the throne that the Scottish practice of excluding foreign fishermen from Scottish waters was made a 'British' practice. See generally, Fulton, n 7 above, s 1, chs II, III.

and Ireland. This marked the commencement of British pretensions to sovereignty over the seas which lasted both *de jure* and *de facto* over the next few centuries. The Dutch fishing industry, which had enjoyed a highly profitable fishing practice in English waters, rallied against this policy. This marked the start of a sometimes deadly struggle between the Dutch and English for commercial and fishing supremacy. Apart from generating numerous diplomatic exchanges on the question of fisheries, this political conflict resulted in three Anglo-Dutch wars between 1652 and 1673.[9] It is notable that recognition of British claims to exclusive fisheries and tributes from Dutch fishermen were key components of the resultant peace settlements, and would become an essential part of the *mare clausum* movement.[10] Just as Grotius was hired to advocate and justify the claims of the Dutch East India Company, so Welwood was motivated to espouse the claims of Scottish fishermen, and later Selden was asked by Charles I to advocate British claims to sovereignty in the Crown's interest.[11]

The doctrinal wrangle between *mare liberum* and *mare clausum* cannot be separated from its political context, not least because the intellectual debate was charged by both historical anecdotes and evidence, but because the authors stoking the fires of the debate were also active proponents of the interests of their respective governments. What may also be noted is that all the parties concerned felt compelled to ground their political claims in terms that were both morally and legal justifiable. There is thus a clear nexus between exclusive and inclusive maritime claims and more fundamental justifications of property or dominion, as illustrated in the previous chapters.

(b) Doctrinal and Theoretical Considerations

Emerging at a time when faith in a narrow and theologically driven view of natural rights was waning, Grotius' defence of the Dutch East India Company's maritime trading rights was a deft and compelling piece of legal advocacy. The reasons for this and its enduring appeal flow from Grotius' fusion of a conventional approach to law with a reason-based view of natural rights. His basic strategy was to deny any possible claims of authority over the oceans according to the traditional grounds for the acquisition of territory and supplant these claims to 'ownership of the seas' with a more compelling regime of ocean use based upon the

[9] These conflicts are treated in wonderful detail by Thomas Wemyss Fulton: *Ibid* chs X–XIII.

[10] It must be noted that in each case no agreement was actually reached: *Ibid*.

[11] Although the Dutch government hired Grotius to advocate their claim against Spain and Portugal, his arguments were also well-suited to the interests of the Dutch fishing industry, and were used to refute the nascent British claims to an exclusive littoral sea.

principle that oceans must be free to all mankind.[12] There are two particular aspects of his work that made his conclusions quite so compelling: his general methodology, and his adept use of property rights.

Grotius adopted two styles of argumentation in persuasive combination: the use of *a posteriori* reasoning, that is to say the induction of a general rule instantiated from a considerable body of evidence, and the use of a priori reasoning, or the deduction of specific rules from rational reflection. Grotius relied heavily on a substantial and disparate body of evidence to generate his general rule, and this reflected his appreciation of the increasing importance of conventional rules. However, this was second in terms of quality to his appeal to reason as a basis for the freedom of the seas. Grotius accepted that natural law possessed a divine origin to be revealed through scrutiny of sacred texts. He argued that it also possessed a form that could be revealed through rational reflection upon the human condition.[13] At a time when the authority of the church was under pressure from the rise in monarchical power, this gave his work a greater secular authority.[14] Against this general approach, Grotius then applied a particular account of property rights that was heavily dependent on the idea of necessity to show why the oceans could not be 'owned'.[15]

The truth of Grotius' a priori reasoning was proved by a weight of historical evidence from which he invited the reader to share his conclusions. For example, he argued that the practice of the Greeks and Roman law did not admit of dominium in the oceans, and so it can be inferred that we also should not admit of such dominium. This method was important because it allowed Grotius to demonstrate the logic of history; a logic which compelled certain outcomes.[16] His method is early recognition of the essential link between the proper legal regulation of the oceans and the practical reality of ocean use. As Buckle notes, it shows:

> how the facts of human nature, concretely realised in specific social situations (commonly drawn from ancient, especially 'sacred', history), so drastically constrain possible solutions to given problems that a particular outcome or outcomes can be seen to be inevitable.[17]

[12] See *Mare Liberum*, n 6 above, chs II, IV, V, and VII, respectively, for the rejection of discovery, conquest, occupation and prescription. See ch I for his positive claim about the freedom of the seas.

[13] *Ibid* 8.

[14] As O'Connell comments. by asserting this he 'presaged the elimination of the divine will from the system of *ius gentium*, and left occupation as the exclusive mode of original acquisition'. O'Connell, n 7 above, 12.

[15] Buckle shows the strong reliance of Grotius on the principle of self-preservation expounded by Thomas Aquinas in *Summa Theologica.* S Buckle, *Natural Law and the Theory of Property* (Oxford, Clarendon Press, 1991) 11–12.

[16] As Buckle, notes the a priori method was used to show 'that the acknowledged facts of history are not arbitrary or accidental, but necessary: *Ibid* 6.

[17] *Ibid*.

This anticipated the importance of a conventional approach to law which would eventually dominate legal discourse. Yet it also exposed him to powerful counter arguments. By relying on largely historical evidence Grotius was able to sustain his a priori conclusions but only in so far as history proved him correct, and such evidence was neither conclusive nor irresistible. As will be seen shortly, Selden drew quite antithetical conclusions from the same pool of sources. Moreover, this approach is susceptible to change. So as history moved on, it became apparent that many of the facts and assumptions underpinning Grotius' claims were no longer tenable.

Grotius gave property rights a central role in determining the limits of coastal State authority over both the sea and its resources. Before looking at his application of property in this context, we should highlight the pivotal role that necessity plays in delimiting property generally. The following extract from *De Jure Belli ac Pacis* is illuminating:

> [T]here remained among the neighbours a common ownership, not of flocks to be sure, but of pasture lands, because the extent of the land was so great, in proportion to the small number of men, that it sufficed without any inconvenience for the use of many ... Finally, with the increase in the number of men as well as of flocks, lands everywhere began to be divided, not as previously by peoples, but by families. Wells, furthermore—a resource particularly necessary in a dry region, one well not sufficing for many—were appropriated by those who had taken possession of them. This is what we are taught in the sacred history.[18]

As an account of the development of property in a primitive society, it is clearly marked by considerations of necessity. For Grotius, necessity is a key feature in the logic of history. Indeed, it was for him the first law of nature.[19] It committed him to a version of private property, one that had the purpose of guaranteeing as far as possible that 'whatever each had thus taken for his own needs another could not take from him except by an unjust act'.[20] According to Grotius, there was a crucial distinction between common property and private property. He argued that private property only emerged under certain conditions, conditions that could not be satisfied in respect of the oceans. For Grotius, goods that had been reduced into private property were initially goods that were at the disposal of a community.[21] The creation of private property first developed from the exercise of a universal use-right: the right of every person to use those goods that are necessary for their self-preservation.[22] This is important because

[18] Above n 32, II. 2. ii. 3.
[19] H Grotius, *De Jure Praedae Commentarius*, n 6 above.
[20] Buckle, n 15 above, 37.
[21] Initially all was common for 'nature knows no Sovereigns', *Mare Liberum*, n 6 above, 23.
[22] Initially food and drink, by virtue of their consumable nature, but evolving to all other things finite in nature: *Ibid* 24.

it invested property with certain moral conditions that preceded and patterned any conventional view of property.[23] Thus, if people are to use what they need, then the development of positive rules of property law must have evolved according to recognition that 'a certain kind of ownership was inseparable from use' and that the law of property must reflect this inseparability.[24] His approach meant that the scope of private property was limited in two ways. First, all property must be based upon possession or occupation (*occupatio*), which required that all moveable things be seized and that all immovable things be enclosed before they can be reduced into ownership.[25] If something cannot be seized or enclosed then it cannot become property.[26] Secondly, private property was limited to those goods that are exhaustible. If a thing could not be exhausted by promiscuous use, then it remained *res communis* and belonged to all men.[27] As the oceans could be neither bounded nor exhausted by use, Grotius concluded that they were common property in perpetuity, whether viewed from the point of navigation or fisheries.[28] Perhaps more importantly, the status of the oceans under natural law, understood as the product of reason, could not be altered by custom—or positive law.[29] Indeed, 'no usurpation no matter how long continued is competent to intercept the use of a *res communis.*'[30] Positive law could not run counter to the dictates of reason. Nevertheless, despite the apparently trenchant nature of these views, Grotius conceded the possibility of some ownership of the seas. So he restricted the object of his inquiry to the open seas and allowed for ownership of a limited band of coastal waters.[31] Thus, inland seas, bays, straits, or even the open seas visible from the shoreline, were not part of the *res communis*, and may be susceptible to exclusive control.[32]

[23] See S Coyle and K Morrow, *The Philosophical Foundations of Environmental Law* (Oxford, Hart, 2004) 16.

[24] Grotius, *De Jure Praedae Commentarius*, n 6 above, 24.

[25] *Ibid* 25–6.

[26] *Ibid* 27. This notion is still prevalent in contemporary approaches to property. As was pointed out in ch 2, if ownership is reducible to exclusivity, then ownership cannot exist where exclusivity is impossible, either for physical, legal or moral reasons.

[27] *Ibid* 28.

[28] *Mare Liberum,* n 6 above, 30.

[29] *Ibid* 52.

[30] *Ibid* 58.

[31] *Ibid* 37.

[32] In a later work, *De Jure Belli ac Pacis*, he conceded that the sea can be occupied by those who possess lands on both sides of it; provided that the area of sea is not so large that it cannot be deemed to part of the lands containing it. This concession has been much seized upon by his opponents, who argue that evidently and morally, Grotius could not deny at least some sovereignty over the sea. H Grotius, *De Jure Belli ac Pacis Libri Tres* (1625), trans FW Kelsey (New York, Oceana, 1964). Bynkershoek noted that the concession was made by Grotius in order to maintain his core principles and yet admit to contrary doctrinal evidence. C Van Bynkershoek, *De Dominio Maris* (1744), trans RVD Magoffin (London, Oxford University Press, 1923) 91.

At this point we see some of the contradictions that run through his writings, between his general support for private property and his exclusion of the oceans from it. Of course, Grotius' work was an exercise in advocacy, in which pragmatism invariably trumped principle and doctrinal coherence. No more so is this evident than in his treatment of fisheries. Grotius distinguished fish from the regime of the seas primarily because he regarded them as susceptible to appropriation by capture.[33] Furthermore, although both fish and the oceans may be termed *res nullius*, the latter have 'by the consensus of opinion of all mankind' been exempted from private ownership on account of their susceptibility to universal use.[34] Of course we should recall that fish, in their natural state, are not the property of any person and, in this sense, he treat them as synonymous with the regime of free seas. That said, Grotius distinguished the use of the ocean for fishing from its use for navigation, stating:

> that even if it were possible to prohibit some particular act of this kind, such as fishing (for it may be maintained that the supply of fish is, in a sense, exhaustible), it would in any case be impossible to prohibit navigation, through which the sea loses nothing.[35]

Fishing may, unlike navigation, diminish the common usefulness of the sea. However, he failed to develop this point and later argued that interference with the freedom of fishing is a more serious offence than an interference with navigation.[36] Such a position, whilst not wholly principled, was at least consistent with Dutch fishing interests.

From this brief retrospective on Grotius, the following points should be highlighted. First, Grotius' recognition of how the physical character of a thing may affect its susceptibility to particular forms of ownership was central to his argument. This foreshadows, albeit advanced upon a flawed assumption about the physical qualities of the oceans and its resources, the present argument that the physical attributes of a resource dictate how property rights apply thereto. Secondly, his natural rights-based approach to property invested it with a strong moral basis that justified certain limitations on property, and possibly duties.[37] According to this approach the notion of necessity was not an external limitation. It was an intrinsic component of any property system, and one that took priority over conventional rules on property. Finally, we might observe that despite his keen use of principle, Grotius was willing to sacrifice purity of principle for practical gain.

[33] Above n 6, 29.
[34] *Ibid*.
[35] Above n 19, 244.
[36] Above n 6, 38–8.
[37] Coyle and Morrow, n 23 above, 23–4

William Welwood, an eminent Scottish jurist, was the first to take up the gauntlet throw down by Grotius in *Mare Liberum*. In *An Abridgement of All Sea-lawes* he laid down the foundation for a theory of *mare clausum*.[38] Although his arguments were somewhat less sophisticated than those of Grotius, Selden subsequently adopted many of them in his seminal work, *Mare Clausum*.[39] As such, the influence of these arguments perseveres and they merit attention, especially to the extent that they take issue with the core tenets of Grotius' *mare liberum*.

Welwood's principal aim was to justify the exclusive or prioritised fishing rights of coastal States, and to this end he argued for recognition of proprietary rights in coastal waters. Crucially, he took issue with the suggestion that the resources of the sea were inexhaustible. Drawing on his experience of the Scottish fishing industry which had been detrimentally affected by the superior trawling techniques of the Dutch, he claimed that such a detrimental effect could only exist if the resources of the sea were in fact exhaustible.[40] He then continued to presage the dangers of overfishing for the local community and argued that exclusive ownership was necessary in the face of this threat:

> the primitive and exclusive right of the inhabitants of a country to the fisheries along their coasts; one of the principle reasons for which this part of the sea must belong to the littoral State being the risk that these fisheries may be exhausted as a result of the free use of them by everybody.[41]

Conservation, albeit anthropocentrically conceived, justified the coastal State's primary and exclusive right to the fisheries along its coasts.[42] Welwood's second line of argument sought to refute Grotius' claim that the sea could not be subject to occupation. He was perhaps too far ahead of his time in that he recognised that the fluidity of the sea was no bar to occupation and this could be achieved by its division into marches and boundaries by the 'ordinary methods used by navigators'.[43] In short, the physical nature of sea was no bar to ownership. Although Welwood conceded that the

[38] W Welwood, *An Abridgment of All Sea Lawes* (London, 1613). Welwood consolidated his arguments in a subsequent book—*De Dominio Maris* (Cosmopoli, 1615, republished in The Hague, 1653). The reliance of Welwood on scripture was a serious weakness in the face of Grotius's enlightened use of reason, making the latter's arguments far more compelling. Yet, it is perhaps significant that Welwood drew the only reply from Grotius among the numerous authors attacking *Mare Liberum*. Fulton, n 7 above, 356.

[39] J Selden, *Mare Clausum* (1635), trans M Needham (London, 1652).

[40] See Fulton, n 3 above, 355.

[41] *Abridgement of all Sea-lawes*, ch 26. Reproduced in Colombos, n 7 above, 147.

[42] This appears to have been a particularly Scottish school of thought, which accorded proprietary interests in the coastal waters to the coastal State. This position is also evident in the works of Sir T Craig, *Jus Feudale, Tribus Libris Comprehensum* (1603) 103. Cited in Fulton, n 3 above, 357.

[43] Although he does not define the limits of such property rights in the sea he refers to the 100-mile limits adopted by Bartolus: Fulton, *Ibid* 353.

oceans were to be free for navigation, he disputed the priority that Grotius attributed to it. Instead, he argued that fisheries conservation was by far the more important concern, and so it should dictate the general regime.[44]

Like Grotius, Welwood's arguments were underpinned by the notion of necessity. However, for Welwood regulation of the sea was to be justified by reference to the particular and irrefutable needs of the coastal communities rather than rights of navigation. In short, Welwood's entire rationale for extending property rights into the sea was driven by a desire to secure exclusive fishing rights, something that is echoed in contemporary claims to exclusive fishing rights. Although each author reflected on the qualities of each resource and moral justification for excluding access, such considerations were outweighed by the overarching political expediency of either prioritising fisheries or navigation as a matter of national policy. Despite Welwood's insights into over-fishing and maritime boundaries, his work is as much an apology for Scottish fishing interests as Grotius' treatise was for Dutch interests.

The ocean enclosure cause was soon taken up by Selden, who vigorously advocated that the sea was susceptible to private dominion and sought to justify British sovereignty over the 'British seas'.[45] Unlike Welwood, who was principally concerned with fisheries, Selden was interested in the broader question of maritime dominion, although this necessarily included a proprietary element.[46] Selden realised the sophistication of Grotius' arguments and strove to refute them on the same level. His arguments proceeded according to the same broad methodology as Grotius. Thus he used extensive anecdotal evidence to reaffirm a priori assertions regarding juridical status of the sea. Here it is worth emphasising how Selden's alternative account of the physical attributes of the oceans formed a key element of his a priori theory.

Selden began by arguing that the physical nature of the sea provided no reason to prevent States establishing maritime dominion:

> And whay Shores should not bee called and reputed lawful bounds, whereupon ground a Distinction of Dominion in the Sea, as well as Ditches, Hedges, Meers, rows of Trees. Mounds and other things used by surveyors in the bounding of Lands, I cannot fully understand.[47]

[44] In making this claim, he took issue with the Grotius' outrage about interference with free fishing, and to this extent Welwood was the first author to advocate something akin to preferential rights for the coastal States: *Ibid* 355.

[45] The issue of maritime dominion was raised by another notable writer of the period, but was not explored in such depth as done by Selden. See Sir John Boroughs, *The Sovereignty of the British Seas* (London, 1633).

[46] Selden contended that in general dominion over the sea was legally permissible. Such dominion was a full title and no other title, such as jurisdiction, was to be admitted. As such the 'closed sea' was privately owned and so excluded others from use of what was originally perceived as common. *Mare Clausum*, n 39 above, preface. This right of exclusion could be applied to fishing: *Ibid*, bk I, ch 22.

[47] *Ibid* 135.

Like Welwood, Seldon claimed that the sea could be divided according to nautical science or by reference to identifiable geographic features such as rocks or islands.[48] This view of the sea as finite and divisible extended to the resources therein:

> But truly we often see that the Sea itself, by reason of other men's Fishing, Navigation and Commerce, becomes the wors for him that owns it and others that enjoie it in his rights; so that the less profit ariseth, then might otherwise bee received therby. Which more evidently appears in the use of those Seas, which produce Pearls, Corral and other things of that kinde.[49]

So, if the sea could be bounded like land and if the inexhaustibility of the sea was cast in doubt by fishing efforts, then it was necessary for States to establish dominion over the sea in order to protect their own interests. It should be noted that his focus was not limited to inland seas, such as the Mediterranean, Baltic and Adriatic seas, but also included 'the main Ocean or Out-land seas'.[50]

In support of this approach, Selden argued that the ancient law of the community of goods had become modified so as to allow private ownership. This was evidenced by the practice of nations.[51] In support of this contention Selden interpreted the scriptures as permitting a private dominion of the sea, thus providing divine support for his *mare clausum*. Not only did divine law permit dominion of the sea, but so too did 'Natural Permissive Law', which is derived from the 'Customs and Conventions of the more civilised Nations'.[52] A startling mass of evidence was produced to support these arguments, and included the practice of many modern States. For example, he noted that the Venetians enjoyed sovereignty in the Adriatic, the Genoese in the Ligurian Sea, the Tuscans and Pisans in the Tyrrhenian Sea, the Poles in the Baltic, and the Turks in the Black Sea.[53] He even referred to the claims of the Spanish and Portuguese over the 'vast oceans', but discounted them on the grounds that they could not effectively maintain control over such great areas. In this Selden exceeded the conventional proof supplied by Grotius to show that the sea could not be appropriated.[54] Selden did concede that the prohibition of free navigation would

[48] *Ibid*, ch 22.
[49] *Ibid*, bk 1, p 141.
[50] *Ibid*, bk 1, p 12.
[51] *Ibid*, bk 1, ch 3.
[52] *Ibid*.
[53] Noted by Fulton, n 7 above, 371.
[54] To this extent Bynkershoek found that he could add nothing to Selden's contention that nothing in the law of nations opposes sovereignty over the sea: n 32 above, 94. In empirical terms it has been argued that Selden offered a more faithful exegesis of past practice, whereas Grotius aspired more to the influencing of future conduct. See Potter, n 7 above, 64. Also Fulton, who notes that '[i]n learning at least he far surpassed Grotius, and he was not inferior to his illustrious contemporary in ingenuity of reasoning. It was Selden's misfortune that the cause he championed was moribund, and opposed to the growing spirit of freedom throughout the world.': n 7 above, 369.

be contrary to the dictates of humanity, but held that such a concession did not derogate from dominion, just as a right of passage over land did not derogate from the owner's proprietary right.[55]

As Brown notes, Selden too is better regarded as a writer whose erudition was motivated by an a priori assumption based on his country's economic and political interests.[56] Thus, his doctrinal defence of *mare clausum* can be seen as reflecting the marked change in policy between Queen Elizabeth and King James. For a short period *Mare Clausum* carried substantial influence because it was the perfect foil for the expansionist maritime policy of King Charles I. However, it was soon overtaken by history, and as trade became more important to Britain, so claims to dominion over the seas lapsed in favour of the freedom of the seas. In any event, the British navy became so supreme that Britain ceased to require any moral, theoretical or *de jure* authority to reinforce its *de facto* authority. By the time of the Treaty of Utrecht 1713, and after decades of struggling against the strength of the British and French, the Dutch fishing industry was in ruins:

> Thus the part of the pretension to the sovereignty of the sea which related to the fisheries along the British coasts was gradually solved, the British fisheries, now the greatest in the world, rising on the ruins of the Dutch.[57]

In its place the British industry flourished. Like the navy, the sheer strength of the British industry meant that little State interference was necessary to protect it and as a consequence claims to sovereignty on behalf of fisheries fell into desuetude.

Despite the intellectual dimension of this debate, it was markedly shaped by the political ambitions of the authors. It was a pragmatic response to State's interests, rather than the development of a wholly principled regime.[58] The nascent law of the sea was merely a reflection of the underlying tension between the competing maritime powers. Thus the law in force marked the point where political compromise had been achieved or where the balance of power was located. However, even within this pragmatic domain, property concepts were the principal tools of protagonists. Their use would influence much of the subsequent development of the law and it is possible to discern certain principles and concepts formulated by the protagonists, which have retained a lasting significance. First, and most crucially, all the protagonists used property rights to conceptualise their system of ocean law. Secondly, there was a

[55] N 39 above, ch 22.

[56] ED Brown, *The International Law of the Sea* (Aldershot, Dartmouth,1994) 7.

[57] Fulton, n 7 above, 534.

[58] Perels characterises Grotius's work as '*tendenschrift*' (biased writing). This description is equally applicable to Welwood and Selden: F Perels, *Das Offentlich Seerecht* (1882), cited in Potter, n 7 above, 59.

fundamental recognition that the physical characteristics of the oceans and ocean resources were determinative of any property rights regime attaching thereto. Of course, there was absolute disagreement about what these essential physical characteristics were. This is a feature of debates about the regulation of natural resources that has continued to evolve alongside our understanding of the natural world. Thirdly, the limits of any system of property were dictated largely by considerations of necessity, and to this extent the authors concurred. As noted earlier, the natural law-based method of legal reasoning was still dominant at this time and resort to some conception of necessity is not surprising given that the above authors were drawing from the same biblical source material. The particular use of property by the protagonists foreshadowed Locke's assertions about the necessities of life. This parallel in conceptual analysis and the obvious way in which property concepts have underpinned claims about the juridical nature of the law of the sea is something that can be traced through subsequent developments.

3. FREEDOM OF THE SEAS

By the 18th century Grotius' *mare liberum* had been vindicated by State practice and the most extravagant claims to sovereignty over the oceans had been abandoned.[59] The vast oceans remained open and were not susceptible to appropriation by any State. However, despite the polemic nature of the above debate, the arguments were not wholly irreconcilable. Thus Grotius reserved his strongest claim to a *mare liberum* in respect of the high seas, whereas Selden's *mare clausum* was chiefly concerned with the 'inner seas'.[60] Once this had been acknowledged, the way was open for the development of two separate regimes for the high seas and territorial waters. Thereafter, the conception of the high seas as an area legally distinct from coastal waters became firmly established. Of course, what then became crucial was how these two areas were delimited.

(a) Background

By the 19th century, Great Britain was undeniably supreme at sea and it pursued a *laissez faire* policy towards the use of the sea.[61] This favoured

[59] As Cockburn CJ in *R v Keyn* remarked, these 'vain and extravagant pretensions' to sovereignty had been abandoned: [1876] 2 Exch D 63, 175.

[60] *Mare Clausum*, n 39 above, bk 2, ch 30.

[61] The industrial revolution demanded a steady flow of goods and raw materials into Europe to supply the new mills and factories. It also required an expansion of trade to new markets for the goods being produced. See Anand, n 7 above, 124–35.

freedom of the high seas because in the absence of constraining legal rules, Great Britain was able to exert its political influence through sheer force of presence at sea. This became quite manifest in British foreign policy. For example, in 1821 Britain aided the United States against Russian attempts to debar foreign vessels from a zone extending up to 100 miles from the shores of Alaska.[62] The legal principle of freedom of the seas was then incorporated into the subsequent treaty settlement.[63] It was then reaffirmed in a number of important cases, such as *Le Louis*[64] and *The Marianna Flora*.[65] The freedom of the seas reached its zenith during the *Behring Fur Seals Arbitration* (1886).[66] Britain opposed the United States' extensive claims to jurisdiction over the seal fishery in the Behring Sea. Ultimately, the tribunal accepted the British argument and firmly rejected American conservation-based arguments for unilateral control of fisheries beyond the territorial sea.[67] Freedom of the high seas received further implicit reinforcement by dint of the virtual absence of treaties purporting to regulate fisheries in the high seas prior to the mid-20th century.[68]

Even into the 20th century, the major maritime powers tended to prioritise economic and security interests and pursued a policy of freedom of the high seas. During this period, codification emerged as means of consolidating and clarifying universal rules for ocean use. However, although such instruments embodied the principle of freedom of the seas, there was increasing recognition of the need to ensure that such use was neither unreasonable, nor infringed the common interests of all

[62] See O'Connell, n 7 above, 664.

[63] Treaty signed at St. Petersburg between Russia and Great Britain, 16–28 Feb 1825 12 *BFSP* 38.

[64] [1817] 2 Dods 210.

[65] As Judge Story held, 'upon the ocean, in time of peace, all possess an entire equality. It is the common highway of all, appropriated to the use of all, and no one can vindicate to himself a superior or exclusive prerogative there.' [1826] 1 Wheaton 1, 43.

[66] For a more detailed discussion see n 121 below and the accompanying text.

[67] JB Moore, *History and Digest of International Arbitrations to which the United States has been a Part*y (1898) 755, 917 *ff* .

[68] Although there were a number of treaties in force during this period they were concerned with rights and obligations in the narrow band of coastal waters, rather than the open seas. Such treaties concerned themselves with activities with a three-mile, or exceptionally a six-mile, zone. See the Anglo-French Fisheries Convention 1839, 27 *BFSP* 983; the Treaty of Guadalupe Hidalgo 1848, 37 *BFSP* 567; the Anglo-Belgian Fisheries Convention 1852, 41 *BFSP* 7; the Anglo American Reciprocity Treaty 1854, 44 *BFSP* 25; the Anglo-French Fisheries Convention 1867, 57 *BFSP* 8; the North Sea Fisheries Convention 1882, 73 *BFSP* 39; the Anglo-Danish Fisheries Convention 1901, 94 *BFSP* 29; the Anglo Finnish Liquor Convention 1933, 142 *LNTS* 187. Arguably, the Webster-Ashburton Treaty 1842, 30 *BFSP* 360, is an exception to this in that it relates to the abolition of unilateral actions against trade. However, the underlying thrust of this treaty was to reaffirm the freedom of the high seas. The same may be said of the Convention for the Protection of Submarine Cables 1884, 163 *CTS* 391.

States. Eventually, this resulted in Article 2 of the Convention on the High Seas 1958,[69] which was subsequently embodied in the 1982 Convention.[70] Of course, by this time the absolute freedom of the seas had yielded considerable ground to the resource regimes of the continental shelf and exclusive economic zone.

(b) Doctrinal and Theoretical Considerations

In the three centuries following the Grotian debate, the freedom of the high seas received surprisingly little detailed treatment in academic writings. The growth of mercantilism from the 17th century onwards meant that there was little reason to contest or discuss the juridical nature of the high seas, although property concepts were still the tool of choice when this occurred. The strongest *raison d'être* for freedom of the high seas was as a medium for communication and this dominated academic opinions on the high seas. De Vattel, in his seminal work *Le Droit des Gens*, stated that no-one had the right to appropriate the high seas because

> it is clear that the use of the high seas for purposes of navigation and fishing is innocent in character and inexhaustible.[71]

However, this conviction in the inexhaustible nature of the ocean resources was already in steady decline, and so the *ius communicationes* became the principal rationale for the freedom of the high seas.[72] The lack of detailed treatment of the freedom of the high seas was principally due to the relatively settled content of the law, but also because the legal method had moved away from natural law to positivism. This meant that doctrinal exposition of State practice was less decisive in dictating the content of the law and less likely to generate polemic discourse to the scale of the Grotian debate. In any event, freedom of the sea was in line with the interests of the maritime powers and so the most important State practice was

[69] 450 *UNTS* 11. It provides that: 'The high seas being open to all nations, no State may validly purport to subject any part of them to its sovereignty. Freedom of the high seas … comprises, inter alia, both for coastal and non-coastal States: (1) Freedom of navigation, (2) Freedom of fishing, (3) Freedom to lay, submarine cables and pipelines; and (4) Freedom to fly over the high seas. These freedoms, and others which are recognised by the general principles of international law, shall be exercised by all States with reasonable regard to the interests of other States in the exercise of their freedoms of the high seas.'

[70] (1982) 21 *ILM* 1245.

[71] E de Vattel, *Le Droit des Gens* (1758), trans Fenwick, *The Classics of International Law* (Washington, Carnegie Institution, 1916) 106–7.

[72] Thus Puffendorf, Grotius' most capable successor in the natural law tradition, conceded that the seas might be exhausted by promiscuous use: S Puffendorf, *De Jure Naturae et Gentium Libri Octo* (1688), trans Oldfather (Oxford, Clarendon Press, 1934) 561–2. Although he did not set out the extent of such rights, he acknowledged the preferential interests of the coastal communities in the wealth and resources of the adjacent seas: *Ibid*.

relatively consistent. During the 18th century even the most influential natural law writers of the time, such as Wolff and Vattel, accorded State practice a value as high as that of natural law.[73] Accordingly, the rules of international law developed in response to the dictates of States rather than natural law. This is significant because if States act according to their own interests, as modified by the systemic consequences of the same, then the resulting law will, inherently, be the result of pragmatic self-interest rather than principle.

Early 19th century writers were more concerned with the problems of belligerency and neutrality at sea rather than communication or natural resources. As such they provide little assistance to the present discussion of natural resource regulation. What can be noted is the fact that much doctrinal opinion was exceptionally political as opposed to legal in character during this period.[74] The rise of the monarchy and the modern concept of the State, along with the ascension of social contract theory, sounded the death knell for natural law. In line with general developments in legal technique, international law method began to focus almost exclusively on customary law and treaty law; these being the voluntary assumption of obligations by States. As such, the broader policy and moral considerations that infused the earlier doctrinal accounts of the law of the sea were marginalised, at least in the prescriptive process.

Freedom of the high seas enjoyed support from the leading writers on the law of the sea during the 20th century. Thus, Colombos stated that the high seas cannot be subject to a right of sovereignty because it is a necessary means of communication between nations and that its use is an indispensable element of international trade and development.[75] Similarly, Gidel maintained that the best argument for a freedom of the high seas was the desire for freedom of international trade.[76] Even McDougal, writing from a policy orientated perspective, made a strong plea for States to consider the benefits of inclusive use of ocean spaces instead of the short-term gains based on exclusive claims to ocean use.[77]

In a systematic review of the development of the high seas, O'Connell reveals five theories that were advanced to explain the juridical nature

[73] See RR Churchill and AV Lowe, *The Law of the Sea*, 3rd edn (Manchester, Manchester University Press, 1999) 5.

[74] Indeed, Potter considered the writings on the freedom of the seas during the Napoleonic period by authors such as Barère, Rayneval, Lord Liverpool and Barton to be imbued with a more acute political bias than any of their predecessors. Potter, n 7 above, 76.

[75] CJ Colombos, *International Law of the Sea*, 3rd edn (London, Longmans Green and Co, 1954) 40.

[76] GC Gidel, *Le Droit International Public de la Mer*, (1932,) vol 2, 25–27.

[77] MS McDougal, 'Crisis in the Law of the Sea: Community Perspectives Versus National Egoism', (1958) 67 *Yale Law Journal* 539.

of the high seas: *res nullius*, *res communis*, *res publica*, the theory of juridicity and the theory of reasonable use.[78] Of these the first three are largely derived from property concepts. Thus the Roman law derived theory of *res nullius* rendered the seas susceptible to appropriation and this appears to have been the predominant view of commentators from the 17th century onwards.[79] However, what prevented them from being appropriated was the fact that States had not established the conditions for the exercise of sovereignty over the high seas. Characterisation of the high seas as *res nullius* was also appealing because it recognised that there was no centralised controlling agency for the high seas, which a regime of *res communis* implied.[80] Under the theory of *res communis* the high seas were common to all and not susceptible to unilateral appropriation by States. All States could use the high seas, but no State could claim exclusive authority over them. However, as O'Connell notes, application of this Roman law concept was problematic because of its inherent ambiguity.[81] Thus it may refer to things incapable of being owned and things publicly owned. Despite this failing there was plenty of support for this theory.[82] Arguably, the pull towards *res communis* is strongest when the perceived common interest in the use of the high seas was threatened. This perhaps accounts for the characterisation of the sea-bed of the high seas as *res communis* in the 20th century and the subsequent claims to it as the common heritage of mankind under the auspices of the International Seabed Authority. O'Connell doubts whether characterisation of the oceans as *res publica* can be distinguished from either *res nullius* or *res communis* and notes that commentators adopting the phrase might just as easily fall into either approach.[83] The common element in these approaches appears to be the idea that whilst the high seas may once have been incapable of appropriation this is no longer the present case, and accordingly 'the exercise of power over it effectively requires a degree of co-ordination of the different usages'.[84]

[78] O'Connell, n 7 above, 792 *ff*.

[79] Cavaré notes that this view was the widest held. L Cavaré, *Le Droit international positif*, 3rd edn (1967) vol 2, 718; cited in O'Connell, n 7 above, 793. The nature of the sea as *res nullius* explains how areas of coastal waters may be brought under the exclusive control of the coastal State. See s IV below.

[80] O'Connell notes that this approach is favoured by Rousseau, Fauchillee, Cavaré, Westlake and Lauterpacht: *Ibid* 793.

[81] *Ibid*.

[82] O'Connell notes the support of Dahm, Colombos, Liszt, Dupuis, Balladore Pallieri, Delbez, Hurst, Mouton and Oppenheim: *Ibid* 794.

[83] He refers to Jiménez de Aréchaga and Georges Scelle in this respect, without specifying where. *Cf* Bos and Bierzanek who argue for public domain on slightly distinctive grounds: *Ibid*.

[84] The analogy is often made between the public utility nations enjoy in respect of the seas and public utility that individuals enjoy under municipal law in respect of parks, highways or beaches.

If *res publica* is distinct from *res communis* or *res nullius*, then it must be because it focuses on a coordination of individual State competence and collective control measures, rather than presupposing the legitimacy of either. Yet if this is the case, then, as O'Connell concludes, it is 'a reflex notion of the equality of States rather than an autonomous notion of *vacuum juris*'.[85] This theory marks a move away from a simple reliance on property concepts, a step that was taken further with Gidel's theory of juridicity, which simply accepted that the activities could be formally regulated.[86] Gidel appreciated the need to legally regulate the oceans, and he noted that States did in fact exercise jurisdiction beyond territorial frontiers, at least in respect of their nationals and vessels flying their flag.[87] His theory was a reaction to the possibility of establishing a supranational authority over the oceans, and in essence is reducible to a notion of coordinated flag State control. As such it does no more than restate the question about the limits of State authority that underlies the debate about the juridical nature of the high seas. In the 1960s McDougal and Burke developed a theory of reasonable use to account for the regulation of the high seas.[88] For them, law of the sea was to be regarded as a process: evolutionary and mutable, developing according to the prevailing interests and policies of States. Within this process, they recognised the opposing nature of exclusive and inclusive claims to ocean space between coastal States and the international community. This tension was to be resolved according to the notion of reasonableness.[89] Exploring the relationship between these two positions very much echoes the previous exploration of the relationship between private rights and public interests. However, what is reasonable is very subjective and this is evident in the idiosyncratic view of reasonable use put forward by McDougal elsewhere.[90] Thus this approach was used to support and justify expanded military uses of the sea in accordance with US maritime policy.[91] However, as O'Connell points out some uses of the sea, such as nuclear testing, make it difficult to see how a strict delimitation between inclusive and exclusive uses of the sea can be made in practice.[92]

[85] O'Connell, n 7 above, 794.
[86] GC Gidel, *Le Droit international public de la mer* (1932–4) vol 1, 213 *ff*.
[87] *Ibid* 229.
[88] MS McDougal and WT Burke, *The Public Order of the Oceans* (New Haven, Yale University Press, 1962) 37–8, 185–7.
[89] See also the comments by Francois, Special Rapporteur for the ILC during the drafting of the Geneva Conventions on the law of the Sea. (1953) *Ybk ILC*, vol I, 102–3.
[90] MS McDougal, 'The Hydrogen Bomb Tests and the International Law of the Sea' (1955) 49 *AJIL* 356, 361.
[91] *Ibid*.
[92] O'Connell, n 7 above, 795, 810–813.

To summarise, the majority of commentators in this period regarded the seas as free for the use of all States, except for a narrow band of coastal waters subject to exclusive State control. Given the growth in the positivist method of international law, the emphasis on freedom of the seas as a fundamental legal principle was only to be expected, reflecting as it did the prevailing interests of the most influential maritime powers. However, despite agreement about the broad principle, there remained stark doctrinal divisions about the underlying juridical nature of the high seas. Although property concepts, such as *res communis*, were used to describe and provide a conceptual structure for State practice, they were used inconsistently, and with little conviction. This should not be surprising. There was simply no need to provide a thoroughgoing juridical account of what was in essence an open-access regime. Only once Grotian assumptions about the boundless and bountiful physical nature of the oceans came under challenge was there a need to subject the oceans to more restrictive regulation. For the open seas, this would occur in the 20th century. For coastal waters this would occur much sooner.

4. CONSOLIDATING COASTAL STATE CONTROL: TERRITORIAL SEAS

The 18th and 19th centuries were marked by the emergence the 'Great Powers' in Europe, along with their global empires and an expansion in maritime trade. Accordingly, the freedom of the sea was of paramount concern and this policy prevailed over the next few centuries. Yet, despite general acceptance of *mare liberum* as the principal basis of ocean regulation, it was never disputed that at least a small marginal belt of waters could become subject to exclusive coastal State control. As we noted above, Grotius conceded that a doctrine of territorial waters could be sustained according to the principle of effective occupation. Thus a State could assert exclusive control over a limited band of coastal waters so long as effective occupation continued.[93] Academic opinion began to consolidate and develop the idea that States could acquire sovereignty over limited parts of the sea, and in particular over a narrow belt of coastal waters adjacent to the coastline. From this the concept of the territorial sea emerged. However, what is notable about developments in this period is that although doctrinal analysis of the law remained influential, it was less so as a source of law. In the positive legal tradition, law was to be discerned through conventional means, rather than by reasoned

[93] H Grotius, *Defensio capitis quinti Maris Liberi oppungnati a Guileimo Welwodo*, translated in *Bliotheca Visserana*, vol 7, 187. Cited in DP O'Connell, 'The Juridical Nature of the Territorial Sea' (1971) 45 *BYIL* 304, 314–5.

reflection. Accordingly the basis upon which exclusive legal rights over ocean spaces and resources could be acquired changed.

(a) Background

With the emergence of positivism as the predominant school of thought, State practice became the principal source of law. The territorial sea appears to have two distinct sources in State practice: the practice of those States claiming exclusive security zones in coastal waters by reference to the cannon shot rule and the practice of certain Scandinavian States claiming exclusive fisheries zones.[94] Reference to the cannon shot rule appears to have made its first appearance in 1610, when the Dutch advanced it during a fishing dispute with the British.[95] According to this rule, the range of cannon shot marked the limits of coastal States' ability to control their adjacent waters effectively, and so determined the limits of their dominion. Consistent with the theory of *res nullius*, the sea could be acquired by effective occupation. Effective occupation could only be exercised from the coast and this was symbolised by the extent to which the coastal State could actually defend its claims. This approach was a key feature of French, English, Dutch and Russian practice during the 17th and 18th centuries.[96]

From as early as 1598 Denmark had claimed and maintained a two-league belt of territorial waters contiguous to its Icelandic coastline.[97] This was done to secure Danish fishermen the economic benefits of these resources and prevent encroachment by foreign fishermen. This practice of enforcing an exclusive fisheries zone continued with very little objection from other States. Indeed, on occasion it gained some degree of positive support. In 1618, James I expressly prohibited Scottish fishermen from fishing within sight of the Isle of Faeroe and subsequently made representations to the Dutch prohibiting them from fishing within sight of his Majesty's land.[98] In 1636 a Norwegian ordinance exclusively reserved a coastal belt of some four to six leagues around Norway to Norwegian fishermen.[99] These claims to exclusive fishery zones paralleled the development of the cannon-shot

[94] There is excellent coverage of this by WL Walker, 'Territorial Waters: the Cannon-Shot Rule', (1945) 22 *BYIL* 210. Also HSK. Kent, 'Historical Origins of the Three Mile Limit', (1954) 48 *AJIL* 537.

[95] See Fulton, n 7 above, 155–9.

[96] See Walker, n 94 above, 213–23. Also, Fulton, *Ibid* 67–73.

[97] Indeed Denmark had never let its claims to *dominium maris* in its adjacent waters to fall into desuetude. See Walker, n 94 above, 538.

[98] Register of the Privy Council, Scotland, vol XI, 328–330. This peculiar Scottish practice, known as 'land kenning', established an exclusive fishery between 14 to 28 miles from the coast, depending on the range of vision. It appears to have dated back to the 15th century. Fulton, n 7 above, 77.

[99] See Fulton, *Ibid* 528.

rule until the end of the 18th century.[100] However, under pressure from other European States this belt was reduced to approximately three nautical miles, a distance more consistent with the cannon shot rule.[101]

The American Neutrality Act 1794, which established a three nautical mile zone around the US, is usually regarded as the point when the cannon-shot rule crystallised into a zone with an arithmetical form of delimitation.[102] On this side of the Atlantic, three important decisions by Lord Stowell in *The Twee Gebrodoeders*,[103] *The Vrow Anna Catharina*,[104] and *The Anna*,[105] marked the emergence of a distinct three-mile zone in British practice. The principal consequence of a general acceptance of the three nautical mile limit was a decline in the need to demonstrate actual physical occupation or symbolic occupation. This move away from occupation to reliance on positive law spurred the negotiation of a spate of international agreements that included delimitation provisions. These agreements included the Anglo-American Fisheries Convention 1818, which confirmed the link between the security zone and fisheries protection by establishing a coterminous fisheries protection zone of three nautical miles,[106] the Anglo-French Fisheries Conventions of 1839 and 1867,[107] and the North Seas Fisheries Convention 1882.[108] During the 19th century, British courts maintained and consolidated the idea that the Crown enjoyed property rights in the adjacent seas. The most significant of these decisions are *Gammell v Commissioners of Woods and Forests*[109] and the *Whitstable Fisheries* case.[110] In the former, the House of Lords ruled unanimously that the Crown had an exclusive proprietary right in salmon fishing in the open sea off the coasts of Scotland. Lord Wensleydale referred to the sea as 'belonging to the coast of the country' and 'under the dominion of the country … and so capable of being kept in perpetual possession.'[111] In the *Whitstable Fisheries* case, Lord Chelmsford held that every State

> is considered to have territorial property and jurisdiction in the seas which wash its coast within the assumed distance of a cannon-shot from the shore.[112]

[100] See, eg, Art 13 of the Treaty of Utrecht 1713, which suggests that the exclusive fishery was not strictly linked to the cannon shot rule. O'Connell, n 7 above, 511.

[101] Walker, n 94 above, 227 *ff*. Kent, n 94 above, 550 *ff*.

[102] O'Connell, n 7 above, 131. Some commentators consider practice to have consolidated the arithmetic measurement of the territorial sea earlier than this act. However the specific date is not crucial for present purposes. See further Kent, n 94 above, 551–2.

[103] (1800) 3 C Rob 162; 165 ER 422.

[104] (1803) 5 C Rob 15; 165 ER 681.

[105] (1805) 7 C Rob 373; 165 ER 809.

[106] (1818) 6 *BFSP* 3.

[107] Above n 68.

[108] *Ibid*.

[109] (1859) 3 Macq 174.

[110] *Gann v The Free Fishers of Whitstable* (1864–5) 11 ER 1305.

[111] Above n 109, 198.

[112] Above n 110, 218.

American jurisprudence developed in a similar vein, at the very least acknowledging the Crown's rights of property in the British seas.[113]

From this point on there is little doubt that States were entitled to a zone of territorial waters, and that the rights in these waters were couched in proprietary terms. Indeed, the celebrated case of *R. v Keyn*, and the British government's subsequent reaction to the court's surprising decision, supports the idea that the State's rights in the territorial sea flow, not from international law but from the domestic exercise of power.[114] The case concerned the Crown's jurisdiction to try a German national for manslaughter arising out of a collision between a German vessel and a British vessel in the British territorial sea. Keyn, the German captain of the *Franconia*, was tried and found guilty of manslaughter at first instance. He appealed on the grounds that the Crown lacked jurisdiction to try a foreigner for an offence occurring on a foreign ship on the high seas. In response, the Crown argued that the offence had occurred within the British realm and so within British jurisdiction. The Court, by a close majority of seven to six, allowed the appeal. Churchill and Lowe suggest that the only common thread running through the individual opinions was that although Great Britain might be entitled to claim a territorial sea, it had not in fact done so.[115] Until this was done by Parliament, Great Britain could not extend jurisdiction over foreigners beyond British shores. However, O'Connell, after scrutinising the individual judge's opinions, comes to the conclusion that there is no reason for concluding that the ratio of the case was that the territorial sea was outside the territory of England.[116] He notes that the opinions of the individual judges were highly fragmented, and based on

[113] See, eg, *Corlfield v Coryl*, (1823) 6 Fed. Cas. 546, No. 3230; *Weber v Board of Harbor Commissioners*, (1867) 18 Wall 57, 65; *Shively v Bowlby*, (1894) 152 US 1, at 13; *Manry v Robinson*, (1932) 122 Tex 213.

[114] *R v Keyn* (1876) 2 Ex. D 63. An excellent discussion of the case is to be found in G Marston, 'Crimes on Board Foreign Merchant Ships at Sea: Some Aspects of English Practice' (1972) 88 *LQR* 357.

[115] Churchill and Lowe, n 73 above, 73.

[116] O'Connell, n 7 above, 100–6. He continues to note that the decision paid scant regard to a long line of authorities from as far back as 1821 that proclaimed the Crown's right of property in coastal waters. *Blundell v Catterall* (1821) 5 Barn & Ald 268, 284 and 289; *Scratton v Brown* (1825) 4 B & C 485; *Gifford v Lord Yarborough* (1828) 5 Bing 163; *The King v Lord Yarborough* (1828) 2 Bligh (NS) 147, 157; *Benest v Pipon* (1829) 1 Knapp 60; *In re Hull & Selby Railway* (1839) 5 M & W 327; *sub nom Smith v Earl of Stair* (1849) 6 Bell's App Cas 487; *A-G v Chambers* (1854) 4 De GM & G 206, 213; *Gann v The Free Fishers of Whitstable,* (1864–5) 11 HLC 192, 218; *Gammell v Commissioners of Woods and Forests* (1859) 3 Macq. 174; *Ipswich Dock Commissioners v Overseers of St Peters, Ipswich* (1866) 7 B&S 310; *Foreman v Free Fishers and Dredgers of Whitstable* (1869) LR 4 HL 266, 283. It also seemed to ignore the Crown Lands Act 1866, which expressly provided for the management of the Crown's interests in the shore and bed of the sea. 29 & 30 Vict, c 62, s 7. *Cf* Sir C Hurst, 'The Territorialty of Bays' (1922–3) 3 *BYIL* 42, where he argues that the case confirmed that the territory of England ended at the low water mark. However this is qualified in an article the following year where he notes the existence of Crown property in the seabed. 'Whose is the bed of the sea?' (1923–4) 4 *BYIL* 34.

a misconception that the case before them concerned the extent of British territory when in fact it concerned the question of whether or not a particular court had jurisdiction to try a particular offence.[117] The majority was split in terms of its legal analysis and given the inconsistent and poor reasoning of most individual judges, one can only conclude that the lowest common denominator in the judgment was that there was no jurisdiction exercisable by the court in question.[118] What may be further noted is that the difficulties faced by the court were reflective of the unsettled nature of the law in respect of coastal State authority over maritime spaces. This is revealed in Sir Robert Phillimore's review of international treatises on the subject, and his acute observation:

> Of course the value of these *responsa prudentum* is affected by various circumstances; for instance, the period at which the particular work was written, the general reputation of the writer, the reception which his work has met with from the authorities of civilised states, are circumstances, which, though in no case rendering his opinion a substitute for reason, may enhance or derogate from the consideration due to it.[119]

The court was sensitive to the consequences of it effectively declaring a wider power to prosecute criminal activities at sea in the absence of some explicit legal authority under domestic law. One might add that the strongest principle at play was the freedom of the high seas, which perhaps explains the majority decision. Although international law may have supported wider claims to exercise territorial authority, it was by no means settled in doctrinal opinion, and in light of this it is not surprising that the court struggled to present a coherent judgment.

The result caught the government by surprise and they went on to remedy the situation by passing the Territorial Waters Jurisdiction Act 1878, which confirmed the Crown's jurisdiction over the territorial sea. Even if the case itself cast doubt on the juridical nature of the territorial sea, it prompted an immediate domestic legislative reaction, which reaffirmed that authority over territorial waters flows from the State and not from international law. It is also clear from the court's reasoning that questions

[117] *Ibid*.

[118] The authoritative status of the case is ambiguous. On the one hand the *Franconia* was followed in *Harris v Owners of the Franconia* [1877] 2 CPD 173; *Blackpool Pier Co v Fylde Union* (1877) 36 LT 251. On the other hand it was rejected as a precedent for the juridical status of the territorial sea in *The Secretary of State for India in Council v Sri Rajah Chelikani Rama Rao* (1916) 32 TLR 652. And perhaps more significantly in *Lord Advocate v Clyde Navigation Trustees* (1891) 19 R 174; *Carr v Fracis Times & Co* [1902] AC 176; *Lord Advocate v Wemyss* [1900] AC 48; *A-G of Southern Nigeria v John Holt and Co (Liverpool) Ltd* [1915] AC 599, 611. O'Connell refers to later cases which appear to follow this line of reasoning, however it is difficult to ascertain whether they were adhering to the common law position or whether they are simply acknowledging that the territorial sea was by then an accepted rule of international law: n 7 above, 100.

[119] N 114 above, 70.

concerning the juridical nature of the territorial sea were to be determined by domestic law rather than international law. The latter was silent on the matter and merely performed a recognising role. This is confirmed by a significant body of jurisprudence on the proprietary nature of the territorial sea.[120]

The *Behring Fur Seals Arbitration* sheds further light on the extent of States' rights in respect of the territorial sea.[121] In 1886, the United States seized three British vessels at a distance of more than 60 miles off the coast of Alaska. After a formal protest against this action the vessels were released, but another five British vessels were arrested in 1889 for breaching American fishing laws. During the subsequent arbitration, the United States justified their action on three grounds.[122] First, they argued that they could exercise dominion over the Behring Sea. This failing, they claimed that they enjoyed a right of property in those seals that spent a significant part of their life cycle in United States territory. Finally, they claimed a right of conservation in the seals. Against this the British government maintained that the Behring Sea could not be the object of territorial dominion and that any claim of jurisdiction was limited to the territorial sea.[123] Upholding the British claim, the arbitral panel held that:

> The US has no right of protection of property in the fur seals frequenting the islands off the US in the Behring Sea when such seals are found outside the ordinary three mile limit.[124]

The US could not enforce any property rights beyond the three-mile limit. The case is important because it consolidated the link between property rights and the territorial sea.

By the late 19th century practice regarding coastal waters was becoming more consistent and with it doctrinal opinion.[125] By the 20th century the matter was settled. In the *Grisbådarna* case of 1909, the Permanent Court of

[120] See those cases cited in nn 116 and 118.

[121] *Behring Fur Seals Arbitration* (1893) Moore, *International Arbitration*, vol 1, 755.

[122] Cd 6920.

[123] Cd 6918.

[124] Parliamentary Papers, US No 4 (1893), reproduced in O'Connell, n 7 above, 523. It should be noted that the decision did not establish an absolute three-mile limit. Rather the decision was based on the fact that the United States had maintained such a limit. The important point was that it confirmed the link between property rights in living resources and the territorial sea.

[125] See SA Riesenfeld, *Protection of Coastal Fisheries under International Law* (Washington, Carnegie Endowment for International Peace, 1942) ch 2. Also see generally, J Westlake, *International Law,* (Cambridge, Cambridge University Press, 1904–7) vol I, 195; L Oppenheim, *International Law*, 1st edn (London, Longmans Green and Co, 1905) vol I, 487; PC Jessup, *Law of Territorial Waters* (New York, GA Jennings Co, 1927) 453. However, as O'Connell notes, recognition of a right of innocent passage was difficult to reconcile with the idea of a proprietal interest in the sea, and so the so-called 'police theory' was put forward by a number of authors during the 19th century so as to try and reconcile theory with practice. O'Connell, n 7 above, 61. This development is discussed in the next section.

Arbitration confidently held to the view that the maritime belt constituted 'an inseparable appurtenance' of the land territory, which must have automatically formed part of ceded territory.[126] This marks international recognition of the essentially territorial character of the territorial sea.[127] This position was implicitly recognised by the PCIJ in the *Legal Status of Eastern Greenland* case, when it upheld Danish fisheries legislation as evidence of Denmark's sovereign authority over disputed parts of Greenland.[128]

Now that the nature of the territorial sea was settled in law, the 20th century witnessed a change in the direction of State practice, away from disputes as to the nature and existence of a territorial sea towards questions about its extent.[129] Despite strenuous efforts to codify the law relating to territorial seas at the 1930 Hague Codification Conference, disagreement persisted as to the maximum width of the territorial sea.[130] Although a majority of 20 out of 36 States supported the adoption of a three-mile territorial sea, no agreement on a definitive limit was forthcoming.[131] There is little doubt that disagreement in respect of the exploitation of fisheries contributed to this failure.[132] As Sharma notes, the period between the 1930 Conference and the 1958 Conference witnessed an increase in support for the adoption of a wider territorial sea, as the emphasis on the sea as a means of communication shifted towards the view that the sea was an increasingly important source of economic wealth.[133] In 1956, the International Law Commission

[126] *Norway v Sweden*, Scott, Hague Court Reports (1909) 121, 127. See also the Treaty of Peace of 14 October 1920 between Russia and Finland which ceded territory to Finland, including territorial waters which were deemed to be 'under the unrestricted sovereignty of Finland'. 144 *BFSP* 383.

[127] At the 1930 Hague Codification Conference it was agreed that the territorial sea should be described as an area of sovereignty for it 'does not as regards its nature differ from the authority exercised over land domain.' See MD Hudson, 'The First Conference for the Codification of International Law' (1930) 24 *AJIL* 448, 456.

[128] 1933 PCIJ Ser A/B, No 53, 53–4.

[129] Reviewing the opinion of 114 writers since 1900, Riesenfeld found that 52 writers took the view that there was no international agreement regarding the limit of territorial waters, and that States were entitled to make any reasonable claim. 14 favoured the cannon-shot rule, 41 the three-mile limit, and 6 either the cannon-shot or three-mile rule. Riesenfeld, n 125 above, 279–80.

[130] O'Connell, n 7 above, 158–9. The principle that coastal States could exercise sovereignty over the territorial sea was not challenged at the 1930 Conference and has remained unquestioned ever since. Thus, Art1(1) of the 1958 Convention on the Territorial Sea and Contiguous Zone states: '[t]he sovereignty of a State extends, beyond its land territory and its internal waters, to a belt of sea adjacent to its coast, described as the territorial sea' (1964) 516 *UNTS* 205; Art 2 of UNCLOS 1982 reiterates this provision: (1982) 21 *ILM* 1261.

[131] CJ Colombos, *The International Law of the Sea*, 3rd edn (London, Longmans Green and Co, 1954) 80–1.

[132] See RW Hale, 'Territorial Waters as a Test of Codification' (1930) 24 *AJIL* 65; Also AP Daggett, 'The Regulation of Maritime Fisheries by Treaty' (1934) 28 *AJIL* 693.

[133] SP Sharma, 'Territorial Sea' in R Bernhardt (ed), *Encyclopaedia of Public International Law* (Amsterdam, North-Holland, 1981–1990) vol 11, 328, 329. Another commentator, Dupuy, describes this shift in perspective as one from a law of movement to a law of appropriation. RJ Dupuy, *The Law of the Sea: Current Problems* (Dobbs Ferry, New York, Oceana, 1974) 9.

commented that there was no uniform limit to the territorial sea.[134] Claims ranged from three miles to 200 miles. Given these huge disparities in State practice, it is no surprise that States failed again to secure agreement on the width of the territorial sea at the first Conference on the Law of the Sea held in Geneva from 1956–8. In the period thereafter the emergence of claims to specialised fishing zones, and ultimately the Exclusive Economic Zone made many of the reasons for a wider territorial sea redundant. By the adoption of the third United National Convention on the Law of the Sea in 1982, the 12-mile territorial sea had been readily accepted.

(b) Doctrinal and Theoretical Considerations

Although there was some earlier recognition of coastal State authority over adjacent oceans, the matter was not fully settled as a matter of doctrinal opinion until the late 17th century.[135] As Fulton notes, during the 17th century eminent jurists, such as Pontanus, Burgus, Shookius, Corigenius and Stauchius passed over the issue.[136] Unsurprisingly, leading English legal commentators from the time of James I were united in their advocacy of the Crown's right of property in the British seas, and although the limits of the British seas were contested by continental jurists, it seems clear that a property based theory of the territorial sea was not of itself heretical. Thus Digges,[137] Callis,[138] Boroughs,[139]

[134] See (1956) *Ybk ILC*, vol II, 265–301, draft Art 3.

[135] Fenn was of the opinion that the origin of the territorial sea is to be found in the work of the Glossators, and that subsequent debates about it have really concerned its extent, rather than existence. He further notes that in the later 16th century Albertico Gentilis recognised this and was of the opinion that the width of the territorial sea was a matter of statecraft rather than law. Certainly the views of Gentilis on the role policy and the function of States were percipient. See PT Fenn, 'Origins of the theory of territorial waters' (1926) 20 AJIL 465, 480. Certainly there are doctrinal and conceptual elements of the debate rooted in antiquity. However, the contemporary notion of a territorial sea only emerged under the post-Westphalian paradigm, and it is with this that we are principally concerned.

[136] JI Pontanus, *Discussionum de Mare Libero Libri Duo* (1637); PB Burgus, *De Dominio Reipubicae Genuensis In Mari Ligustico* (1641); M Shoock, *Imperium Maritimum* (1654); M Conring, *De Dominio Maris* (1676); J Strauch, *De Imperio Maris* (1674): n 7 above, 550.

[137] Digges is regarded as the origin of the right of property in the sea and seabed. T Digges, *Arguments proving the Queens Maties Propertye in the Sea Landes and Salt Shores Thereof* (1569), reprinted in SA Moore, *A History of the Foreshore and the law relating thereto. With a hitherto unpublished treatise by Lord Hale, Lord Hale's "De Jure Maris," and Hall's Essay on the Rights of the Crown in the Sea-shore*, 3rd edn (London, Stevens and Haynes, 1888) 185.

[138] Callis delivered a series of lectures at Gray's Inn with the aim of establishing the Crown's title to the *Mare Anglicum*. R Callis, *Reading of the famous and learned Robert Callis, esqr, upon the Statute of Sewers* (1622), 4th edn, ed WJ Broderip (London, J Butterworth and Son, 1824).

[139] As he famously opined '[n]o man that is not desperately impudent could deny that that Princes may have an exclusive property in the sovereignty of the several parts of the sea, and in the passage, fishing and shores thereof': Sir J Boroughs, *The Sovereignty of the British Seas* (Edinburgh, W Green and Son, 1633), reprinted London (1739) 43.

Spelman,[140] Coke,[141] Godolphin,[142] Zouche,[143] Codrington,[144] Hale,[145] Meadows,[146] and, of course, Selden advocated the King's right of property in the seas adjacent to England. It is perhaps important to point out that this necessity of ownership vesting in the Crown was a central requirement for the effective operation of feudal law. In this system, the power of the Crown and its authority to govern was intimately bound up with property rights.[147]

From an international law perspective, it was not until the publication of an influential treatise by Puffendorf that the matter was given any serious treatment.[148] Puffendorf considered afresh the moral reasons for the absence of ownership in the sea and concluded that this could only be justified if the sea were indeed inexhaustible. For Puffendorf, private property only arises under conditions of scarcity and its introduction can only be justified in order to preserve peace in human society.[149] Crucially, he doubted that the oceans were inexhaustible.[150] Although the use of the sea for bathing, drawing salt and navigation was inexhaustible, he argued that the use of the sea for fishing was not so:

> It is clear that fishing can be partially exhausted and become less profitable to maritime peoples, if any and every nation should want to fish along some particular shores; especially since it often happens that fish or things of value, such as pearls, coral and amber, are found in only one part, and that is not very extensive, in the sea. In such cases nothing prevents the people dwelling along

[140] *The English Works of Sir Henry Spelman* (1723) 229, cited in O'Connell, n 93 above, 308, fn 6.

[141] Although Coke's Fourth Institute was published posthumously, it does give a more considered view of the nature of the Crown's rights of property in the English seas. Sir E Coke, *The Fourth Part of the Institutes of the Lawes of England* (London, 1644) c 22, 142.

[142] J Godolphin, *A View of the Admiral Jurisdiction* (London, Godbin, 1661).

[143] R Zouche, *The Jurisdiction of the Admiralty of England Asserted* (London, F Tyton and T Dring, 1663) 20.

[144] R Codrington, *His Majesty's Propriety, and Dominion on the Brittish Seas Asserted: together with a true account of the Neatherlanders insupportable insolencies* (London, T Mabb, 1665) 1.

[145] Lord Chief Justice Hale, *De Jure Maris*, extracted from Moore, n 137 above, 367.

[146] Sir P Meadows, *Observations Concerning the Dominion and Sovereignty of the Seas* (London, E Jones, 1689) 42.

[147] In the UK, it may be doubted that feudal law is the source of property rights in coastal waters. Thus in *Shetland Salmon Farmers* (1990) SCLR 484, in a special case to answer questions concerning the nature and extent of the Crown's rights in the seabed around the Shetland Islands, the inner House of the Court of Session held that the Crown's rights derive from its sovereignty and not its ultimate feudal superiority. However, in this case, special weight was given to the institutional writers, and even then the detachment of feudal law from the exercise of property rights over coastal waters isunclear. Furthermore, the court makes it clear that once ownership is established, it then becomes subject to feudal tenure: *Ibid* 490–1.

[148] Johannes Loccenius wrote with greater detail on the maritime law than Puffendorf. However, his work was less widely influential. See Fulton, n 7 above, 551

[149] Puffendorf, n 72 above, 561–2.

[150] *Ibid*.

> that shore or neighbouring sea from being able to lay a stronger claim to its felicity than those who dwell at distance.[151]

He also understood that claims to the sea emerged concurrent with a realisation by States that the sea has some economic value.[152] This economic interest combined with the security advantage that exclusive control of over coastal waters would bestow upon States gave them a moral right to claim dominion over coastal waters.[153] This dominion would be established by the State performing 'acts of sovereignty at a time when the advantage of the State seemed to have demanded it'.[154] Here we can see that Puffendorf followed a similar line of reasoning to Grotius, but departs from his conclusions as a result of his different view of the physical nature of the oceans. Puffendorf did not delimit the extent of this territorial sea, but implied that it could be quite extensive: '[its] great extent does not make it absolutely incapable of being regarded as property'.[155] However, he was sceptical about the means by which property rights could be established over potentially vast areas of sea, and because navigation cannot establish possession, he concluded that there was little advantage in favour of extensive territorial waters.[156] Similarly, he reasoned there to be insufficient advantage in securing at a high cost exclusive fisheries on the high seas. So, property rights would extend as far as the advantage of the State was justified and in so far as the coastal State could effectively control that area.

As with Grotius, the notion of necessity underpinned Puffendorf's thinking:

> reason prescribed to men such bounds of possession, as would leave them content upon acquiring what would be likely to meet the needs of themselves and of their dependants.[157]

His reasoning was supplemented with an element of equity, and so he states that a man should not prevent others from providing for their own necessities, nor should others be blamed when they attempt to bring a greedy individual back into line.[158] It is necessity, subject to respect for the agency and the needs of others, which provided the moral basis for claims to ocean dominion.[159] Indeed, such factors fundamentally limited

[151] *Ibid*.
[152] *Ibid* 563–4.
[153] *Ibid* 563.
[154] *Ibid* 564.
[155] *Ibid* 565.
[156] *Ibid*.
[157] *Ibid* 567.
[158] *Ibid*.
[159] There is some influence on Locke's work here. Thus, Laslett in his introduction to Locke notes that Locke described *De Jure Naturae Gentium* as the best book of its kind, better even than Grotius'. J Locke, *Two Treatises of Government*, 2nd edn, ed P Laslett (Cambridge,

dominion's extent. Here, the parallels with liberty-based justifications of property are apparent. Although Puffendorf outlined moral and policy reasons for extending coastal State control that remain pertinent today, he failed to articulate how this would apply in practice, and it would take the subsequent developments in customary and treaty law to achieve this. However, his views demonstrate how fisheries resources and the predatory desire of States to control them played a central role in the development of State control over the seas.

The gap between a moral justification for ownership and the practical mechanism for achieving this was closed by Cornelius van Bynkershoek. Underpinning Bynkershoek's theory of coastal waters was the idea of utility.[160] Contrary to Grotius, he argued that *res communis* could be rendered useless by promiscuous use, for example overfishing, and this justified property rights being established.[161] Necessity (as argued by Grotius) commanded and utility persuaded States to occupation of the seas.[162] Thus, the nature of States' rights over the oceans was to be determined by a State's ability to effectively control, or occupy, the waters in question from the shore.[163] Bynkershoek rejected Selden's expansive *mare clausum* in favour of a limited, more realistic band of coastal waters. These waters were then assimilated to the land territory. Thus, he asserted that a belt of coastal waters could be subject to the control of the coastal State:

> [w]herefore on the whole it seems a better rule that the control of the land [over the sea] extends as far as cannon will carry; for that is as far as we seem to have both command and possession.[164]

This conveniently reflected the approach of the leading maritime powers of the time. Here Bynkershoek's fusion of a theory of ownership and practice of States is particularly noteworthy, as is his move away from broader moral justifications for control to one that was largely contingent upon the will of States. Following his commentary on the pivotal role of occupation, Bynkershoek rejected the distinction between command (jurisdiction or *imperium*) and ownership (dominion or property) over the seas. He explicitly contrasted the separation of property and government on land territory, which arose through convention, with maritime ownership '*optima maxima*', and argued that in occupation of the sea they are one

Cambridge University Press, 1979) 74. Tully notes that Locke shared Puffendorf's view on a number of points, particularly on self-preservation (necessity). See J Tulley, *A Discourse on Property. John Locke and his adversaries* (Cambridge, Cambridge University Press, 1980) 73.

[160] *De Dominio Maris*, n 32 above, 91.
[161] *Ibid* 91–2.
[162] *Ibid*.
[163] See generally, *Ibid*, ch 2.
[164] Above n 32, 44.

and the same.[165] Bynkershoek considered whether the high seas could be owned and suggested that title could be founded through occupation and maintained by continuous possession.[166] At one point he goes as far as suggesting that ownership of the sea could be maintained by agreement alone.[167] However he stops short of committing to this position and on the same page notes that because this had never happened, it could not be conceived of happening.[168] For Bynkershoek, ownership of the open seas was a practical absurdity rather than theoretical impossibility.

Emmerich de Vattel returned to the idea that the high seas were incapable of appropriation, since the use of the sea for navigation and fishing was innocent in character and inexhaustible.[169] Following in Bynkershoek's steps, he recognised the legitimacy of a marginal sea to the extent of the cannon shot but went even further and recognised coastal State rights over all the resources of its coastal wasters:

> Are we not to allow it [the coastal State] to appropriate that gist of nature as being connected with the territory it occupies and to keep to itself the great commercial advantages which it may enjoy, should there be fish enough to supply neighbouring Nations.[170]

His approach reflects a fundamental change in the nature of international law. Vattel argued that States could acquire exclusive rights in areas of the sea by treaty, and through prescription, as long as this was with the consent or tacit agreement of other States.[171] It would follow that States could extend claims to exclusive control of the seas beyond that which they effectively occupy under the canon-shot rule. If international law was contingent on the will and consent of States, then this permitted alternative bases for territorial claims. Neither physical nor legal factors operated as a bar to ownership of the oceans. Rather the determinative factor was whether or not positive law had been utilised to secure ownership. It is significant that Vattel's views emerged in the same Enlightenment climate as Jean-Jacques Rousseau. Although Rousseau's views on property are generally considered to come from the natural rights or first

[165] *Ibid* 56.
[166] *Ibid* 46.
[167] *Ibid* 49.
[168] *Ibid*. This demonstrates a lack in faith in the binding quality of international law in its nascent years, and can be contrasted with the quality and stability it began to manifest from the late 19th century onwards.
[169] De Vattel, n 71 above, 106–107.
[170] *Ibid* 107.
[171] 'When a nation that is in possession of the navigation and fishery in certain tracts of the sea claims an exclusive right of them, and forbids all participation on the part of other nations, if the others obey that prohibition with sufficient marks of acquiescence, they tacitly renounce their own right in favour of that nation, and establish for her a new right, which she may afterwards lawfully maintain against them, especially when it is confirmed by long use.' See Fulton, n 7 above, 560.

appropriationist school, Rousseau in fact argued that moral rights and ownership were only fully established by a social compact.[172] This understanding of how positive law, in addition to natural rights shaped property, was extended to the question of maritime authority, and is evident in Vattel's move to a strongly positivist and liberal account of the law of the sea.

During the 18th century claims to extensive sovereignty over the sea had all but disappeared, and virtually every writer on the matter accepted Grotius' basic premise: the vast oceans were not susceptible to occupation because they were both inexhaustible and indivisible. As *res communis* they were part of the original community of goods and free to all. However, these considerations did not apply to a belt of coastal waters. Thus maritime space was property of the coastal State to the extent that it could be defended by a cannon shot. The property theory originally put forward in the context of the claims of James I to the British Seas continued alongside the cannon shot rule. O'Connell suggests that the Crown's claim to property in the seas did not disappear with the emergence of the cannon-shot rule.[173] Rather it was reconceived into a new form. There was a

> rationalisation of an uninterrupted legal institution, denuded of the idiosyncratic features which could no longer be supported in the Age of Reason.[174]

As noted above, this position received express acceptance in domestic courts.[175] It was also reaffirmed by doctrinal commentary.[176]

In the 19th century the scope and nature of a right of innocent passage emerged as States' most important concern. Innocent passage through third States coastal waters facilitated commerce, and so fundamentally important was this that it shaded other considerations when it came to regulating the territorial sea. This period was marked by substantial disagreements between commentators as they focused on the problem of reconciling the right of innocent passage with a property theory of the territorial sea. Two alternatives to a property rights-based theory of coastal waters can be identified during the period: the police theory and the competence theory. According to Massé, who first propounded the 'police theory', the coastal State exercises '*un droit de police et juridiction sur la partie de la mer qui borde ses côtes*'.[177] Of course, his emphasis

[172] JJ Rousseau, *The Social Contract and Discourses*, trans GDH Cole (London, Dent, 1973) 12. The social contract paved the way for a school of property theorists who focused entirely on convention as the basis for property rights. See D Hume, *A Treatise of Human Nature*, ed LA Selby-Bigge (Oxford, Clarendon Press, 1964) 490 *ff*.

[173] O'Connell, n 93 above, 317

[174] *Ibid*.

[175] See nn 109–112, and the accompanying text.

[176] O'Connell notes that none of the 25 authors who discussed coastal waters between Vattel in 1758 and Wheaton in 1836 questioned this basic position: n 7 above, 60.

[177] G Massé, *Le Droit commercial dans ses rapports avec le droit des gens* (1844), cited in O'Connell, n 7 above, 62.

on navigation rather than fishing is not surprising in a treatise with a commercial focus. All the same Massé could not discount the property theory entirely because this remained necessary to account for coastal States' exclusive fishing rights.[178] Another influential French author, Ortolan, went further and argued that because States could not obstruct navigation in sight of their territory, or close the territorial sea like a port, or impose duties on passing vessels, one cannot say that a State is the owner of the territorial sea.[179] The competence theory of the late 19th century can be associated with a school of German jurisprudence which focused on the public capacity of the State rather than its private order relationships.[180] Accordingly, property was rejected as having nothing to do with the exercise of State power. Sovereignty was a right to rule, not a right of property. Thus the territorial sea was an area in which the State exercised power and it was not part of the national domain. However, like the police theory, this was not generally accepted and merely added to the doctrinal confusion.[181] Rather it seems that the views of a third French jurist, Hautefeuille, who propounded the property theory of territorial waters, were the most influential.[182]

What is clear is that jurists of the period were having great difficulty reconciling nuances in practice with the niceties of legal theory. State practice and judicial decision-making were driving the content of the law and writers were struggling to provide a systematic account of this. A number of observations can be made about developments during this period. First, the pull of natural law remained strong during the 18th century which increased the scope for consideration of the moral right to claim property in the seas. From Vattel onwards most influential authors began to attach greater significance to customary law as a source of legal obligations. The emergence of powerful new political theories based upon the idea of a social contract displaced theories based on natural law. Many legal commentators embraced this change in the guise of the positivist school. This approach advocated a view of international law which consisted only of those obligations that States voluntarily subscribed to by

[178] As O'Connell notes, the intractable problem of reconciling property-type rights in fisheries with innocent passage was pervasive in subsequent doctrine: n 7 above, 62.

[179] JFT Ortolan, *Régles internationales et diplomatie de la mer* 2 vols. (1844–5) vol I, 173–5. Reproduced in O'Connell, *Ibid* 63.

[180] O'Connell includes von Bar and Harburger in this school. See L von Bar, *Theorie und Praxis des internationalen Privatrechts* (Hanover, Hahn, 1889) and H Harburger, *Der Strafrechtlicher Begriff Inland und seine Beziehungen sum Völkerrecht und Staatsrecht* (1882). Their approach in turn influenced later writers such as Nuger: A Nuger, *De l'occupation: Des Droits de l'état sur la mer territoriale* (1887).

[181] This was quite evident during the meetings of the Institut de Droit International during the latter part of the 19th century. See O'Connell, n 7 above, 67–8.

[182] O'Connell notes that of the 36 authors writing between 1836 and 1876 only 6 challenged this approach with two others being ambiguous on the point: *Ibid*.

virtue of their practice. During this period, liberal ideals became increasingly powerful. Thus there were strong parallels between the liberal accounts of property and States' entitlement to make claims over ocean space. Indeed, there was a significant body of academic opinion which supported the right of States to enjoy exclusive control of coastal fisheries in order to ensure their economic, social and political development. However, cases such as the *Behring Fur Seals Arbitration* confirm that consequentialist justifications of authority, such as conservation, had yet to gain much credence.[183] The majority of the arbitrators were constrained by the absence of any positive rule of law permitting the US to exercise proprietary control over the seals on the high seas. Dissenting, Mr Justice Harlaan was of the opinion that the law of nature (natural justice as derived from sound reasoning), justified a right of property to one who takes conservation measures.[184]

It is important that we highlight which values were instrumental in justifying claims over maritime space and resources because these values become entrenched within legal systems and they are difficult to challenge. Indeed, as we will see in the next chapter, many claims to exclusive fisheries jurisdiction were based upon precisely these types of argument in the latter part of the 20th century. One can make a number of conclusions, beginning with the trite observation that the territorial sea has a mixed pedigree. Coastal waters have been subject to varying claims and degrees of control in accordance with States' varied political priorities. Secondly, conceptions of law and power as understood within States have shaped the external manifestations of power by States, and consequentially the substance of international law. In the absence of specific legal rules to underpin claims by States, recourse was had to property concepts and early legal thought was dominated by property rights. This is consistent with O'Connell's observation that claims to authority over the territorial sea were rooted in domestic law rather than international law.[185] From this we can infer that conceptions of property that were being developed under domestic law were influential on the development of the territorial sea. Thus, most early claims to territorial waters took the form of Crown property. Firmer conclusions are impossible because of the ambiguous state of doctrine throughout most of the eighteenth and nineteenth centuries, and also because of the disparities in State policy. Thirdly, in the 19th century writers moved away from a heavy and direct reliance on property rights to justify and explain claims to authority in coastal waters because it was difficult to reconcile ownership of the seas with the concept of innocent passage. Ultimately, the result of this and the

[183] Above n 121, 917.
[184] *Ibid* 918.
[185] O'Connell, n 7 above, 83 *ff*.

general failure of doctrine to provide a complete theory of States' authority over coastal waters was the emergence of the State specific concept of sovereignty, wherein exclusive property based claims merged with the exercise of governmental authority. The emergence of sovereignty should not detract from the original, property-based nature of State authority in the territorial sea. In any event, sovereignty and property may be construed as essential exclusive control of a thing. Moreover, it is evident that it is control over space and things rather than persons which provides the principal rationale for States' authority in territorial waters.[186]

5. THE EMERGENCE OF RESOURCE REGIMES

The 20th century witnessed a move away from relatively absolute claims to ownership of the seas, to claims of ownership of the resources of the seas as States sought exclusive rights to alienate the living and non-living resources of the seabed of the continental shelf and the high seas adjacent to their coasts. In this way the problem of reconciling exclusive control of resources was separated from the issue of navigational rights.

(a) Continental Shelf

Early State practice did not concern itself much with the marginal seabed and subsoil. This was simply because States lacked the technology to exploit commercially the resources of the seabed. Also, any activities that did occur on the seabed only marginally impinged upon other ocean uses and were not considered significant.[187] This is reflected in academic writings, which, prior to the 20th century, were relatively quiet on the matter of the seabed.[188] Early 20th century writers pointed to the existence of Crown property in the seabed in marginal waters.[189] However, domestic courts dealt with the issue in a rather fragmented and uncertain manner. In *Oldsworth's Case* (1637) it was held that sovereignty of the seas had vested ownership of the seabed in the Crown.[190] This and later cases support the idea that the Crown's prerogatives in the sea are proprietal in nature and extend to the seabed.[191] Such ownership was, of course,

[186] This point is taken up in the next chapter in greater detail.

[187] See generally G Marston, 'The Evolution of the Concept of Sovereignty over the Bed and Subsoil of the Territorial Sea', (1976–7) 48 *BYIL* 321, 322 *ff*.

[188] *Ibid* 323; See also DP O'Connell, n 93 above.

[189] Hurst, n 116 above, 40–3; Fulton, n 7 above, 697–8.

[190] *The King v Oldsworth* (1637) Hale's *de Jure Maris* (Hargrave's Tracts) 30, cited in O'Connell, n 7 above, 85.

[191] *Benest v Pipon*, (1829) 1 Knapp 60; *Johnston v McIntosh,* 8 Wheat 543, 595 (1823).

limited to the area over which the Crown exercised sovereignty, and it is to be assumed that this was coterminous with the territorial sea. However, later cases cast some doubt on the precise extent of this. In *Gann v Free Fishers of Whitstable,* the House of Lords unanimously upheld the public right of navigation over the right of property granted to the owners of an oyster fishery. Lord Chelmsford doubted the absolute quality of property rights which the Crown could bestow in territorial waters.[192] Similarly, Cockburn CJ, in the *Franconia*, denied that a belt of sea three miles from the shore formed part of Great Britain, noting that it was subject to sovereignty and jurisdiction and that the extent of such was uncertain.[193] Internationally, during the *Behring Fur Seals Arbitration*, the view was expressed that the ambivalent attitude of States was unlikely to have led to the formation of a customary rule in respect of the seabed.[194] Such doubts as to the nature of the sea bed and subsoil subsequently influenced the Privy Council in the case of *A-G for British Colombia v A-G for Canada.*[195] Here the court declined to answer a question regarding the difference between the regimes for the sea in the three-mile zone and those applying to bays, arms of the sea and estuaries, until the matter had been pronounced upon by States at an international conference.[196]

Technical developments soon gave rise to changes. Offshore drilling began during the 1920s and could not continue as an effective commercial enterprise without proper regulation. States became aware of the problem of relying on the supply of oil from overseas suppliers, especially during periods of conflict.[197] Economic and political drivers, combined with a technological capacity to exploit the mineral resources of the seabed, gave rise to claims to exclusive economic jurisdiction over the continental shelf. The catalyst for claims in law was the Truman Proclamation of 1945:

> Whereas the view of the Government of the United States that the exercise of jurisdiction over the natural resources of the subsoil and seabed of the continental shelf by the contiguous nation is reasonable and just, since effectiveness

[192] Above n 110, 1313.

[193] (1876) LR 2 Ex. D 63, 173.

[194] Article by 'A Legal Correspondent', *The Morning Post*, 21 May 1923. Cited in Marston, Above note, 187, 325.

[195] [1914] AC 153.

[196] *Ibid* 174–175 (Haldane LC). *Cf Lord Advocate v Wemyss*, where the court was quite clear about the title to the sea bed and subsoil of territorial waters, with Lord Watson stating that 'by the law of Scotland, the solum underlying the waters of the ocean, whether within the narrow seas, or from the coast outward to the three mile limit, and also the minerals beneath it, are vested in the Crown.' [1900] AC 48, 66. However, English law remained inconclusive.

[197] For example, in 1936 the British Foreign Office instructed the British Embassy to commence negotiations with the Venezuelan Government for an agreement to delimit the seabed and subsoil of the Gulf of Paria. The Treaty relating to the Submarine Areas of the Gulf of Paria was concluded in 1942. 205 *LNTS* 121.

> of measures to utilise or conserve these resources should be contingent upon the co-operation and protection from the shore, since the continental shelf may be regarded as an extension of the land mass of the coastal nation and thus naturally appurtenant to it, since these resources frequently form a seaward extension of a pool or deposit lying within the territory, and since self-protection compels the coastal nation to keep close watch over activities off its shores which are of the nature necessary for the utilisation of these resources.[198]

Subsequent claims varied in nature. Some claimed jurisdiction and control over the resources of the continental shelf, while others claimed sovereignty over the shelf. Others, most notably Latin American States' claims, extended to the superjacent waters over the continental shelf.[199] Although Lord Asquith in the *Abu Dhabi arbitration*, concluded that the continental shelf had not 'assumed hitherto the hard lineaments or the definitive status of an established rule of international law', this was a mere hiatus in the consolidation of the continental shelf regime.[200] The concept readily gained approval at the first United Nations Conference on the Law of the Sea, and was codified in the Geneva Convention on the Continental Shelf 1958.[201]

Three theories were put forward to explain the continental shelf. The first, advanced by the British Government, required a claim to be made and pursued through effective control of the seabed.[202] The second, which was a slight variant on this, required a claim to be made but waived the strict elements of effective occupation in light of the Truman Proclamation approach to control.[203] The third was that the continental shelf inhered in the coastal State, thus dispensing with any need whatsoever for a claim or acts of occupation.[204] It was in truth a new theory, although Lauterpacht recognised that there was no principle in opposition to it and to a large extent it was the product of the unopposed practice of a number of important maritime States.[205] The rigid application of freedom of the high seas was inappropriate because it was constructed at a time when the opportunity for exploitation and control of the sea-bed was unimaginable. In the absence of any prohibition, the remaining

[198] M Whiteman, *Digest of International Law* (Washington DC, US Government Printing Office, 1963) vol 4, 756.

[199] On 9 October 1946, Argentina issued a 'Declaration proclaiming sovereignty over the epicontinental sea and continental shelf' (1947) 41 *AJIL Sup* 14.

[200] 18 *ILR* 144, 155.

[201] 499 *UNTS* 311.

[202] Sir Francis Vallat, 'The Continental Shelf' (1946) *BYIL* 336.

[203] E Borchard, 'Resources of the Continental Shelf' (1946) 40 *AJIL* 53.

[204] O'Connell, n 7 above, 482–4.

[205] H Lauterpacht, 'Sovereignty over Submarine Areas' (1950) 27 *BYIL* 376. Indeed, a survey in the Colombia Law Review indicated some extensive if disparate practice supporting claims over submarine minerals and sedentary fisheries. Comment, (1939) 39 *Columbia Law Review* 317.

test for the legitimacy of the continental shelf was whether it would be reasonable and fair, and whether it would meet the requirements of the international community at large.[206] The precise scope of reasonableness and fairness is not delimited by Lauterpacht in this context. However, this appears to be consistent with the notion advanced by MacCormick, and is certainly rooted in law. This is quite evident in Lauterpacht's rejection of *non-liqet* and his rigorous defence of arguments from general principles in his wider writings.[207] Eventually, the third view prevailed, in part due to the standing of the writers advocating it, and in part due to practical expedience. It avoided the potential issues that might arise from conflicts in historical use of the seabed, and prevented States staking claims to the seabed adjacent to other States. Certainly, what was more important was the reality of the claims and the general acquiescence to the new regime, rather than niceties of its historic pedigree. In 1969, the ICJ underscored the status of coastal State rights in respect of the continental shelf in the *North Sea Continental Shelf* case:

> the rights of the coastal State in respect of the area of the continental shelf that constitutes a natural prolongation of its land territory into and under the sea exist *ipso facto* and *ab initio*, by virtue of its sovereignty over the land, and as an extension of it in an exercise of sovereign rights for the purpose of exploring the sea bed and exploiting its natural resources. In short, there is here an inherent right.[208]

Presently, the regime of the continental shelf is set out in Part VI of the 1982 Convention.

At this point a number of points are worth emphasising. First, the *raison d'être* of the continental shelf regime was to secure for States exclusive control of the natural resources of the seabed. It was driven largely by self-interest and pragmatism, rather than legal principle.[209] So, once the

[206] Lauterpacht, n 206 above, 431–2.

[207] On the prohibition of non-liquet see The Absence of an International Legislature and the Compulsory Jurisdiction of International Tribunals' (1930) XI *BYIL* 134, pp 144 *ff*. Also 'Some Observations on the Prohibition of "Non Liquet" and the Completeness of the Law', reproduced in H Lauterpacht, *International Law: Being the Collected Papers of Hersch Lauterpacht* (arranged and edited by E Lauterpacht (Cambridge, Cambridge University Press, 1970–2004) vol 2, 213, 217. On the use of general principles, see *Private Law Sources and Analogies of International Law with Special Reference to Arbitration* (London, Longmans Green and Co, 1927). Also, *The Development of International Law by the International Court* (London, Stevens and Sons, 1958) esp 158–65.

[208] [1969] ICJ Rep 3, [19].

[209] As Borchard concludes, '[p]ractical considerations thus lead to the conclusion that the State must be permitted to exercise jurisdiction over the submarine soil beyond the marginal sea on the continental shelf.' Above n 203, 70. This seems to be reinforced by the inclusion of sedentary species, a regime originally designed to secure exclusive control over mineral rights. Such species cannot be classified as part of the natural prolongation of the landmass of the coastal State. The case of *Duchess of Sutherland v Watson* (1868) VI M 99, (L Neave) exerted some influence prior to the 1958 Convention, suggesting that an analogy could

continental shelf became exploitable, it became necessary to explain and justify new and extensive State claims. Changes in the physical environment opened up new legal possibilities of exclusive control. Secondly, unlike the territorial sea, which was very much the product of domestic claims, international law played a much stronger role in providing a legal basis for the continental shelf. Finally, early continental shelf claims embodied a powerful conception of propriety. To the extent that exclusive control of the continental shelf was a largely unprecedented claim, it had to be rooted in universally applicable terms. Hence the claim by President Truman that it is

> reasonable and just, since effectiveness of measures to utilise or conserve resources should be contingent upon the cooperation and protection from the shore.[210]

Thus, attribution of the continental shelf to the coastal State was regarded as conducive to good order, and certain duties of conservation and protection went with this claim to 'ownership'. Such a conception of propriety became increasingly prominent in the development of the EEZ.

(b) Exclusive Economic Zone

There are records of some exclusive claims to sovereignty over the seas as early as the 10th century, but these were ill-defined and at odds with the prevailing regime of the freedom of the high seas.[211] In the late 16th century two influential writers, Plowden and Dr John Dee, advocated British sovereignty over adjacent waters in order to secure exclusive control over fishing grounds.[212] However, other than attributing these rights to the power of the Crown, the basis of these rights was quite vague. More importantly, they ran contrary to Elizabeth I's policy of freedom of

be drawn between edible sedentary species as maritime crops and crops on dry land. See further DP O'Connell, 'Sedentary Fisheries and the Australian Continental Shelf' (1955) 49 *AJIL* 185, 208. In fact this requires the erroneous classification of sessile and other sedentary species as growths of the soils in order to reach the conclusion that they are legally classifiable as crops. See LFE Goldie, 'Sedentary Fisheries and Art 2(4) of the Convention on the Continental Shelf—A Plea for a Separate Regime', (1969) 63 *AJIL* 86. This is a clear case of a legal fiction being used to implement policy considerations.

[210] Above n 198.

[211] See Fulton, n 7 above, ch 1.

[212] Plowden in *Sir John Constable's* case. In SA Moore, *History and Law of the Foreshore and Sea Shore and the Law Relating Thereto* 3rd edn (1888), cited in Fulton n 7 above, 102. Dr John Dee, *General and Rare Memorials pertaining to the Perfect Arte of Navigation* (1577), cited in Fulton, *Ibid*. However, Plowden explicitly denied that the Queen had property rights in the sea, and that it was common to all men (presumably though only Englishmen). Fulton, *Ibid* 102.

the seas. A turning point in doctrine was prompted by the accession of James I, who vigorously pursued a policy of exclusive fishing in British waters.[213] This approach was gradually subsumed within wider claims to sovereignty over the sea. For example, Vattel pointed out that the existence of exclusive fishing rights presupposed the existence of a power to forbid it, which entailed wider claims over coastal waters.[214] However, it was not until the 18th century that the link between fisheries and effective occupation was firmly established.

After the United States gained independence, the question of the entitlement to fish in Crown waters arose in respect of US citizens, who had previously enjoyed the right to fish as British subjects.[215] The US argued that the right to fish was historic, whilst the British claimed that only such rights as were granted by treaty were to be enjoyed. However, during negotiations between the parties, it emerged that the dispute was only over a small coastal belt and that beyond this fishing was considered free to all. The result of this was to focus the scope of exclusive claims into a small belt of coastal waters. This eventually secured legal form in the Anglo American Convention of Commerce 1818.[216] The 1818 Convention established an absolute boundary between an area of exclusive fisheries up to 3nm from the coast and an area of unqualified liberty to fish beyond.[217] This rigid boundary was adhered to throughout the 19th century and was incorporated into the Anglo-French Convention of 1839[218] and the North Sea Fisheries Convention of 1882.[219] Such treaties were as much about the delimitation of territorial waters as the regulation of fishing and demonstrated the connection between exclusive fisheries rights and State sovereignty as the source of legal power.

Soon after the 1818 settlement a dispute arose between Britain and France in respect of oyster fishing in the Bay of Cancalle. This further illustrated the burgeoning relationship between fishing and property rights in the sea.[220] France was forcibly preventing the English from fishing oyster beds which lay beyond more than one league from French territory. During diplomatic moves to resolve the dispute, the French sought agreement on a two-league limit. The British government quite clearly based its position on an assimilation of fishing rights with territorial

[213] Above n 7.

[214] De Vattel, n 71 above, bk 1, ch XXIII, [280] *ff*.

[215] For an account of this dispute see HD Reid, *International Servitudes in Law and Practice* (Chicago, University of Chicago Press, 1932) 90 *ff*. Also L Larry Leonard, *International Regulation of Fisheries* (New York, Johnson Reprint Corporation, 1971) 17–27.

[216] 6 *BFSP* 3.

[217] *Ibid*. Under Art 1 the United States renounced any fishing and associated rights within three miles of British coasts.

[218] (1839) 27 *BFSP* 983.

[219] (1882) 73 *BFSP* 39.

[220] HA Smith, *Great Britain and the Law of Nations* (London, PS King, 1932) vol 2, 146–64.

dominion, which extended to one league from the coasts—the distance established by the cannon shot principle. The opinion of King's Advocate reaffirmed the link between fishery rights and more expansive dominion over the seas, stating that foreign fishermen could not be compelled to cease fishing within a certain distance from the coast unless it was agreed between the two nations. An agreement could have been reached which would have extended the French claims up to two leagues from shore, but only if compensation was provided for the British, who otherwise would be making a gratuitous concession in abrogation of the cannon-shot rule.[221] The initial dispute was resolved by subsequent agreement between the fishermen and the French, although the general point about the extent of the limit remained in dispute and gave rise to later disputes. Eventually, these were resolved by the North Seas Fisheries Convention 1882, which confirmed that the exclusive control of fishing was limited to territorial waters.

The *Behring Sea Fur Seals Arbitration* signifies the emergence of conservation as an important policy objective in fisheries regulation. Although the tribunal found in favour of the British and rejected the American conservation arguments, O'Connell suggests that thereafter the direction of States' fisheries policies was dictated by conservation rather than economics.[222] This might be somewhat misleading because conservation can be subsumed by economic goals and so it becomes a factor of economic policy, rather than a distinct agenda in its own right. Moreover, it was doubtful whether States would make claims to conserve resources if this did not benefit domestic fishing concerns. This is not to deny that conservation was an important consideration, but rather to make the point that it was difficult to separate conservation goals from economic considerations at this time.[223] Conservation soon began to feature as a central consideration in both diplomatic and doctrinal fields.[224] The French jurist, Antoine Nuger, was particularly forthright in advocating the importance of the conservation of resources in shallow waters.[225] Such claims were not merely limited to pure conservation matters; they extended to the social and management implications of coastal fisheries. Thus, in 1896, Rivier argued that stronger exclusive fishing rights would improve fisheries exploitation.[226] Protectionist measures also emerged, as illustrated

[221] *Ibid* 149.
[222] O'Connell, n 7 above, 524.
[223] This is evident in claims that ITQs contribute to stewardship. See ch 8, s 4(b).
[224] Above n 7, 524–30.
[225] A Nuger, *De l'occupation: Des droits de l'état sur la mer territoriale* (1887) 216, cited in O'Connell, *Ibid* 524.
[226] A Rivier, *Principes du droit des gens* (1896) cited in SA Riesenfeld, *Protection of Coastal Fisheries under International Law* (Washington DC, Carnegie Endowment for International Peace, 1942) 62.

by the 'Moray Firth Dispute'. Responding to growing concerns over the deleterious impact of new trawling techniques in the Moray Firth, the UK Parliament passed the Sea Fisheries Act 1889 and Herring Fisheries (Scotland) Act 1889, which restricted the use of such techniques in a semi-enclosed sea extending beyond the 3nm limit. Although the management rationale was sound, the legal basis for the Acts was less so. Under international law, such measures could only be applied within 3nm or as against British subjects. The landmark case of *Mortensen v Peters* in 1906 was in many ways influenced by the fact that extant fisheries limits were inadequate.[227] In this case, a Scottish court upheld the conviction of a Danish national operating a Norwegian vessel in breach of the 1889 Acts. Despite being contrary to the position the British government had maintained in the *Behring Fur Seals Arbitration*, the decision was necessitated by the particular demands of local fishing interests.

Diplomatic discussions on exclusive fishing rights carried on into the 20th century,[228] and numerous treaties attempted to tackle the problem of depleted fisheries.[229] The principle of abstention, which recognised the need to stabilise a fishery at the level of its maximum yield, was embodied in several conventions, including the Pelagic Sealing Convention 1911,[230] the US/Canada Halibut Fisheries Convention 1923[231] and the US/Canada Convention on Sockeye Salmon 1930.[232] Around this time there were also a number of moves to increase the limit of the territorial sea in order to facilitate exclusive fishing.[233] In 1902 the International Council for the Exploration of the Sea held its first meeting in Copenhagen, with the aim of assessing the state of fisheries and deciding whether protection against over-fishing was required.[234] Sir Thomas Barclay, rapporteur to the *Institut de Droit International* on its work on maritime jurisdiction, noted the inadequacy of the territorial sea limit and the near unanimous desire of European States to extend their maritime jurisdiction.[235] Eventually, the Institut recommended an extension of fisheries limits up to six miles.

[227] *Mortenson v Peters* (1906) 14 SLT 227.

[228] The *Institute de Droit International* considered the issue of fisheries conservation at its meetings in 1891 and 1894. During these meetings a fishery conservation zone of up to 10 miles was considered. See O'Connell, n 7 above, 524.

[229] See, eg, Anglo-Danish Fisheries Convention (1901) 94 *BFSP* 29; the Anglo-French Fisheries Convention (1904) 97 *BFSP* 31; Halibut Fisheries Convention (1923) 32 *LNTS* 94; United States-Canada Convention on Sockeye Salmon (1930) 184 *LNTS* 305; Baltic Fisheries Convention (1929) 65 *LNTS* 93; Fisheries Convention (1932) 89 *LNTS* 199; Anglo-Soviet Fisheries Agreement (1930) 102 *LNTS* 103; Anglo-Soviet Fisheries Agreement (1956) 266 *UNTS* 209.

[230] 104 *BFSP* 175.

[231] 32 *LNTS* 94.

[232] 184 *LNTS* 305.

[233] Conferences included the Bergen Fisheries Congress 1898, the International Marine Congress 1904 and the Rome Fisheries Congress 1911.

[234] Fulton, n 2 above, 35–6.

[235] Annuaire de l'Institut de droit international, xiii, cited in Fulton, n 7 above, 691.

Commenting on the Hague Codification Conference 1930, Gidel noted a shift in emphasis from exclusive fishery being justified by arguments about the national economy and the availability of capital to fund fishing vessels to humanitarian considerations based on the dependence of the local population on adjacent fishery resources.[236] The effect of these pressures was to stimulate claims to wider territorial seas or exclusive fisheries zones. It is important to emphasise here that in general domestic laws did not permit States to exercise power beyond territorial limits. So, in the absence of any domestic precedent for these claims, exclusive fishing rights remained absolutely contingent upon international law.

The catalyst for the development of the EEZ was the Truman Proclamation with Respect to Coastal Fisheries in Certain Areas of the High Seas of 1945, a unilateral claim by the American government to unshared exploitation authority over the natural resources of the adjacent sea area.[237] Although the proclamation was never given practical effect, it encouraged other States to make claims to exclusive coastal State jurisdiction over areas previously considered the high seas. Argentina followed suit, making an extravagant claim to sovereignty over a continental shelf and epicontinental sea.[238] This exceeded previous claims by including sovereignty over the superjacent waters. Chile continued the trend of consolidating the continental shelf claims with the superjacent waters in a single zone of sovereignty.[239] This was in effect a 200-mile territorial sea, and was followed by similar claims by Panama,[240] Nicaragua,[241] Peru,[242] Costa Rica,[243] Honduras,[244] Brazil[245] and El Salvador.[246] These

[236] GC Gidel, *Le Droit international public de la mer* (Chateauroux : Impr. par les Établissements Mellottée 1934) vol 3, 297 *ff*.

[237] There were two proclamations, with the Proclamation on the Continental Shelf being more widely considered in the literature: n 198 above. For States with little interest in mineral resource exploitation, both these proclamations justified unilateral acts of appropriation over marine resources. The Fisheries Proclamation proposed conservation zones in contiguous waters beyond the 3nm territorial sea, wherein the US would unilaterally regulate activities in respect of its nationals, and joint State management would apply in respect of foreign nationals. Presidential Proclamation 2668, 28th Sept. 1945, 10 *Fed Reg* 12304.

[238] Decree No 14,708 of 9 October 1946, Proclaiming Sovereignty over the Epicontinental Sea and Continental Shelf: UN Legislative Series, *Laws and Regulations on the Regime of the High Seas* (New York, United Nations, 1951) 5.

[239] The Presidential Declaration Concerning the Continental Shelf, 23 June 1947: *Ibid* 6–7. See also A Hollick, The Origins of 200-mile Offshore Zones' (1977) 71 *AJIL* 494, 495.

[240] See Decree 449 (1946). Cited in *Laws and Regulations on the Regime of the High Seas*, Above n 238, 16

[241] Declaration 1 May 1947. Reproduced in R Young, 'Further Claims to Areas Beneath the High Seas' (1948) 43 *AJIL* 790, 853.

[242] Decree No 781(1) of 1 August 1947, Concerning the Submerged, the Continental or Insular Shelf: n 238 above, 17.

[243] *Decreto-Ley* No 803 (1949). *Ibid* 9–10.

[244] Congressional Decree No. 103. *Ibid* 12.

[245] Decree No 28,840 of 8 November 1950: *Ibid* 299–300.

[246] Art 7 of the Constitution of 14 September 1950: *Ibid* 300.

claims were immediately the object of vigorous protest. As such they can be distinguished from the Truman Proclamation, as lacking universal or even general support beyond the claimant States. This indicates the critical importance of international law and general recognition to the legality of such claims.[247]

In an attempt to appease other States and secure their claims as a matter of international law rather than a domestic exercise of authority, Chile, Ecuador and Peru issued the Santiago Declaration 1952.[248] This purported to consolidate their claims and was the first international instrument to recognise a 200 mile zone subject to the exclusive authority of the coastal State. The Declaration emphasised the socio-economic and conservation basis for the new zones.[249] Moreover, these States were anxious to control fisheries to compensate for their lack of a continental shelf of real economic value and so the 'theory of compensation' was advanced.[250] Other explanations, such as the 'eco-system' approach or 'bioma' concept, were also incorporated into the text.[251] However, it would seem that there was little credible scientific evidence at the time to support the 'bioma' or ecosystem approach.[252] Indeed, the precise juridical bases of the claims in the Declaration were ambiguous. On the one hand, Garcia Amador suggests that no claim was being made to extend territorial waters, so it amounted to a *sui generis* regime, concerned chiefly with the protection, conservation and exploitation of fisheries resources.[253] On the other hand, McDougal and Burke consider the claim tantamount to a claim to an extended territorial sea.[254] What can be seen, as in the case of the continental shelf, was a nexus between claims to exclusive fisheries and notions of propriety. The claimant States presented themselves as being in the best position to regulate offshore activities given their proximity and better understanding of the physical, social and economic aspects of local ocean use. They also stressed their dependency on the oceans. Their claims can be restated as follows: coastal States enjoy a close proximity to and socio-economic relationship with the sea off their coasts, so it is only proper that they exercise

[247] Lauterpacht emphasised the importance of acquiescence during this process: H Lauterpacht, 'Sovereignty over Submarine Areas' (1950) 27 *BYIL* 376, 393, 413–4.

[248] Declaration on the Maritime Zone 18 August 1952. S Lay, R Churchill and M Nordquist, *New Directions in the Law of the Sea* (London, British Institute of International and Comparative Law 1973) vol I, 231. (Hereinafter 'New Directions').

[249] See paras 1–3 of the Declaration.

[250] See A Ulloa Y Sotomayor, *I Derecho Internacional Publico* (1957) 47, cited in D Attard, *The Exclusive Economic Zone in International Law* (Oxford, Clarendon Press, 1987) 7. Also LDM Nelson, 'The Patrimonial Sea' (1973) 22 *ICLQ* 668, 670.

[251] FV Garcia Amador, *The Exploitation and Conservation of the Resources of the Sea: A Study of Contemporary International Law* (Leyden, Sythoff, 1959) 73. See also O'Connell, n 7 above, 555–6.

[252] Johnston, n 5 above, 336.

[253] Garcia Amador, n 251 above, 76–9.

[254] McDougal and Burke, n 88 above, 493.

exclusive authority over this area. Clearly, there is an attempt to draw a close factual relationship between coastal State and adjacent seas, and to couch the interests in justifying exclusive control in terms of interests that are universal. This approach is evident in subsequent claims. During the same decade a number of pronouncements were made in support of these extensive claims, including the Principles of Mexico City[255] and the Ciudad Trujillo Resolution.[256] Thus, the former reaffirmed that

> [c]oastal States have the right to adopt in accordance with scientific and technical principles, measures of conservation and supervision necessary for the Protection of the living resources of the sea contiguous to their coasts.[257]

Furthermore,

> [c]oastal States have, in addition, the right of exclusive exploitation of species closely related to the coast, the life of the country, or the needs of the coastal population.[258]

It is notable that support for these declarations remained limited to Latin American States, with strong US opposition to such claims.[259] The lack of competence to act beyond territorial limits remained a fundamental obstacle. Any such claims automatically assumed the lineaments of claims to extended sovereignty and this could not be tolerated. Moreover, these zones were generally inconsistent with the existing law and hence subject to protest by other States. The claims went much further than the Truman Proclamation and were regarded as incompatible with the freedom of the high seas.[260] Nonetheless, although the immediate legal validity of the claims was unconvincing, the claims were important because they emphasised and developed a powerful scientific and economic basis for the existence of an exclusive economic zone, and sought to ground the claim right in terms of universal interests. To this end a great deal of reliance was placed on the work of Professor Suarez, who argued that:

> trade requires it and, above all, fishing, whaling and sealing, as the life cycle of the most valuable species gravitates between the territorial sea and the open sea

[255] The Principles were formulated and passed at the third meeting of the Inter-American Council of Jurists of the OAS. The relevant details are reproduced in Garcia Amador, n 251 above, 53.

[256] *Ibid*, 56.

[257] *Ibid* 53.

[258] *Ibid*.

[259] The claims were generally challenged on the grounds that they violated the freedoms of the high seas. See JA de Yturriaga, *The International Regime of Fisheries. From UNCLOS 1982 to the Presential Sea* (London, Nijhoff, 1997) 5–6. Also Attard, n 250 above, 67

[260] For the US protest see United Nations, Laws and Regulations on the Regime of the High Seas (1951) vol I, 7; For the UK protests see BBL Auguste, *The Continental Shelf: The Practice and Policy of Latin American States with Special Reference to Chile, Ecuador and Peru* (Genève, Librairie E. Droz, 1960) 113.

> which are separated from each other only by an imaginary man-made barrier but constitute by their nature and form a single continuous whole.[261]

These factors suggest that the coastal State needs are to be prioritised in the allocation of such resources and highlight the need to conserve fishing resources and the role of the coastal State in facilitating this.

When UNCLOS I commenced in 1958 a tension already existed between the traditional maritime powers, who wished to maintain the status quo of minimal coastal State authority over the ocean, and the newly independent and developing nations who wished to secure greater control over the resources of the ocean. The notion of the continental shelf secured recognition and codification at the 1958 Geneva Conference.[262] However, the conference failed to agree upon a territorial sea limit wider than 3nm. It also failed to secure any recognition of preferential or exclusive fishing rights for the coastal State beyond that limit.[263] This was largely due to the inability of negotiations to break the fundamental connection between exclusive fishing rights and the territorial sea, a position which was in accordance with interests of the major maritime powers who prioritised shipping and military uses of the sea over the fishing interests of coastal States.[264] Although the conservation measures secured some recognition in the Convention on Fishing and Conservation of the Living Resources of the High Seas, this was merely in the form of an interest short of a legal claim right and an allowance for limited unilateral measures to be taken by coastal States in limited circumstances.[265] This failed to go as far as some coastal States desired.

The failure of the 1958 and 1960 UN Conferences on the Law of the Sea to secure universal agreement on the width of the territorial seas stimulated further unilateral claims to expansive fishery zones. Apart from the evident economic advantage that such zones provided for coastal States, they were increasingly justified as a means of conserving fish stocks from promiscuous over fishing.[266] In 1958, Iceland unilaterally established a

[261] '*El mar territorial y las industrias marítimas*', *Diplomacia universitaria Americana* (1918), cited in Attard, n 250 above, 3–4. This approach was echoed in a later Peruvian policy document. See Ministerio de Relaciones Exteriores del Peru, *Soberanía Marítima: Fundamentos de la Posición Peruana* (1970), cited in O'Connell, n 7 above, 555.

[262] See Art 2 of the Geneva Convention on the Continental Shelf. *UKTS* 39, 1964 (Cmnd 2422); 499 *UNTS* 311; (1958) 52 *AJIL* 858.

[263] *Official Records of the First United Nations Conference on the Law of the Sea* (New York, United Nations, 1958) vol 3, 249.

[264] The difficulties this provoked led the American Bar Association to argue that there was no logical connection between the territorial sea and fishery protection. See (1964) 58 *AJIL* 985.

[265] See Arts 6 and 7 of Convention on Fishing and Conservation of the Living Resources of the High Seas 1958, n 201 above.

[266] Attard notes that this spate of unilateralism was boosted by an explosion in fishing activities and the emergence of new States in Africa and Asia who clearly prioritised their economic development most acutely through the exercise of sovereignty over the resources off their coasts: n 250 above, 20. See also Dahmani, *The Fisheries Regime of the Exclusive Economic Zone* (Lancaster, Nijhoff, 1987) 16.

12-mile exclusive fishery zone, which was successfully defended before the International Court of Justice.[267] In 1965, Nicaragua claimed a 200-mile national fishing zone.[268] Ecuador extended its territorial sea to 200 miles in 1966.[269] This was followed by a claim by Argentina to a 200-mile zone subject to its sovereignty which ambiguously preserved the freedom of navigation and overflight.[270] In 1967, Panama quite clearly laid claim to a 200-mile territorial sea.[271] A series of regional conferences in Latin America undertook to co-ordinate and consolidate unilateral measures and avail them of broader recognition. The Montevideo Declaration on the Law of the Sea 1970 reiterated the geographical, economic and social ties between coastal States and the adjacent ocean in an attempt to legitimise their right to exercise control over the area.[272] Although the freedoms of navigation and overflight were guaranteed in the Montevideo Declaration, these were restrictively interpreted by the signatories.[273] The Montevideo Conference was followed by another meeting in Lima in 1970. This time 20 States attended and 14 adopted the Declaration of the Latin American States on the Law of the Sea.[274] A number of land-locked States were opposed to these claims and were supported by several Caribbean States. However, the latter group reconvened in 1972 and produced the Declaration of Santo Domingo which proposed a 12-nm territorial sea and 200-nautical mile patrimonial sea over which the coastal State had sovereign rights in respect of resources and jurisdiction in respect of pollution and scientific research.[275] Although such practice was not sufficient to establish a customary rule, it shows the general appeal of such claims and growing support for extended coastal State authority.

Across the Atlantic, the interests of African States began to run in parallel to those of the Latin American States, so contacts were established

[267] *Fisheries Jurisdiction* cases [1974] ICJ Rep 3. See n 291 below and the accompanying text.

[268] Decree No 11, 5 April 1965. United Nations, *National Legislation and Treaties Relating to the Territorial Sea, the Contiguous Zone, the Continental Shelf, the High Seas, and to Fishing and Conservation of the Living Resources of the Sea* (New York, United Nations, 1970) 656.

[269] Decree 1542 (1966). *Ibid* 78.

[270] Law No 17,094 (1966). *Ibid* 45. See also Law No 17,500 (1967), which refers to a 200-mile territorial sea: *Ibid* 569.

[271] Law No 31 (1967): *Ibid* 105.

[272] The preamble stresses the geographic, social, and economic link between the sea, land and its inhabitants. It also purported to recognise the legal validity of earlier claims. The thrust of the substantive provisions is to avow the right of coastal States to determine their needs and to exclusively appropriate the resources of adjacent waters in order to meet these needs, whilst noting the duty to conserve said resources. See *New Directions*, n 248 above, 235.

[273] Attard, n 250 above, 18.

[274] The substantive provisions differed little from the Montevideo Declaration. Although the number of States parties in support of the Lima Declaration was greater. *New Directions*, n 248 above, 237.

[275] Reproduced in R Zacklin (ed), *The Changing Law of the Sea: Western Hemisphere Perspectives* (Leiden, Sijhoff, 1974) 253.

between the groups.[276] African States were particularly affected by the explosion of fishing activities in international waters, which threatened their off-shore fisheries.[277] This was compounded by the technological inferiority of their fishing fleets which meant that they could not compete with distant water fishing vessels.[278] During the early 1970s, African nations adopted a more aggressive stance towards exclusive coastal State jurisdiction, and, in 1971, the Organisation of African Unity (OAU) passed a resolution recommending that African States extend their territorial waters out to 200nm.[279] This approach was developed during discussions at meetings in Colombo and Lagos.[280] Although no formal proposals were made, Brown notes that there emerged a more moderate claim to an exclusive economic zone rather than an absolute territorial type claim.[281] The breakthrough came at the Yaoundé Conference in 1972, when headway was made in formulating an exclusive economic zone that would form the basis of a regional policy on ocean development. The ensuing report was adopted unanimously.[282] It stated that: African States had the right to determine the limits of national jurisdiction over the seas; that the territorial sea should not extend beyond 12nm; and that African States may establish an economic zone adjacent to the territorial sea in which they enjoy exclusive jurisdiction for the purpose of exploiting the sea's living resources.[283] Such authority was without prejudice to the freedoms of navigation, overflight, and the laying of submarine cables and pipelines. The OAU endorsed this policy in 1974, giving it even wider currency.[284] This report and the advocacy of Kenya, in particular, fed into discussions at UNCLOS III and provided the basis for the concept of the EEZ.

Although claims to extended jurisdiction were predominantly a feature of South American, Latin American and African practice, similar claims were being advanced by developed States. In Western Europe,

[276] For example, Representatives from Egypt and Senegal attended the Lima Conference.

[277] See Asian-African Legal Consultative Committee Report 1972, 306–7 and FAO Report, *The State of World Fisheries* (Rome, Food and Agriculture Organization, 1968) 8.

[278] J Douence, 'Le Droit de la mer en Afrique occidental' (1967) 71 *Revue Générale de Droit International Public* 110, 119.

[279] See ED Brown, 'Maritime Zones: A Survey of Claims' in *New Directions*, n 248 above, vol 3, 176.

[280] *Ibid*.

[281] *Ibid*.

[282] Conclusions in the General Report of the Organisation of the African States Regional Seminar on the Law of the Sea, held in Yaoundé, from 20–30 June 1972. (1973) 12 *ILM* 210.

[283] Recommendation I, *Ibid*.

[284] Declaration on the Issues of the Law of the Sea, May 1973, (1973) 12 *ILM* 1246. Declaration of the Council of Ministers of the Organisation of African Unity 1974, UN Doc A/Conf 63/33 (1974). See WG Extavour, *The Exclusive Economic Zone* (Genève, Institut Universitaire de Hautes Études Internationals, 1979) 160.

the practice of claiming exclusive fishing zones of up to 12 miles from the coast was prevalent.[285] The expansive claims by the Latin American States were mirrored by those of Iceland.[286] Then in 1964, the European Fisheries Convention was adopted by 12 States.[287] In an attempt to reach a compromise between extensive fisheries jurisdiction and an overly restrictive 3nm territorial sea, this proposed a 12nm exclusive fishing zone. The agreement provided that the basis of jurisdiction was recognition and this served to distinguish it from previous claims, which were essentially grounded in territorial competence. However, Iceland and Norway refused to accede to the convention devaluing it as a truly regional solution to fisheries problems in the Northeast Atlantic Ocean.

Extended fisheries jurisdiction was paralleled by extended coastal State jurisdiction in respect of pollution. In 1970, Canada enacted legislation permitting it to regulate all shipping within 100 miles of its Arctic coastlines in order to guard against pollution.[288] Although this was subject to protest, Canada justified its actions on the basis of the 'overriding right of self defence of coastal States to protect themselves against grave threats to their environment.'[289] It was argued by Canada, in the face of strong American objection, that there was ample support for such measures, particularly in American practice.[290]

In light of increasing State practice, wider legal recognition of an exclusive fisheries zone was inevitable. In 1974, the ICJ was asked to determine the validity of Iceland's claim to a 50-mile fishery zone.[291] Although the Court held that Iceland's claim was not opposable against the applicants, it declined to comment on whether it was contrary to

[285] Dahmani, n 266 above, 8, fn 36. Also S Oda, 'International Control of Sea Resources', (1969) 127 *HR* 410. Both authors record numerous bilateral fisheries agreements between European States, and indeed other fishing nations.

[286] See Regulation of the Althing Extending Fishery Limits to 50 miles, 15 February 1972. Reproduced in *New Directions*, n 248 above, 89. This sparked off the dispute between Iceland and the UK and Germany, who had previously enjoyed fishing rights in waters subject to the legislation. However these were only guaranteed by an agreement due to expire in 1972. Exchange of Notes No 1570, 11 March 1961. *New Directions*, n 248 above, 85.

[287] Parties to the Convention include Austria, Belgium, Denmark, France, Federal Republic of Germany, Ireland, Italy, Luxembourg, The Netherlands, Portugal, Spain, Sweden, and the United Kingdom. The Convention accorded a coastal State exclusive jurisdiction over fisheries in a belt 6 miles from the coastline (art 2), with a further 6-mile belt being open to the coastal State, contracting States and those States whose nationals have traditionally fished in the waters (arts 3–4). The coastal State has the power to regulate fisheries and enforce its regulation in the zone (art 5). See *New Directions*, n 248 above, 41 *ff*.

[288] The Arctic Waters Pollution Prevention Act. See (1970) 9 *ILM* 543.

[289] The Canadian position is set out in (1970) 12 *ILM* 607. See also RS Reid, 'The Canadian Claim to Sovereignty over the Waters of the Artic' (1974) 12 *Canadian Yearbook of International Law* 111, 218.

[290] *Ibid*.

[291] Two claims were brought, one by the UK and one by Germany. *Fisheries Jurisdiction* case (*UK v Iceland*), [1974] ICJ Rep 3. *Fisheries Jurisdiction* case (*FRG v Iceland*), [1974] ICJ Rep 175.

international law.[292] In light of the on going negotiations at UNCLOS III, the Court held that it could not 'render judgment *sub specie legis ferendae* or anticipate the law before the legislator has laid it down.'[293] The Court did, however, hold that the 12nm exclusive fishing zone had crystallised into customary international law since UNCLOS II.[294] It also recognised that the special dependency of the coastal State on fisheries gave rise to preferential fishing rights in certain circumstances.[295] The zone of preferential fishing rights was described as a '*tertium genus* between the territorial sea and high seas'.[296] Yet, the Court failed to ascribe maximum limits to the concept and examine its legal nature. The influence of this case on the development of international law is uncertain given the emphasis the Court placed on the fact that it could not 'render a judgment *sub specie legis ferendae*'.[297] However, O'Connell regards the case as setting out the doctrinal infrastructure for the EEZ.[298] Churchill considers it implicit in the concept that it embodied a rule of exclusive jurisdiction and as such is a more expansive concept than that of preferential rights.[299] However, the notion of preferential rights was a controversial one at the time. Although it was indisputably a feature of national fisheries policy, it was debatable as to whether it constituted a rule of customary international law.[300] Unfortunately, the ICJ's reasoning on this matter is too superficial to be of assistance.[301] According to the majority, preferential rights would have to vary according to the extent of the coastal State's dependence on the resource and the need for conservation, thereby rendering the concept highly relative and unstable. Although such a position

[292] *Fisheries Jurisdiction* case (*UK v Iceland*), *Ibid* [67]; *Fisheries Jurisdiction* case (*FRG v Iceland*), *Ibid* [59].

[293] *Fisheries Jurisdiction* case (*UK v Iceland*), *Ibid*, [53]; *Fisheries Jurisdiction* case (*FRG v Iceland*), *Ibid*, [45].

[294] *Fisheries Jurisdiction* case (*UK v Iceland*), *Ibid*, [52]; *Fisheries Jurisdiction* case (*FRG v Iceland*), *Ibid*, [44].

[295] As the Court stated, preferential rights are 'not compatible with the exclusion of all fishing activities of other States. A coastal State entitled to preferential rights is not free, unilaterally and according to its own uncontrolled discretion, to determine the extent of those rights. The characterisation of the coastal State's rights as preferential implies a certain priority, but cannot imply the extinction of current rights of other States, and particularly of a State which, like the applicant, has for many years been engaged in fishing in those waters in question, such fishing activity being important to the economy of the country concerned. The coastal State has to take into account and pay regard to other States, particularly when they have established an economic dependence on the same fishing grounds'. *Fisheries Jurisdiction* case (*UK v Iceland*), *Ibid*, [62]; *Fisheries Jurisdiction* case (*FRG v Iceland*), *Ibid*, [54].

[296] *Ibid* [23]–[24].

[297] Above n 293.

[298] Above n 7, 542.

[299] RR Churchill, 'The Fisheries Jurisdiction Cases: The Contribution of the International Court to the Debate on Coastal States' Fisheries Rights' (1977) 24 *ICLQ* 83, 87–8.

[300] See the joint Separate Opinion of Judges Forster, Bengzon, de Arachaga, Singh and Ruda: n 291 above, 45, at [52].

[301] Churchill, n 299 above, 92–98.

can be regarded as a retreat from the traditional high seas position of non-ownership, it did little to provide the security that effective fisheries management required at the time.

This period of development in the law of the sea is highly significant. An increasing number of States unilaterally claimed extended maritime jurisdiction. The basis of this largely derived from the political will of the State in accordance with certain moral, social and economic imperatives. At the same time States were also advocating their claims through regional mechanisms. This suggests that States also appreciated that ultimately such claims could only achieve legality through conventional law-making processes. This much is consistent with the decision of the ICJ in the *Anglo-Norwegian Fisheries* case, which confirmed that

> the delimitation of sea areas has always had an international aspect; it cannot be dependent on the will of the coastal State as expressed in its municipal law.[302]

By 1978, 23 States had claimed 200nm exclusive fishing zones, and another 38 had claimed exclusive economic zones.[303] In the 1982 *Tunisia/Libya Continental Shelf* case, the ICJ based its decision, in part, on the well-established trends evident during the negotiations of UNCLOS III, which demonstrated that 'the concept of the exclusive economic zone … may be regarded as part of modern international law'.[304] In the same year, the United Nations Convention on the Law of the Sea was concluded and it set out in some detail the rules pertaining to the EEZ. Within a couple of years the ICJ confidently held that the provisions of the 1982 Convention were consonant with general international law.[305]

Before concluding this historical review, some observations should be made on the development of the EEZ, and on the relationship between exclusive fishing rights and property concepts. Early claims to exclusive fisheries were unsystematic and ambiguous, and, more importantly, were contrary to the freedom of the seas. When such claims were successful, they were dependent on reciprocal and co-extensive claims to sovereignty over the seas.[306] Only where the coastal State had exclusive control over the ocean could exclusive claims to fisheries be supported. As noted above such territorial claims were contingent upon effective occupation. This fundamental link between exclusive fishing rights and territorial claims continued almost unmolested until the end of the 19th century. As such there was little consideration of fisheries in

[302] [1951] ICJ Rep 116, 132.

[303] DJ Harris, *Cases and Materials on International Law* (London, Sweet and Maxwell, 1998) 447.

[304] [1982] ICJ Rep 18, [100].

[305] *Gulf of Maine* case [1984] ICJ Rep 246, [94].

[306] O'Connell saw this as inevitable because legal doctrine could not justify the exercise of State power beyond territorial limits: n 7 above, 530.

terms of discreet property rights. Moreover, the assumption that fish were inexhaustible meant that they fell outside mainstream property discourse. Like the air and sun there was no need to reduce fish in their natural state to private property and they remained subject to a rule of capture.

By the end of the 19th century it was generally accepted that new fishing methods were reducing the amount of fish that could be captured. Fish were becoming economically, if not physically, scarce and moves were afoot to address the problem. In response to changing perceptions about the physical qualities of fisheries, the conservation of fish stocks began to emerge as a priority. This, combined with the need to secure adequate resources for coastal States, appears to have stimulated a change in policy, which would result in the disengagement of fisheries regulation from wider claims to sovereignty (or ownership) over the oceans. However, it remained the case that fish stocks on the high seas could not be subsumed within an extended territorial sea or continental shelf. There was little, if any, basis for title to such stocks under domestic law and the predominant justification for exclusive control, ie effective occupation, could not be applied to fisheries. As such a new basis or justification for exclusive control was required and this was to be pursued through positive international law. Although claims were initially pursued by individual States, the ultimate validity of any claim to extended fisheries jurisdiction was determined by international law. International law did not merely recognise domestic claims, it constituted their whole legal basis. This is in stark contrast to the territorial sea and continental shelf which were rooted in domestic law. This is crucial because the EEZ marks a reduction in the importance of the physical quality of a resource in favour of legal excludability as determinative of its susceptibility to property rules.

In order to secure international agreement on a new maritime zone, State's claims took on a strong consequentialist bent, ie if exclusive control was not granted then fish stocks would continue to decline. This did not quite reach a utilitarian level of evaluation, but did lay the basis for the broadly economics-based fisheries regimes of the 1982 Law of the Sea Convention. Furthermore, as we will discuss in more detail in chapter 7, States had to mediate claims to exclusive control with the assumption of duties or responsibilities, with the result that the EEZ became imbued with conservation responsibilities. Finally, the focus on the 'appropriateness' of coastal States control are essentially arguments derived from propriety. They were assertions of a proper order, albeit subjectively determined. Such order, which facilitated conservation of important natural resources, was couched in terms of a general interest. The nature and extent of such property-type consideration are considered further in the next two chapters.

6. CONCLUDING REMARKS

This review shows how sovereignty over ocean space was at first circumscribed due to doctrinal limitations inherent in the then dominant accounts of property, ie occupation theory held that exclusive physical control was a precondition to title. This was in most cases absent, hence the lack of property-type claims in ocean spaces. However, once States were able to exert such control over ocean space, through the medium of positive law based upon the political authority of the State, there was a gradual extension of exclusive, property-type claims to the seas and their resources. As a result of the coalescence of property rights and governmental authority in these new maritime zones, coastal States exercised largely unrestrained control of coastal waters. Significantly, and until recently, the use of property-type concepts in the law of the sea has been quite isolated from important socialising factors. This may be contrasted with the development of exclusive use rights within domestic legal orders. Here, property and government evolved into separate, countervailing social systems at an early stage. As Allott points out, the result of the dialectical tension between these systems under domestic law resulted in a series of law-mediated compromises.[307] Thus respect for property resulted in limits to the scope of government authority, and limitations were imposed on property to ensure that important community-type interests were not encroached upon. Internationally, the coalescence of property rights and the exercise of government authority in a feudal way denied the opportunity for the development of such law-mediated compromises. This in turn prevented the articulation and development of community type interests that are characteristic of land-based holdings within States.

In the 18th century there was something of a sea change in way in which international law was done at this time. Until Vattel, the substance of international law was principally derived from the treatises written by the leading jurists of the time. In part this was in keeping with a natural law tradition. Yet, in practical terms, it could not have been otherwise for the new institution of international law. Lacking as it did any systemic corpus of rules, it depended for its existence upon reason and reflection on other rules and institutions to provide the necessary raw material for a new body of laws. This explains the influence of doctrine and natural law in the formative period of international law. Within this challenging paradigm, there was initially much opportunity for invention and advocacy as to what ought to be the law. Over time, this method of enquiry declined in favour of a more rigorous and scientific approach to the construction of legal rules under the guise of positivism, in which commentators placed

[307] P Allott, '*Mare nostrum*: A new international law of the sea' (1992) 86 *AJIL* 764, 771.

greater normative emphasis on the will of States. This in turn resulted in a marginalisation of doctrinal commentaries. It is difficult to pinpoint when this change in method was consummated, but it can be assumed to have been sparked by *Le Droit des Gens* and to have transpired by the 19th century.[308]

However, during the 20th century, the consolidation and geographic expansion of control over enormous swathes of ocean space beyond the territorial sea became increasingly contingent on legal rather than physical or 'political' excludability. It is then somewhat paradoxical that changes in our perception of the physical quality of the resource base, ie the finite and exhaustible nature of the fish stocks, served to justify these new claims to exclusive fisheries under positive law. During the 20th century, dependence upon multilateral agreements and, indeed, international law more generally, infused the law of the sea with distinctive values. In part, this was a consequence of the emergence of new States, particularly in the developing world, and their desire to seek a redistribution of wealth. In part it was also a result of the consensual nature of international law, with the resultant imperative to seek compromise or negotiate a package of rights in the development of legal regimes. Arguably, it was also a consequence of newly emergent and influential paradigms such as environmental law. These factors generated a range of legal and moral factors capable of shaping excludability that are distinct from those found in domestic legal orders, with the result of that different forms of control have emerged. The complex interface of moral and political values with legal mechanisms is epitomised in the form of the United Nations Convention on the Law of the Sea, which is considered in the next chapter.

Some interim conclusions may be made about the way in which property rights and the law of the sea have developed. First, it is apparent that questions of ownership are largely determined by reference to the physical quality of a resource. In this context, two factors have been decisive in determining whether or not a resource could be reduced to exclusive control: the state of technological development and the sophistication of property theory. Only once the sea and its resources could be physically controlled did claims of ownership emerge, as illustrated by the cannon shot rule. This rule was in accordance with the prevailing justification of private property on the grounds of effective occupation. It was just as evident in way in which the continental shelf developed. Secondly,

[308] As noted above, it was evident in the method of De Vattel. It was certainly influenced by the works of Hobbes and Locke and, later, by the influential work of Hegel. It would seem to be a process of evolution rather then revolution. The writers considered above, from Puffendorf onwards, can be firmly located in the emergent liberal tradition. See NG Onuf, '*Civitas Maxima*: Wolff, Vattel and the Fate of Republicanism' (1994) 88 *AJIL* 280.

the application of property principles has been subject to the overriding policy interests of States. There has been a gradual extension of exclusive, property type claims to the resources of the seas, generated in part by States' pragmatic self interest, but also in part by realisation that exclusive control over things provides a stable regulatory regime. Here we may also note that the values at play in the international community have given the law of the sea distinctive qualities. Originally many such values were limited to the exclusive acquisitive desires of States. However, latterly these became imbued with greater concern over the consequences of wealth allocation. Thirdly, the evolution of international law into a voluntarist system of law with its own effective rules and principles made it possible to substitute legal excludability for physical excludability. This opened up the possibility of a vast expansion of exclusive coastal State control over ocean space on a conventional basis. The difference between territorial bases of authority and conventional bases of authority is quite evident in the difference between the territorial sea and continental shelf on the one hand and the EEZ on the other. In the case of the territorial sea and continental shelf, the essentially territorial basis of these regimes meant that few duties or responsibilities were imposed upon States. In the case of the EEZ, which was based upon agreement, a series of law mediated compromises featured in the ultimate regime, in the form of conservation and management obligations.

Throughout this chapter, the importance of certain techniques of legal reasoning has been observed. That the influence of some such techniques has been muted is only to be expected in a developing legal system, that is to say international law. Thus, the pragmatic rather than principled development of many concepts was frequently remarked upon, indicating a frequent disregard for legal coherence, at least in the formative period of the law of the sea. On the other hand there are important instances where techniques of legal reasoning have exerted an important influence over the development of the law of the sea. Since the Grotian debate, jurists have carefully sought to couch their legal claims in terms of univeralisable interests, hence the enduring influence of the freedom of the high seas. Indeed, as a higher order principle, the freedom of the high seas has also been repeatedly used to test the coherence of a number of claims to exclusive control or use of ocean space. This explains the difficulty that many jurists had in advancing exclusive claims to ocean spaces or resources beyond a narrow belt of waters, the strong resistance to exclusive fishing rights, and the adoption of an inclusive approach to ocean use. Although jurists' appreciation of strictly legal consequences of their doctrinal claims was rather muted, this is understandable given the rather raw form of early international law and the scope it provided for imaginative thinking. There were initially few rules of substance and the fact that the interests of most maritime powers were relatively

homogenous meant that there was little concern in holding a rule applicable in like cases. This may be contrasted with jurists' keen appreciation of the general consequences of the legal claims that they were advancing. Such consequences played a much more significant role, as was reflected in the all too apologetic advocacy of their early treatises. However, as the law of the sea became more complex and sophisticated, it became necessary to carefully construe the legal consequences of new legal claims: witness the difficult struggle to establish a principled basis for exclusive fishing rights in the 20th century, and the subsequent appropriation of some of the justifications presented for the extension of sovereign rights over the continental shelf by States desiring exclusive control over coastal fisheries. The impervious rigidity of the freedom of the high seas was broken in the manner of any defeasible norm, and subject to contours more in line with the needs of the international community. In the 20th century, consequential factors such as conservation imperatives, however poorly based in science, also became increasingly important in justifying exclusive fishing zones. As Lauterpacht argued, reasonableness had an important role to play in explaining and justifying the emergence of the continental shelf regime.[309] By extension this applied to the development of the EEZ. In chapter 7, the importance of techniques of legal reasoning is much more apparent. It is suggested that this is the result of two factors. First, the increased complexity of law concerning the regulation of ocean spaces and resources, and second, the consolidation, systematisation and near universal acceptance of the law of the sea in the form of the 1982 Convention on the Law of the Sea.

In chapter 2 it was remarked that property is a pluralist concept, and that elements of natural rights theory, liberty, utility, propriety, and even anti-property considerations shape property institutions. This historical review has shown the relevance of some of these approaches to be quite muted. Initially, first appropriation, in the form of effective occupation was the dominant basis for most maritime claims, largely because it respected the nexus between the coastal State and the adjacent waters, but also because it was rooted in international law at a formative stage and so became difficult to supplant with alternative bases of title. The second discernable property influence came from the liberal tradition. In the liberal tradition States are regarded as the locus of power in the international legal order. Accordingly, States need and desire exclusive use of things to ensure their continued agency. This has been a compelling justification for claims to exclusive control over oceans or resources. Consonant with this liberal paradigm is the idea that limits on States should not be presumed,

[309] See above n 206 and the accompanying text.

and it is no surprise that we have witnessed a creeping extension of exclusive coastal State authority along with the significant accumulation of wealth it has engendered. The international legal order is a horizontal legal order of sovereign and equal States, characterised by the absence of centralised institutions and decision-making forums with effective authority over States. Under a system of law traditionally based upon a theory of auto-limitation, that States are only bound by rules they freely accept as legally binding,[310] the scope for the emergence of public-type duties commonly associated with domestic property regimes is much reduced. Public institutions are necessary to impose constraints on the self-interested acquisitive activities of States and to (re)distribute wealth. This has meant that the trend towards exclusive control of resources has been difficult to check, and this has in turn resulted in a series of maritime zones, in which States enjoy high degrees of exclusive and untrammelled authority. As suggested above, the convergence of property and governance into a single regulatory structure under international law denied the opportunity for the development of important law-mediated compromises. Only in the 20th century, with the emergence of conservation imperatives and stronger institutional mechanisms, such as the United Nations, the Food and Agriculture Organisation, and various regional fisheries management organisations, has this been possible. As international society has matured, and as States have become aware of the ordering consequences of their actions, there is increasing evidence of other values coming into play. These included weak versions of propriety or utility in the continental shelf regime, ie exclusive coastal State control was the means of securing good order over offshore drilling activities. A slightly stronger version of propriety emerged with the 'custodial' regime of the EEZ, and its specific emphasis on conservation and management. Economic rationales also manifested themselves in this regime, for example in the provisions on the EEZ, which require the optimum utilisation of resources. The range and extent of these values/justifications and their influence on property rights in natural resources are considered in the next few chapters.

[310] *Lotus* case, 1927, PCIJ, Ser A, No 10, 8.

6

Sovereignty and Property: General Considerations

1. INTRODUCTION

Before considering how property is regulated in various maritime zones, some general observations on the nature of sovereignty must be made. First, we must consider whether or not it is at all appropriate to analyse sovereignty in terms of property-type relationships. As indicated at the outset, this approach is not at all inconsistent with how the concept of territorial sovereignty has developed, and it offers up important avenues of analysis. Having established that our property-based framework of private rights and public interests is appropriate to an analysis of territorial sovereignty, it is possible to examine the relationship between the private and public functions of territorial sovereignty. In particular, it is important to consider specific restrictions on the exercise of sovereign rights over natural resources.[1] Many such developments have occurred since the adoption of the basic rules on maritime jurisdiction, and so may shape the content of the provisions set forth in the Law of the Sea Convention. Moreover, these developments apply to natural resources generally and so offer insights into the potential limitations upon property rights over land-based natural resources. Traditionally, the treatment of natural resources was done according to the rule that once a resource fell within the exclusive sovereignty of a State then it was subject to few limitations. After World War II, this came to be embodied in the principle of permanent sovereignty over natural resources.[2] The principle has since been confirmed in the decisions of a number of international

[1] Here we are only concerned with 'property-type' rules that are directly concerned with the use of natural resources. Such rules are characterised by their *in rem* attributes, either because they create positive rights effective against the world at large, or they negatively constrain such rights to the same extent. It should also be pointed out that we are not concerned with public order type rules that may indirectly limit how States use resources, such as the rules on the use of force.

[2] This principle is enshrined in a number of instruments, including: General Assembly Resolution 1803 XVII (1962); the Declaration on the Establishment of the New International Economic Order, UNGA Res 3201 (S-VI) 1974; Charter of Economic Rights and Duties of States, UNGA Res 3281 XXIV (1974).

tribunals.[3] Of course such control has never been regarded as absolute.[4] As Schrijver notes:

> The development of permanent sovereignty has tended to focus on the formulation of rights in the earlier periods, but a balance with duties has been increasingly created by stipulating that permanent sovereignty over natural resources be exercised for national development and the well being of the people.[5]

As section 4 below indicates, the scope of limitations on sovereignty in order to protect such interests has expanded considerably.

A number of contemporary writers are of the opinion that the exercise of sovereignty over natural resources must include some form of commitment to the public good.[6] There is quite some merit in this approach. Not only is it consistent with the notion of the public interest that has been advanced, and, more specifically, with the priority attaching to vital needs set out in chapter 3, it is reflected in a number of developments in the field of international law.[7] This is important because any general aspect of the public interest needs to be given specific legal form before it can have practical effect.

2. TERRITORIAL SOVEREIGNTY AS PROPERTY

According to a widely held view, sovereignty has two facets: internal sovereignty, that is, the supreme authority within the State to make law, and external sovereignty, the legal independence of the State *vis a vis* other sovereign States. In the former case, sovereignty is typically conceived of as political power, as an expression of the supreme authority of the State. Sovereignty understood so is to be distinguished from private power and, in particular, property relationships.[8] Indeed, much endeavour has been spent on critiquing the relationship between these two spheres of power. However, despite the importance of this relationship, we are rather more concerned with the latter dimension of sovereignty, sovereignty

[3] See, eg, *Texaco v Libya* (1977) 53 *ILR* 389; *BP v Libya* (1977) 53 *ILR* 297.

[4] Thus, in 1921, US Secretary of State Lansing claimed that sovereignty over territory was to be exercised in a manner that was beneficial to the population, by ensuring national security'. R Lansing, *The Peace Negotiations—A Personal Narrative* (London, Constable, 1921) 102–3.

[5] NJ Schrijver, *Sovereignty Over Natural Resources* (Cambridge, Cambridge University Press, 1997) 168.

[6] See G Handl, 'Environmental Security and Global Change: The Challenge to International Law' (1990) 1 *Ybk IEL* 3, 32; E Duruigbo, 'Permanent Sovereignty and Peoples' Ownership of Natural Resource in International Law' (2006) 38 *George Washington International Law Review* 33; K Baslar, *The Concept of the Common Heritage of Mankind In International Law* (London, Nijhoff, 1998).

[7] See Schrijver, n 5 above, ch 10.

[8] M Loughlin, 'Ten Tenets of Sovereignty' in N Walker (ed), *Sovereignty in Transition* (Oxford, Hart Publishing, 2003) 55, 59–63.

as it describes the authority of States under international law, and more especially territorial sovereignty.

Sovereignty describes the locus of power within the international system. Power must be located somewhere and that somewhere is the territorial unit called the State. This agency or sovereignty is independent of the consent of other agents.[9] International law is the law created by these agents, by virtue of the reciprocal recognition of the exclusive territorial competence of these agencies.[10] In this sense the building blocks of the international system are territorially defined spheres of exclusive competence. If not logically imperative, then it is at least highly desirable that the locus of power be territorially defined. This is because overlapping claims to exercise power over the same physical space invariably lead to conflict. Where these agents exercise competence beyond territorial limits, then this may only be through the positive operation of international law, and in this sense competence is derivative of any territorial competence.[11] When sovereignty is exercised over things, say territory or natural resources, then sovereignty takes on the lineaments of property. Sovereignty in this sense is in effect a claim to excusive regulatory authority over a defined spatial extent or *res*. Of course, the concept of sovereignty is not entirely synonymous with ownership.[12] A State does not own its nationals. Neither does it exercise powers of ownership when it enters into arrangements with other States. In these two senses sovereignty is to be understood as a power of governance by which States exercise regulatory authority over their nationals and over the machinery of the State *vis a vis* other States.[13] However, when sovereignty is exercised over territory and the resources therein, it is clearly analogous to a regime of property. Indeed, it is not uncommon to find international tribunals making explicit use of property terminology to account for territorial sovereignty.[14] In order to maintain a clear distinction between the

[9] The point is that agency must be physically defined. For individuals that physical space is one's own body. In exceptional situations one agent may exercise powers for and on behalf of another agent, eg by power of attorney. This does not detract from the fact that the legally recognised power to act resides within that first agent. For States that physical space is their territory.

[10] Allott describes this situation as 'a mutual protection society of landowners'. P Allott, '*Mare Nostrum*: A New International Law of the Sea', (1992) 86 *AJIL* 764, 771.

[11] As we shall see in the next chapter, extended sovereignty over the continental shelf was couched in such terms. See the *North Sea Continental Shelf* cases [1969] ICJ Rep 3, [19]; *Aegean Sea Continental Shelf* case, [1978] ICJ Rep 3, [86].

[12] See the *Case Concerning Sovereignty over Pedra Branca/Pulau Batu Puteh, Middle Rocks and South Ledge*, [2008] ICJ Rep 1, [222].

[13] This power is, as Brownlie notes, delineated by international law. I Brownlie, *Principles of Public International Law* 5th edn (Oxford, Oxford University Press, 1998) 107.

[14] *Eritrea/Yemen Arbitration*, Award of the Tribunal in the First Stage—Territorial Sovereignty and Scope of Dispute, 9 October 1998. Reproduced in (1998) RIAA, vol 22, 209, 219, para 19; 317–318, para 474.

different functions of sovereignty, we shall refer to sovereignty in this sense as territorial sovereignty.

The conceptual structure which property lends territorial sovereignty is first evident in the object theory of State territory, which regards the relationship of the State to its territory the same as that of the individual to his land or property.[15] If this approach holds true then we can analyse the regulation of territory it in the same way as property generally.[16] Examining territory in terms of the typical incidents of ownership allows us to clarify the range of rights, powers and privileges that a State has over its (maritime) territory, the restrictions on such rights, powers and privileges, and the rights and duties of other States.[17] This in turn allows us to extrapolate the chain of legal relationships arising at the level of the State under international law through to the holder of individual property rights under domestic law. Before considering such relationships it is necessary to establish that the object theory is an appropriate way of accounting for States' relationships to their territories.

Some commentators hold that it is quite wrong to regard the territory of the State as something external to the State.[18] Rather territory is an inseparable part of the State, which cannot be detached from the State in the same way that an individual can dispose of property. Yet this view is not wholly antithetical to the object theory, for as Lauterpacht argued, it is not necessary to deny the indispensability of territory in order to maintain at the same time that it is the object of the proprietary right of the State.[19] Thus he admits of theories that allow for the existence of the State

[15] H Lauterpacht, in E Lauterpacht (ed), *International Law. Being the Collected Papers of Hersch Lauterpacht* (London, Cambridge University Press, 1970) 367.

[16] Many of the rules concerning territory, and in particular the acquisition of territory, are derived from the treatment of property and ownership in Roman law. See, eg, O'Connell, *International Law* 2nd edn (London, Stevens, 1970) vol I, 403–4; M Shaw, 'Territory in International Law' (1982) 13 *Netherlands Yearbook of International Law* 61, 74. In the present discussion although only territory is mentioned, the use of the term includes those *res* attached to and forming a natural extension of the territory, eg rivers and other bodies of water, fish and other wild animals, forests and other natural resources. We should also distinguish territory from other things owned by the State. States may own property under and according to their own domestic laws of property. Such public property may include government buildings, public parks and so on.

[17] Even Brownlie admits that the analogy is 'useful': n 13 above, 106. For example, restraints on the property of the State can simply be translated into restraints on those to whom the State may grant subsequent rights of ownership. Allott adopts just such an approach in his seminal article examining the legislative process that resulted in the Law of the Sea Convention. He points out how social policy is transformed into law by specifying jural relations between predetermined legal persons in respect of things. His approach makes heavy use of Hohfeldian analysis and he even uses the concept of ownership to illustrate his point that the convention is composed of a complex layering of legal relations and delegations of power. P Allott, 'Power Sharing in the Law of the Sea' (1983) 77 *AJIL* 1.

[18] See, eg, E Kaufmann, '*Règles générales du droit de la paix*' (1935—iv) 54 *Recueil des Cours* 379.

[19] Lauterpacht, n 15 above, 368.

without territory. Although this might be unrealistic in practice, in light of the emergence of self-determination, and other doctrinal developments, such as the requirement of democratic governance, it is clear that the requirement of territory is now less crucial to Statehood than at any previous time.[20] Individuals are increasingly of direct concern to international law and if we regard the State as the totality of the individuals organised as the State, then there is nothing artificial in regarding the State as the owner of territory. As Lauterpacht concludes, 'individuals, in their collective capacity as a State, own the territory of the State.'[21] This approach is confirmed by State practice in respect of the treatment of condominiums, international leases and servitudes, international trusts, rights of transit across territory and territorial concessions.

The condominium, under which States exercise sovereignty conjointly over a piece of territory, is the clearest example of a division of ownership rights over a piece of territory and the treatment of territory as the property of the State.[22] Thus States held a number of territories as condominia in the aftermath of the First World War.[23] Although these were regarded as temporary arrangements pending the final determination of the territory in a post-conflict period, there are other examples, including the Anglo-French condominium over the New Hebrides (1914–80), the City of Tangier, Schleswig-Holstein and Lauenburg under the condominium of Prussia and Austria (1864–6), and Sudan under Great Britain and Egypt (1898–1955). In 1932 a German Supreme Administrative Court decision confirmed the existence of a regime of joint ownership over a watercourse running between Prussia and Holland.[24] More recently, the ICJ confirmed the legitimacy of condominia in the *Case Concerning the Land, Island and Maritime Frontier Dispute*.[25]

An international lease, such as the one held by the United States over the Panama Canal, is another example of the treatment of territory like

[20] States have always taken a liberal approach to the requirement of territory as a prerequisite for statehood. For example most States emerging after the First World War were recognised without their borders being fully defined. H Lauterpacht, *Recognition in International Law* (Cambridge, Cambridge University Press, 1947) 30.

[21] Lauterpacht, n 15 above, 368.

[22] See C Parry, 'Plural Nationality and Citizenship with Special Reference to the Commonwealth' (1953) 30 *BYIL* 262–3. Parry makes specific reference to common law notions of tenancy in common and joint tenancy as means of explaining a condominium.

[23] Ch II, s IX of the Treaty of Versailles 1918 established a temporary condominium over Danzig. Under Art 99 of the same, Germany ceded Memel as a condominium.

[24] Above n 15, 371.

[25] '[T]he waters were subject to a regime of a condominium rather than being simply undelimited waters. The existence of the joint sovereignty in all that area of waters other than those subject to the treaty or customary delimitations means that Honduras has existing legal rights (not merely an interest) in the Gulf waters up to the closing line, subject of course to the equivalent rights of El Salvador and Nicaragua.': [1992] ICJ Rep 351, [414].

property.[26] One can also point to the status of Hong Kong territory as leased by the United Kingdom from China.[27] The concept of an international lease was discussed at length and confirmed in the *Lighthouses in Crete and Samos* case.[28] The majority of the Permanent Court held that although the Sultan of the Ottoman Empire had accepted important restrictions on the exercise of his rights of sovereignty in Crete, that sovereignty had not ceased to belong to him however qualified it might be from a juridical point of view.[29] International servitudes, although much criticised, also show how the component aspects of sovereignty are often divided in a property-like manner.[30] A servitude is an exceptional division of sovereignty by which the territory of one State is limited in favour of that of another.[31] Servitudes have been confirmed by international tribunals, if not by that name, then at least by reference to the underlying concept.[32] In the *North Atlantic Coast Fisheries arbitration,* the tribunal rejected the US claim that Article I of the 1818 Anglo American Convention of Commerce constituted an international servitude in their favour amounting to a derogation of British sovereignty. Although they noted that such a concept was unknown to statesmen at that time, the Tribunal implicitly accepted that such a grant would be valid where it was clearly intended and granted.[33] In the *Aaland Islands* case, the International Commission of Jurists held that the demilitarisation provisions of the treaty were binding

[26] Panama Canal Treaty 1903, 2 Malloy's *Treaties*, 1349. Sovereignty has since been returned to Panama. See (1978) 72 *AJIL* 225.

[27] Authority over Hong Kong recently reverted back to China upon the expiry of the United Kingdom's lease. See the Anglo Chinese Agreement on Hong Kong (1984) 23 *ILM* 1366.

[28] *Lighthouse Case* (1937) PCIJ Ser A/B, no 71.

[29] *Ibid*, 127.

[30] Of particular relevance to the present study was the concept of servitude as put forward by La Pradelle in 1898 to describe the nature of rights enjoyed in the territorial sea. His argument was that the rights of the coastal State consisted of a bundle of individual servitudes rather than homogenous rights. See AG de La Pradelle, '*Le Droit de l'État sur la Mer Territoriale*' (1898) 5 *Revue Générale de Droit International Public* 264. More recent writers have been very critical of the concept. See CH Hyde, *International Law, chiefly as interpreted and applied by the US* (Boston, Little Brown and Co, 1922) vol I, para 153. Also Lord McNair, 'So-called State Servitudes' (1925) 6 *BYIL* 111; Brownlie, n 13 above, 377–8. Core to these critiques is the problematic idea that servitudes may survive changes of sovereignty. See Brierly, who suggests that they are more akin to rights in personam given that they do not survive changes of sovereignty. J Brierly, *The Law of Nations*, 6th edn, ed H Waldock (Oxford, Clarendon Press, 1963) 191. However, this should not detract from the point that States can validly create rights over their territory in favour of other States, which may be enforceable against the host State. See generally, the *Case Concerning Right of Passage Over Indian Territory*, [1960] ICJ Rep 6.

[31] A servitude was confirmed by the Cologne Court of Appeal in 1914. See *Aix-la-Chapelle-Maastricht Railroad Co. v Thewis*, noted in (1914) 8 *AJIL* 858-60.

[32] See the *SS Wimbledon,* (1923) PCIJ Ser A, No 1, 24–5; the *Rights of Passage Over Indian Territory* case, [1960] ICJ Rep 6, 44.

[33] *North Atlantic Coast Fisheries Arbitration* (1910) RIAA, vol XI, 167 *ff*.

upon a successor State, despite noting, that 'the existence of international servitudes, in the true technical sense of the term is not generally admitted'.[34]

The League of Nations mandates system and United Nations trust system are further examples of territorial sovereignty being qualified in a property-like manner. In each case, a State is appointed to administer a territory until it is restored to sovereignty or absorbed into another State. The question of where sovereignty resides in such arrangements is much debated but should not detract from the fact that its exercise is allocated among different agencies.[35] For example, Lauterpacht argued that the exercise of sovereignty over the mandate territory is vested in the Mandatory and titular ownership in the League.[36] He describes the sovereignty of the League as residual and supervisory, an approach which received confirmation *R v Ketter*.[37] This clearly parallels the way in which the incidents of ownership may be separated. Others jurists have argued that it resides elsewhere.[38] However, the point is not *how* sovereignty is divided, but that it *is* divided.

The treatment of territory like property arises in respect of the right of transit passage, which provides land-locked States with a right of access to and from the sea through the territory of any littoral State. For example, Article 3 of the 1958 High Seas Convention provides that landlocked States should enjoy the freedom of the sea on equal terms with coastal States and so should have free access to the sea.[39] It is doubtful whether such a right could be self-executing, and State practice suggests that the right needs to be realised through special agreement.[40] This is reflected in Article 125 of the Law of the Sea Convention, which provides for the right of transit passage, the terms and modalities of which shall be agreed

[34] *Aaland Islands* case, LNOJ, Special Supplement No 3, 1920, 3, 16–19.

[35] See, eg, Q Wright, *Mandates under the League of Nations* (Chicago, University of Chicago Press, 1930) esp 319 *ff*; D Hall, *Mandates, Dependencies and Trusteeship* (London, Stevens and Sons, 1948); FB Sayre, 'Legal Problems Arising From the United Nations Trusteeship System' (1948) 42 *AJIL* 263, 268.

[36] H Lauterpacht, *Private law sources and analogies of international law: with special reference to international arbitration* (London, Longmans Green and Co, 1927) 191–202.

[37] The court considered the legal nature of a mandate in a case concerning whether or not a Turkish subject resident in Palestine became *ipso facto* a subject of Great Britain. In holding that a Turkish subject remained Turkish during the mandate, the Court stressed that Great Britain was merely exercising a power on behalf of the League according to the provisions of the Mandate. It did not amount to a transfer of sovereignty to Great Britain: [1940] 1 KB 787.

[38] In his eminent Separate Opinion in the *International Status of South West Africa,* Judge McNair pointed out that sovereignty was in abeyance and that the territory was held for the 'sacred trust of civilisation'. [1950] ICJ Rep 128, 150. See also G Marston, 'Termination of Trusteeship' (1969) 18 *ICLQ* 1, 32–6.

[39] 450 *UNTS* 82.

[40] See L Caflisch, 'Land-Locked States and their Access to and From the Sea' (1978) 49 *BYIL* 71, 83–7.

between landlocked and transit States through bilateral, sub-regional or regional agreement.[41]

Finally, we should consider territorial concessions. Concessions are territorial privileges granted to other States, and include the establishing of military bases, the establishing of exile governments within the territory, and international control commissions.[42] Such concessions are for the most part dependent on the consent of the host State although this will not always be the case.[43] Brownlie notes that although the practice is quite disparate, once such concessions have arisen they are regulated by international law and not by reference to the discretion of the host State.[44] In this sense they are again akin to property arrangements.

Territorial sovereignty is neither immutable nor inviolable. State practice shows that territory is something capable of being the object of an international transaction; something that can be acquired and alienated in the same way as other proprietary interests.[45] Indeed, it is clear from the examples given that a variety of property-type modifications and limitations may be imposed upon the State or by the State in respect of its territory.[46]

3. THE SCOPE OF SOVEREIGNTY (OR ITS PRIVATE INCIDENTS)

Like property, territorial sovereignty is comprised of a series of jural relations and individual incidents may be subject to modification. Conceived of this way, it is possible to view territorial sovereignty in terms of the right to possess, the right to use, the right to manage, the right to the income of a thing, the right to the capital of the thing, the right to security, the rights or incidence of transmissibility and absence of term, the duty to prevent harm, liability to execution, and the incidence of residuarity. These incidents encompass all the possible legal relations that could

[41] (1982) 21 *ILM* 1261.

[42] See, eg, the discussion of Marshall CJ in the *Schooner Exchange v McFadden* (1812) 7 Cranch 116.

[43] Security Council Resolution 687 (1991) provided the authority for a chemical and biological weapons commission to supervise the destruction of such weapons in Iraq at the end of the Gulf War.

[44] Brownlie, n 17 above, 370.

[45] Even if we concede that territory is more inextricably linked to the existence of the state than other tangible property is to individual existence, this does not preclude the conceptual analysis of territory as property. It is interesting to note that even the human body is the object of increasing analysis in terms of property rights, with developments in gene therapy. See, eg, RP Merges, 'Property Rights Theory and the Commons: The Case of Scientific Research' (1996) 13 *Social Philosophy and Policy* 145.

[46] Lauterpacht notes that a consequence of the absolutist view would be to leave cession as the only way of settling property type disputes and resolving disputes where there were divergent interests in the same territorial space. This would arise only under force, and only then as an object of war. Lauterpacht, n 15 above, 376.

pertain to a piece of property.[47] Subsequent analysis reveals that only the first five of these incidents were essential features of a claim right.[48] Collectively, these incidents perform what may be termed the private functions of sovereignty—the rules that determine the positive capacity of a State.

Possession, or rather the right to exclusive physical control of the territory, is clearly an essential aspect of territorial sovereignty. It is embodied in the object theory of territory outlined above, and comprises the right to claim control and the right to remain in control of certain territory.[49] In practice, it is manifest by the exercise of governmental authority over territory and it is implicit in the provisions of Articles 2(1) and 2(7) of the United Nations Charter and on the rules in respect of statehood. It overlaps with the next incident, that of exclusive use, although as was considered above, this may be subject to limitations in the interests of other States. The right to income, ie the fruits, rents or profits derived from property, is fundamental to sovereignty and embodied in the notion of permanent sovereignty over natural resources. The right of capital includes the power to alienate and the liberty to consume, waste or destroy a thing or part thereof. Clearly, States have the right to cede territory or grant away rights over it.[50] This may be subject to some restrictions necessary to protect the effective functioning of the State. As noted above, territory is inextricably linked to the identity of the State and so is subject to some *de minimis* content, although international law is notoriously unspecific about the precise content of this requirement. The liberty to waste is also somewhat restricted. First territory as a spatial notion cannot be consumed or destroyed, although it may be granted away. Secondly, although States enjoy permanent sovereignty over natural resources, which may include the right to exhaust non-renewable natural resources, as we will demonstrate in the next section, there are considerable limitations on this right.

The right to manage is the right to decide how and who may use territory. In one sense this incident could be understood to mean the power

[47] Although we have indicated that property has a public function, it seems that any positive duties imposed upon property can be framed as duties in respect of use and management, so it is not necessary to add new incidents to the existing bundle.

[48] These were supplemented by three systemic requirements—term, security and residuarity. The other two incidents: the prohibition of harmful use and liability to execution, operate as external constraints on property. However they remain an essential component of any property relationship, designed to ensure that the exclusive rights do not run counter to certain public interests.

[49] Generally, control of territory requires some form of approbation from the international community. Under international law the rules on title to territory, supplemented by the doctrine of recognition, provide this function. See the *Eastern Greenland* case (1933) PCIJ Ser A/B, no 53, 46; *Island of Palmas* case, (1928) RIAA, vol ii, 829, 839.

[50] See J Crawford, *The Creation of States in International Law* 2nd edn (Oxford, Clarendon Press, 1979) 329–448.

of the State to govern itself. It is thus closely bound up with the rules on democratic legitimacy, independence and capacity to enter into international relations. Yet it must also be understood in the context of resources, and refers to the right to make decisions in respect of the exploitation of the resources of the State. As we shall see in section 4, the exclusive exercise of this right is significantly qualified in respect of certain natural resources.

Transmission of ordinary property is the right to transfer an interest in property to one's successors. The transmission of sovereignty in international law is regulated by the rules of continuity and succession. Notably these two concepts are closely related and not easily distinguishable from each other.[51] However, at this level of abstraction the analogy is not too problematic, although it must be pointed out that specific rules relating to continuity and succession are likely to adjust the *status quo*. It is important to point out that the State is not the locus of the right of transmission; matters of personality and the transmission of rights and duties are determined by international law.

Term, security and residuarity are systemic concepts, concepts necessary to ensure the existence of the other substantive rights.[52] Just as absence of term must apply to domestic property, so term is relevant to the concept of territory. Sovereignty is a determinable interest in the sense that it continues until such a point as the holder of sovereignty, or some rule of law, divests the holder of the right.[53] As with any other right there must be some form of temporal indexical to security, which is provided by term. With private property, the right of security is provided by the rules on immunity against uncompensated expropriation of property by the State, and by rules preventing theft and unlawful interference with one's property. In relation to sovereignty, security operates against the unlawful interference of one State in the territory of another. This fundamental property type rule is embodied in Articles 2(4) and 2(7) of the UN Charter. The rule is at once a guarantee of the agency of the State and a protection of the proprietary interests of the State in its territory and its natural resources.[54] The incident of residuarity provides for the return of the full incidents of ownership to the owner upon the expiry of any lesser

[51] Lawful changes in government do not give rise to incidents of transmission. In this sense the 'owner' is the State and not the particular government. Transmission only arises where the State itself is extinguished. Clearly the extinguished or annexed State does not have the power to determine the future path of territorial sovereignty—ownership of territory.

[52] See J Christman, *The Myth of Property* (Oxford, Oxford University Press, 1994) 187, fn 18.

[53] Such a rule (or rules) is intimately bound up to the question of recognition and the idea that the capacity of a State is dependent on the acts of recognition by other States. This complex issue cannot be fully explored here.

[54] At a more particular level the rules on expropriation of foreign property serve to protect the security of property interests. At this level the rules do not pertain to territory, but rather reflect the broader range of interest of the State. It is as such open to debate whether at the inter-State level these rules are truly property rules. Strictly speaking the rules are part of the broader category of rules on State responsibility and are more akin to delictual rules. That said, such rules are still concerned with the protection of proprietary interests.

rights over the property that may have been granted. It distinguishes the greater interest in thing from a lesser interest, and is likened by Penner to a return to the *status quo* of ownership upon the expiry of a licence.[55] Internationally it is manifest in the return to the State of territory upon the expiry of a temporary derogation from territorial sovereignty.[56]

These incidents are a key aspect of State's power to govern. As with property generally, the notion of exclusivity permeates these incidents, for it defines an identifiable and functional sphere of competence. As with property, this is the right to exclude and not exclusivity per se, which would be inimical to any system based upon inter-agency transactions. Finally, it is worth noting that sovereignty, like ownership, is an indeterminate interest, or rather a determinable interest. It continues for as long as the sovereign agent wishes, excepting the operation of rules of law that divest the sovereign of authority.[57] Lesser rights than sovereignty, such as the exercise of powers in accordance with international leases or mandates, are determinate in the sense that they are contingent or come to an end upon a certain occurrence or after a certain period of time.

4. RESTRICTIONS ON THE EXERCISE OF SOVEREIGNTY

Sovereignty has always been limited by the exigencies of interdependence. As Koskenniemi has observed, in this respect 'sovereignty bears an obvious resemblance to the domestic liberal doctrine of individual liberty'.[58] Just as an individual's liberty is shaped by others' liberty as mediated by law, so too the liberty or sovereignty of States must be capable of determination from a perspective that is external to it. This is the role of international law. As Judge Anzilotti famously stated:

> [i]ndependence as thus understood is really no more than the normal condition of States according to international law; it may also be described as sovereignty (*suprema potestas*), or *external sovereignty*, by which is meant that the State has over it no other authority than that of international law.[59]

In this very basic but most important way, international law exercises an important ordering function. It determines various limits on States, essential not just to protect agency, but to ensure that public interests are protected from the misuse of individual power.

[55] JE Penner, 'The "Bundle of Rights" Picture of Property' (1996) 43 *UCLA Law Review* 711, 764.

[56] See, eg, the restoration of Japanese sovereignty after US occupation post World War II (1968) 7 *ILM* 554. The residual nature of Japanese sovereignty was confirmed in a series of American cases including, *US v Ushi Shiroma* (1954) 21 *ILR* 82; *Cobb v US* (1951) 18 *ILR* 173.

[57] Perhaps the clearest example of such a rule is the principle of self-determination.

[58] M Koskenniemi, *From Apology to Utopia* (Helsinki, Finnish Lawyers Publishing Company, 1989) 192–3.

[59] *Customs Regime between Germany and Austria* (1931) PCIJ, Ser A/B, No 41, 57.

As indicated above, it is widely accepted that territorial sovereignty or sovereignty over natural resources must be exercised with some respect to the public good. To this end a number of general duties are imposed upon how States use their natural resources. In addition to these commitments which focus upon the economic and human rights impact of resource use, a body of environmental rules has evolved that that deal with conservation of natural resources and matters of 'common concern'.[60] By examining some of the key obligations that States have undertaken in respect of natural resources and environmental protection, we can see both the reasons why and the extent to which public interest considerations shape both the limits of sovereignty and property structures adopted to facilitate the regulation of natural resources.

(a) General Limits on the Use of Natural Resources

Let us consider these general restrictions briefly. First, it is arguable that State sovereignty over natural resources must be exercised for the purpose of national development and the well-being of its citizens.[61] Despite its frequent iteration, this limitation on sovereignty is undermined by the wide discretion inherent in such a duty. Indeed, the absence of detailed provisions delineating the duty means that resources may be utilised in ways not beneficial to the entire population or to sections of it. A second limit on sovereignty concerns the much discussed limits on the right of a State to nationalise or expropriate foreign property.[62] Expropriation is

[60] UNEP, *Report of the Group of Legal Experts to Examine the Concept of the Common Concern of Mankind in Relation to Global Environmental Issues* (1990). Since the Rio Declaration, the term 'common concern' has been used to capture such interests. See eg, the preamble to the United Nations Framework Convention on Climate Change, which states that change in the Earth's climate and its adverse effects are a common concern of humankind'. As does UN General Assembly Resolution 43/53 (1988). The preamble to the Convention on Biological Diversity 1992 affirms that the conservation of biological diversity is a common concern of humankind. (1992) 31 *ILM* 818. Prior to Rio, such concerns were implicit in a number of other instruments, including the preamble and Art 4 of the Convention for the protection of the World Cultural and Natural Heritage 1972, (1972) 11 *ILM* 1358 and the preamble to the Convention on International Trade in Endangered Species of Wild Flora and Fauna 1973, 993 *UNTS* 243.

[61] See GA Res 523(VI) on Integrated Economic Development and Commercial Agreements of 12 January 1952; Para 1 of GA Res 1803(XVII), 17 UN GAOR Supp (No 17) 15, UN Doc A/5217 (1962); Art 1(2) of the International Covenant on Civil and Political Rights 1966, 999 *UNTS* 171; Art 21(1) of the African Charter on Human Rights, (1982) 21 *ILM* 58; Arts I, V, IX of the Treaty for Amazonian Cooperation 1978, (1978) 17 *ILM* 1045.

[62] See, eg, S Baughen, 'Expropriation and Environmental Regulation: The Lessons of NAFTA Chapter Eleven' (2006) 18 *Journal of Environmental Law* 207; T Waelde and A Kolo, 'Environmental Regulation, Investment Protection and 'Regulatory Taking in International Law' (2001) 50 *ICLQ* 811; WD Verwey and N Schrijver, 'The Taking of Foreign Property in International Law: A New Legal Perspective?' (1984) 15 *Netherlands Yearbook of International Law* 3; R Higgins, 'The Taking of Property by the State' (1982-III) 176 *Recueil des Cours* 263.

permitted subject to certain protective constraints. It must be for a public purpose, non-discriminatory, subject to compensation, and protected by due legal process, including a right of appeal.[63] A third limit on sovereignty is the requirement to respect the rights and interests of indigenous peoples.[64] Whilst many of the instruments protecting such rights are viewed rather sceptically, there is evidence that such instruments have influenced domestic protection of indigenous peoples, resulting in limitations on State regulation of natural resources.[65]

A fourth limit requires States to cooperate in respect of shared or transboundary natural resources. This most commonly arises in respect of international watercourses, oil and gas deposits and fisheries. The latter two examples are dealt with in the next chapter.[66] Article 5 of the Watercourse Convention requires that 'States shall in their respective territories utilise an international watercourse in an equitable and reasonable manner.'[67] The factors relevant to this are listed in Article 6 and include physical factors, socio-economic factors, and conservation requirements. Notable is the inclusion of physical factors. This reaffirms the above point that such factors are no longer limited to external constraints on the regulation of natural resources, they form an essential component of modern regulatory regimes. More notable, however, is Article 10, which provides that although there is no priority of uses, in the event of a conflict, special consideration should be given to 'vital human needs'. This provision represents an uncommon, explicit endorsement of the priority that first order public interests must take in the regulation of natural resources.[68] The ILC commentary to this provision reveals that vital human needs refers to water for drinking and food production, and so comprise an accentuated form of the socio economic factors set out in Article 6(1)(b).[69] Article 10 is exceptional and only applies in cases where no agreement is reached between watercourse States. Of course any attempt to meet vital needs in complex resource situations

[63] Schrijver, n 7 above, 244–64.

[64] Arts 25 and 26 of the United Nations Declaration on the Rights of Indigenous Peoples *Official Records of the General Assembly, Sixty-first Session, Supplement No 53* (A/61/53) art one, ch II, s A; Art 15 of ILO Convention 169 concerning Indigenous and Tribal Peoples in Independent Countries, (1989) 28 *ILM* 1382;

[65] See *Milirrpum v Nabalco Pty Ltd*, (1971) 17 FLR 141; *Mabo v Queensland (No 2)* (1992) 175 CLR 1, esp [42] (Brennan J).

[66] See ss 2(c) and (d).

[67] The Convention on the Law of the Non-navigational Use of International Watercourses 1997, (1997) 36 *ILM* 719. See generally, S McCaffrey, *The Law of International Watercourses*, 2nd edn (Oxford, Oxford University Press, 2007).

[68] A similar but less stringent approach was taken in Art 4 of the 1999 Protocol on Water and Health to the 1992 ECE Convention on the Protection and Use of Transboundary Watercourses and Lakes. Available at <http://unece.org/env/documents/2000/wat/mp.wat.2000.1.e.pdf> accessed 16 October 2008.

[69] [1994] Ybk of the ILC, vol II, pt II, 110.

is contingent on governance measures. No further explanation for this priority is offered, suggesting that this goal is self-evident. In an important decision concerning certain land reclamation activities carried out by Singapore in its coastal waters, and which allegedly impinged upon rights of Malaysia, ITLOS effectively secured a duty to cooperate at the provisional measures stage.[70] In addition to finding that Singapore had committed itself to notify and consult with Malaysia before carrying out further works,[71] the Tribunal further required the parties to exchange information on a regular basis[72] and consult as regards temporary measures affecting certain works.[73]

(b) Limits on the Use of Natural Resources under International Environmental Law

Under international law, States are under a number of obligations that restrict how they may treat natural resources. These include: a duty to prevent or control harm to the environment, the duty of notification and consultation, and the duty to carry out environmental impact assessments (EIA).[74] This is not meant to be exhaustive of all the potential limits on sovereignty, for there are many such limits. However, these represent some of the most significant limits on the freedom to use natural resources. They are also illustrative of how and why public interest demands shape the contours of sovereignty, and subsequently property regimes. In this section we consider the general prohibition on the harmful use of things, notification and consultation, the duty to carry out EIA, and then limits on sovereignty flowing from the duty to protect and conserve biodiversity as an element of the 'common concern'.

First, States shall not act or permit their territory to be used in a way that causes harm to the rights or interests of other States.[75] The *locus classicus* of this rule is the *Trail Smelter arbitration*.[76] In a case concerning the

[70] *Land Reclamation by in and around the Straits of Johor (Malaysia* v *Singapore), Provisional Measures, Order of 8 October 2003* ITLOS Reports 2003, 10.

[71] *Ibid*, para 78.

[72] *Ibid*, para 99 operative para 1(b).

[73] *Ibid*, operative para 1(c).

[74] These obligations have been explored in detail elsewhere. See P Birnie and A Boyle, *International Law and the Environment*, 2nd edn (Oxford, Oxford University Press, 2002).

[75] Under international law the prohibition on the harmful use of territory is reinforced by the rules on State responsibility. When a State commits an internationally wrongful act, by breaching a rule of international law, whether through an act or omission, then that State will be held responsible.

[76] *Trail Smelter Arbitration* (1939) 33 *AJIL* 182 and (1941) 35 *AJIL* 684. This rule was reiterated in the *Corfu Channel* case and the *Nuclear Tests* case. In the *Corfu Channel* case the ICJ held that each State is under an obligation 'not to allow knowingly its territory to be used

effects of sulphur dioxide pollution from a Canadian smelter on American territory, the tribunal noted that:

> no state has the right to use or permit the use of territory in such a manner as to cause injury by fumes in or to the territory of another or the properties of persons therein, when the case is of serious consequence and the injury is established by clear and convincing evidence.[77]

More precise content is given to the general rule in specific contexts, as for example in Article 7 of the Convention on International Watercourses 1997.[78] According to a liberal view of international society, States as independent agents may engage in those activities necessary to meet their needs or ends. However, to ensure that such activities do not threaten other States' liberty there must be some restriction of this liberty. In this sense the rule is designed to secure a certain level of inter-agency transactions. However, there is increasing evidence that the rule is moving beyond a mere liberal paradigm. First, obligations to respect the agency of other actors beyond the narrow limits of territorial sovereignty emerged. For example, in the use of common spaces States are obliged ensure that such use does not interfere unreasonably with other's freedom.[79] Thus Article 87(2) of the Law of the Sea Convention provides that the freedoms of the high seas, which include fishing:

> shall be exercised by all States with due regard for the interests of other States in the exercise of the freedom of the high seas.[80]

for acts contrary to the rights of other States'. [1949] ICJ Rep 4, 22. The obligation of States to protect and respect the environment was stated in the *Request for an Examination of the Situation in Accordance with Paragraph 63 of the Nuclear Tests Case 1974* (1995) ICJ Rep 288, para 64. See also the *Legality of the Threat or Use of Nuclear Weapons Advisory Opinion* [1996] ICJ Rep 226, para 29.

[77] (1941) 35 *AJIL* 684, 716.

[78] Art 7 of the 1997 Convention requires States to 'take all appropriate measures to prevent the causing of harm to other watercourse states'. Convention on the Non-Navigable Uses of International Watercourses, (1997) 36 *ILM* 719. Protection of the environment features in a number of liability conventions such as the Convention on Civil Liability for Oil Pollution Damage 1969, (1970) 9 *ILM* 45, as amended by the 1992 Protocol (reproduced in ED Brown, *The International Law of the Sea* (Aldershot, Dartmouth Publishing, 1994) vol II, doc 10(2); Convention on Civil Liability for Damage Resulting from Activities Dangerous to the Environment 1993, (1993) 32 *ILM* 1228. See also, UN Security Council Resolution 687, which imposed international liability on Iraq for the environmental damaged it caused to Kuwait during the Gulf War, and the work of the Compensation Commission. Reproduced in (1992) 31 *ILM* 1045.

[79] See Art IX of the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies 1967, 610 *UNTS* 205; Arts 2–4 of the Agreement Governing the Activities of States on the Moon and other Celestial Bodies 1979, (1979) 18 *ILM* 1434.

[80] This specific obligation of reasonable use is reiterated in general terms in Art 300. For other examples of reasonable use see Art 2 of the Geneva Convention on the High Seas 1958.

This reflects the importance of not merely respecting the agency of States, but also the value of ordered interactions. In this context, notions of due regard and reasonableness provide a means of mediating or resolving conflicts between different lawful activities involving the same resource or spatial extent, rather than as mere adjuncts of rules that respect the agency of States. The importance of good order has been further extended by requiring States to act in a non-harmful way regardless of how it directly impacts upon the agency of other States. Thus Principle 21 of the Stockholm Declaration 1972 stipulates that States have:

> the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of other areas *beyond the limits of national jurisdiction*[81]

Paragraph 1 of General Assembly Resolution 2995 (XXVII) reaffirms this approach, stating that 'in the exploration, exploitation and development of their natural resources, States must not produce significant harmful effects in zones situated outside their national jurisdiction'. This general duty to prevent harm to the environment is reiterated in a number of instruments including, Article 194(2) of the Law of the Sea Convention,[82] Article 3 of the Convention on Biological Diversity 1992[83] and Principle 2 of the Rio Declaration.[84] The existence of an obligation in respect of areas beyond national jurisdiction indicates that the environment is worthy of protection not simply as a rule of inter-agency protection, but as an independent virtue. The environment should be protected not because it belongs to another State, it should be protected because it has inherent worth or because it contributes to maintenance of vital needs. This marks a further move away from a purely liberal paradigm to one of propriety,

[81] Stockholm Declaration of the United Nations Conference on the Human Environment 1972 (emphasis added), UN Doc.A/CONF/48/14/REV.1. Reproduced in P Birnie and AE Boyle, *Basic Documents on International Law and the Environment* (Oxford, Clarendon Press, 1995) 1.

[82] Art 194(2) provides that 'States shall take all measures necessary to ensure that activities under their jurisdiction or control are so conducted as not to cause damage by pollution to other States and their environment, and that pollution arising from incidents or activities under their jurisdiction or control does not spread beyond areas where they exercise sovereign right.'

[83] Art 3 provides that 'States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.'

[84] 'States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental and developmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction'. Declaration of the UN Conference on Environment and Development, UN Doc A/CONF.151/5/Rev 1 (1992). Reproduced in (1992) 31 *ILM* 874.

in the sense that protection of the environment ensures a degree of proper social order and protects important public interests.[85]

This suggestion that the prohibition on harmful use has broader proprietary significance is reinforced by reference to other rules on resource use or protection of the environment. It is well-established that States are required to engage in a process of prior notification and consultation with other States affected by a proposed use of shared natural resources.[86] Thus in the *Lac Lanoux* arbitration, the tribunal held that France was under a duty to consult and negotiate with Spain before diverting a shared watercourse.[87] Although Spain's rights were only procedural and did not amount to a veto, it remained the case that France had to ascertain Spain's interests and take reasonable measures to safeguard them.[88] Again this duty can be seen to originate in liberal-based notions of agency. However, it is arguable that this duty now extends beyond cases of shared natural resources and to any situation of transboundary risk.[89] Thus, Principle 19 of the Rio Declaration requires:

> States shall provide prior and timely notification and relevant information to potentially affected States on activities that may have a significant adverse transboundary environmental effect and shall consult with those States at an early stage and in good faith.[90]

This duty has been imposed by an international tribunal,[91] and it is also to be found in agreements dealing with movements of transboundary waste,[92] transboundary air pollution,[93] the prevention of marine pollution,[94]

[85] See ch 2, s 3(e).

[86] See the *Corfu Channel* case, n 76 above, 22; *Gabčikovo-Nagymaros* case [1997] ICJ Rep 7, [141]; Convention on Long-Range Transboundary Air Pollution 1979, (1979) 18 *ILM* 1442; Principle 18 of the Rio Declaration, n 84 above; Art 198 of the Law of the Sea Convention; Art 5(1)(c) of the International Convention on Oil Pollution Preparedness, Response and Cooperation 1990, (1991) 30 *ILM* 735; Art 15 (and the commentary thereto) of the ILC's Draft Articles on International liability for injurious consequences arising out of acts not prohibited by international law. Reproduced in (1994) Ybk. ILC, vol II(2), 171 *ff*.

[87] (1957) 24 *ILR* 101, 119.

[88] *Ibid* 128–30, 140–1.

[89] See Birnie and Boyle, n 74 above, 127. *Cf* PN Okowa, 'Procedural Obligations in International Environmental Agreements' (1996) 67 *BYIL* 275, 334.

[90] Above n 84.

[91] *MOX Plant (Ireland v UK), Provisional Measures, Order of 3 December 2001* ITLOS Reports 2001, 95, [89]; *Land Reclamation by in and around the Straits of Johor (Malaysia v Singapore), Provisional Measures, Order of 8 October 2003* ITLOS Reports 2003, 10, [106]. Of course, the imposition of this requirement to consult suggests the absence of a pre-existing legal duty.

[92] Art 6 of the Convention on the Transboundary Movement of Hazardous Wastes and their Disposal 1989, (1989) 28 *ILM* 657.

[93] Art 5 of the Convention on Long-Range Transboundary Air Pollution 1979, (1979) 18 *ILM* 1442

[94] See, eg, Art IV(c) of the Protocol concerning Marine Pollution Resulting from Exploration and Exploitation of the Continental Shelf 1989, (1989) *EPL* 32; Art 21(1) of the Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR Convention), (1993) 32 *ILM* 1072.

dumping at sea,[95] and the conservation of biodiversity.[96] A duty of notification and consultation is virtuous not simply because it respects the agency of States, it ensures that the consequences of decisions are better known and so contributes to diffuse reciprocity. It also results in dialogue and hence increased awareness of the implications of any given decision or course of action. It should be noted that the obligation to notify and consult does not necessarily require any particular outcome. As such it falls short of imposing substantive constraints on the use of resources. Of course notification and consultation in respect of harm to common spaces presents significant challenges for traditional, bilateral modes of consultation. The effects of action on common spaces may be of concern to all States, as well as non-State actors. In such circumstances, effective notification and consultation can best be achieved through institutions that are able to support this type of multilateral and multi-level dialogue.

If States are under a duty to prevent harm occurring to the rights and interests of other States, or to the environment, and a duty of notification and consultation, then this requires some process that evaluates the likely impacts of a proposed activity. An Environmental Impact Assessment constitutes such a process which furnishes decision-makers with sufficient knowledge to enable them to authorise a proposed activity and/or require mitigating steps to be taken. In recent years, international law has developed to the point where it seems clear that the requirement of an EIA has reached the status of a general principle, and arguably a rule of customary international law.[97] Early decisions of international courts and tribunals were not conclusive as to the status of EIA.[98] More recent decisions provide evidence of States' acceptance of the obligation to carry out an EIA, and focus instead on whether the EIA was adequate.[99] The importance of EIA is reinforced by the decisions in the *Southern Bluefin Tuna* case and *Land Reclamation* case to order provisional measures that

[95] Art 210(5) of the Law of the Sea Convention. Also Art V(2) of the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter 1972, (1972) 11 *ILM* 1294.

[96] See Art 14(c) of the Convention on Biological Diversity.

[97] A number of commentators view this to be the case for transboundary impacts. See Birnie and Boyle, n 74 above, 131; P Sands, *Principles of International Environmental Law* 2nd ed (London, Cambridge University Press, 2003) 800; J Holder, *Environmental Assessment. The Regulation of Decision Making* (Oxford, Oxford University Press, 2004) 53. Whether this applies to purely domestic impacts is less certain. See Birnie and Boyle, n 74 above, 132.

[98] See *Request for an Examination of the Situation in Accordance with Paragraph 63 of the Nuclear Tests Case 1974* (1995) ICJ Rep 288, Dissenting Opinion of Judge Ad Hoc Palmer at [91]. *Gabčikovo-Nagymaros* case [1997] ICJ Rep 7, [140]. In particular see the separate opinion of Judge Weeramantry, [111]–[113].

[99] See generally, *MOX Plant (Ireland v UK), Provisional Measures, Order of 3 December 2001* ITLOS Reports 2001, 95; *Land Reclamation by in and around the Straits of Johor (Malaysia v Singapore), Provisional Measures, Order of 8 October 2003* ITLOS Reports 2003, 10; *Pulp Mills* case, *Request for the Indication of Provisional Measures* [2006] ICJ Rep 135.

were tantamount to impact assessments.[100] Moreover, many States have adopted domestic law provisions requiring an EIA.[101] This widespread use of EIA in domestic law perhaps obviates some of the problems of proving it to be a rule of custom. However, what may be more difficult to ascertain is the precise substantive content of an EIA duty.

A broad iteration of the duty is found in Principle 17 of the Rio Declaration, which requires an EIA to 'be undertaken for proposed activities that are likely to have a significant impact on the environment and are subject to a decision of a competent national authority.' Binding obligations to conduct EIA are seldom found in multilateral instruments. A somewhat weaker provision is found in Article 206 of the Law of the Sea Convention 1982, which requires States to carry out an assessment when it is reasonably believed that activities under their jurisdiction or control may cause substantial pollution or significant harm to the environment. Crucially, the assessment is subject to what is reasonably practicable and it does not require States to take measures in response to the findings of an assessment. At a regional level, much stronger action has been taken. In particular, the Espoo Convention requires its 42 States Parties, including the EC, 'to take all appropriate and effective measures to prevent, reduce and control significant adverse transboundary environmental impact from proposed activities.[102] This requires the preparation of an EIA, in accordance with the detailed technical provisions of the convention, and public participation in the process and consultation with affected parties.[103] The final decision taken in respect of a proposed activity shall take due account of the findings of the EIA.[104] In practice the EIA is conducted by the primary developer, subject to procedural requirements set by a planning authority.

As a prerequisite to certain uses of property, the requirement of an EIA is an important limitation on the use of any natural resource. Indeed, many EIA instruments require certain acts of mitigation or compensation, and so impose positive duties on developers.[105] As such the EIA process may go beyond a system of limitations, requiring positive steps to be taken to protect or conserve either natural resources or

[100] See A Boyle, 'The Environmental Jurisprudence of the International Tribunal for the Law of the Sea' (2007) 22 *IJMCL* 369, 377.

[101] See C Wood, *Environmental Impact Assessment: A comparative review* (Harlow, Prentice-Hall, 2002).

[102] Art 2, Convention on Environmental Impact Assessment in a Transboundary Context 1991, (1991) 30 *ILM* 802.

[103] Arts 3(8) and 5 respectively.

[104] Art 6.

[105] See, eg, Art 6 of the Habitats Directive, Directive 92/43/EC on the Conservation of Natural Habitats and of Wild Fauna and Flora, [1992] OJ L206/7. The Habitats Directive has a wide scope of application, and extends to fishing activities. See the *Wadenzee* case Case C-127/02.

the environment more generally. What may also be noted about the EIA duty is the requirement that it is a continuous process. As the ICJ stated in the *Gabčikovo-Nagymaros* case:

> Owing to new scientific insights and to a growing awareness of the risks for mankind—for present and future generations—of pursuit of such interventions at an unconsidered and unabated pace, new norms and standards have been developed, set forth in a great number of instruments during the last two decades. Such new norms have to be taken into consideration, and such new standards given proper weight, not only when States contemplate new activities but also when continuing with activities begun in the past.'[106]

This process is responsive to new insights, reaffirming how changes in our appreciation of the physical qualities of the environment may drive regulatory responses. In the context of environmental protection and resource use, it also reaffirms the need for a coherent and systematic treatment of legal rules.

The concept of common concern is not limited to things that are simply shared as a result of their transboundary nature, such as an international watercourse, or things common to all States, such as the high seas. It also includes matters that fall within the sovereignty of a single State, but which implicate certain interests of all other States. As such there is general recognition that there is a common concern in protecting and managing the global climate system, the ozone layer, rainforests and biodiversity for present and future generations.[107] Although these resources may be located within States' territories or in common areas, their use has consequences for all other States. The notion of common concern does not change the status of a resource, rendering it common property. Rather it vests the community of States with an interest in the resource that may require the sovereign State(s) to treat a resource in a particular way, or entitle States to take action against other States acting in a way detrimental to that common concern. In this way the common concern is an important constituent part of the international community's public interests.

[106] Above n 98, [140].

[107] B Simma, 'From Bilateralism to Community Interest in International Law' (1994) 250 *Recueil des Cours*, 217; F Biermann, 'Common Concern of Humankind: The Emergence of a New Concept of International Environmental Law' (1996) 34 *Archiv des Völkerrechts* 426; A Kiss, 'The Common Concern of Mankind' (1997) 27 *Environmental Policy and Law* 244; EM Kornicker-Uhlmann, 'State Community Interests, *Ius Cogens* and Protection of the Global Environment: Developing Criteria for Peremptory Norms' (1998) 11 *Georgetown International Environmental Law Review* 101; PH Sand, 'Sovereignty Bounded: Public Trusteeship for Common Pool Resources?' (2004) 4 *Global Environmental Politics* 47. *Cf* J Brunnée, '"Common Interest": Echoes from an Empty Shell? Some Thoughts on Common Interest and International Environmental Law' (1989) 49 *Zeitschrift für ausländisches öffentliches Recht und Völkerrecht* 791.

Of particular relevance to the regulation of natural resources is the obligation to conserve biodiversity. Article 2 of the Convention on Biological Diversity (CBD) defines it as 'the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems'. Thus biodiversity exists at the genetic, species and habitat level.

The principal regulatory instrument for the protection of biodiversity is the CBD.[108] This is a framework agreement that requires States parties to take additional measures to give effect to its general obligations. Under the CBD, States parties are bound to apply the convention in respect of the components of biodiversity in areas within the limits of national jurisdiction.[109] In addition, States are bound to control any

> processes and activities, regardless of where their effects occur, carried out under their jurisdiction or control' within and beyond the limits of national jurisdiction.[110]

Where the components of biodiversity occur exclusively within the territorial sea, EEZ or continental shelf, then the exclusive competence of coastal States appears to provide an effective basis for action. States simply adopt domestic law measures to ensure the substantive provisions of the CBD are met. In contrast, the regulation of the components biodiversity in the high seas can only proceed on the basis of cooperation between States.[111]

Fundamentally, action to conserve biodiversity is driven by our understanding of how the natural systems operate and how human

[108] Arts 23 and 24 require cooperation with agencies operating under other relevant conventions. These include the Ramsar Convention, the World Heritage Convention, CITES, and the Bonn Convention, all of which aim to protect the components of biodiversity. In addition there are numerous regional instruments, which seek to conserve species or habitats. These include the Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere 1940, 161 *UNTS* 193; the African Convention on the Conservation of Nature and Natural Resources 1968, 101 *UNTS* 4; Conservation of European Wildlife and Natural Habitats 1979, (1982) *UKTS* 56, Cmnd 8738. A number of agreements dealing with aspects of biodiversity have also been concluded under the UNEP Regional Seas Programme. See eg, Art 11 of the Convention for Cooperation in the Protection and Development of the Marine and Coastal Environment of the West and Central Africa Region 1981, (1981) 20 *ILM* 746; the Protocol Concerning Protected Areas and Wild Fauna and Flora in the Eastern Africa Region 1985, reproduced in W Burhenne (ed) *International Law: Multilateral Treaties* (London, Kluwer Law, 1974) 385:46; Protocol for the Conservation and Management of Protected Marine and Coastal Areas of the South-East Pacific 1989, reproduced in New Direction in the Law of the Sea, Doc J 35; Protocol on Specially Protected Areas and Wildlife in the Wider Caribbean Region 1990, reproduced in Burhenne, 990:85. Protocol concerning Specially Protected Areas and Biological Diversity in the Mediterranean 1995 (1995) 6 *Ybk. IEL* 887.

[109] Art 4(a).

[110] Art 4(b).

[111] Hence Art 5 of the CBD exhorts cooperation, either directly or where appropriate through international organisations.

activities may impact upon them. The known threats to marine biodiversity include natural events, however, the most significant threats result from human activities, such as commercial fishing,[112] chemical pollution,[113] eutrophication,[114] physical alteration of marine habitats, invasion of alien species and global climate change.[115] Such threats cannot be considered in isolation because of the complex interactions that characterise natural systems, with the result that traditional regulatory structures do not always provides effective means of preventing the loss of biodiversity. Here an important point about biodiversity needs to be made. Although it is the components of biodiversity—specific natural resources—that are the immediate object of regulatory measures, the special focus of protection is on diversity amongst the components of biodiversity. Diversity is a quality that attaches to the whole. In legal terms, biodiversity is an attribute or quality of a thing rather than the actual physical resource, and this presents an interesting challenge for the regulation of biodiversity.[116] Whilst States retain their sovereign right to exploit their natural resources, the CBD introduces a powerful and indivisible interest into the equation. The questions now are how does this affect the traditionally defined proprietary interests of States over their natural resources, and how can these additional responsibilities be captured within existing property structures? In part the answers to these questions will be driven by our growing appreciation of the physical nature of biodiversity, and of the impact of human activities thereupon. In the same way that our regulation of ocean spaces and resources adapted to our changed appreciation of its finite and boundable nature, so too our regulation of natural resources will adapt to our

[112] See TR Parsons, 'Impact of Fish Harvesting on Ocean Ecology' (1991) 22 *Marine Pollution Bulletin* 217. Also George W Boehlert, 'Biodiversity and the Sustainability of Marine Fisheries' (1996) 9 *Oceanography* 28.

[113] Incidental pollution from fishing is regulated by instruments focusing on marine pollution generally. See Arts 192, 194(3) and 211 of the LOSC. MARPOL applies to all vessels including fishing boats. 1340 *UNTS* 61. Annex V, Reg. 6 deals with abandoned gear. A Tan, *Vessel-Source Marine Pollution. The Law and Politics of International Regulation* (Cambridge, Cambridge University Press, 2006).

[114] This refers to the excess build up of nutrients in water bodies, causing excessive plant growth (typically algae and nuisance plants). In turn, this can lead to oxygen depletion and changes to the ecosystem structure.

[115] See generally, EA Norse, *Global marine biological diversity: a strategy for building conservation into decision making* (Washington DC, Island Press, 1993); Committee on Biological Diversity in Marine Systems, *Understanding Marine Biodiversity: a research agenda for the nation* (Washington DC, National Academy Press, 1995) ch 3; B Thorne-Miller & JG Catena, *The Living Ocean: Understanding and Protecting Marine Biodiversity* (Washington DC, Island Press, 1999).

[116] See further, generally, C de Klemm and C Shine, *Biological Diversity Conservation and the Law: legal mechanisms for conserving species and ecosystems* (Gland, Switzerland, The World Conservation Union, 1993); WJ Snape, *Biodiversity and the Law* (Washington DC, Island Press, 1996) 16–24.

developing understanding of biodiversity. However, at present such knowledge is far from complete.[117] Until we realise the full extent and implications of ecological relationships (if this is at all possible), we can only rely upon accepted science and the normative measures taken upon this basis.

If we look at the substantive obligations set forth in the CBD, we see that it contains few unqualified legal obligations and many hortatory provisions.[118] In no small measure this is a result of the uncertainty that still exists over the precise nature of biodiversity.[119] In this respect it is not unreasonable to assume that as the nature and effect of threats to biodiversity are better understood, more precise limits on their use will arise. Article 3 reaffirms the principle of the permanent sovereignty of States over their natural resources, but subjects it to certain conservation and sustainable use requirements which are detailed in Articles 6–20. First, States are to develop plans for the conservation and sustainable use of biological diversity,[120] and its components.[121] This is supported by an obligation to monitor the components of biological diversity and identify activities that may threaten biodiversity.[122] Article 8 requires States, where appropriate, to take measures to conserve biodiversity *in situ*.[123] Such measures include, inter alia, establishing protected areas and rehabilitating degraded habitats. *Ex situ* measures, such as taking species to breed for reintroduction, are also required.[124] Further provisions deal with a range of subsidiary issues ranging from research and training to financial support.[125] As a framework instrument, the CBD requires its broad objectives to be implemented through more detailed measures. This is facilitated through a number of institutional mechanisms consisting of a periodic meeting of the Conference of Parties, a permanent advisory board, a

[117] J Madox, 'Frontiers of ignorance' (1994) 372 *Nature* 11. Also, Committee on Biological Diversity in Marine Systems, n 115 above, ch 1; GESAMP, *Marine Biodiversity: patterns, threats and conservation needs*. GESAMP Reports and Studies No 62 (London, International Maritime Organisation, 1997).

[118] See R Barnes, 'Some Cautions about Integrated Oceans and Coastal Management' (2006) 8 *Environmental Law Review* 247, esp 252–5.

[119] The difficulty and expense of research into marine biodiversity are regularly noted in the Report of the Secretary General on Oceans and Law of the Sea. See 2005 Report. UN Doc A/60/63/Add 1, para 57.

[120] CBD, Art 6.

[121] CBD, Art 10.

[122] CBD, Art 7.

[123] CBD, Art 8.

[124] CBD, Art 9.

[125] Incentives to conserve biodiversity (Art 11); research and training (Art 12); public education and awareness (Art 13); impact assessment (Art 14); controlling access to genetic resources and biotechnology (Arts 15 and 19); technology transfer (Art 16); information exchange (Art 17); scientific and technical co-operation (Art 18); the provision of financial resources to support the conventions objectives (Art 20).

financial support mechanism and a dispute settlement process. In the context of marine biodiversity, the most important development was the adoption of the Jakarta Mandate on Marine and Coastal Biodiversity in 1995.[126] The Jakarta Mandate sets out a series of non-binding recommendations for States to pursue their national plans and programmes pursuant to Article 6 of the CBD.[127] Accordingly, States should ensure as far as possible and appropriate that management decisions are based upon a precautionary approach and the best available and sound scientific knowledge, research and information, taking into account ecosystem impacts.[128] Waste in the trade in living organisms is to be reduced.[129] Local communities, users, and indigenous people are to be involved in the conservation and management of resources.[130] There should be national legislation that ensures the conservation and sustainable use of living marine and coastal resources, which is in conformity with the CBD, the LOSC, and Agenda 21.[131] With specific reference to fisheries, the provisions of the FAO of Conduct for Responsible Fisheries should be followed, and States should accede to and fully implement existing international agreements addressing the overexploitation and conservation of marine and coastal resources.[132] Although these are non-binding recommendations, it is clear that they seek to limit the freedom of States to treat natural resources in a way that would jeopardise biological diversity. By linking the CBD's general obligations to more detailed guidelines and policy goals and other binding instruments, the Jakarta Mandate seeks to mediate a passage between the traditional respect for sovereignty and the ideal of effective global management of natural resources.

The difficulties that the protection and conservation of biodiversity pose for traditional systems of resources ownership or control have manifested themselves in a number of the convention's provisions. First, in most cases obligations are qualified, typically according to capacity of the State to act or its subjective view of what measures are actually appropriate. Second, as a framework convention, its obligations operate at a high level of generality and these have not yet been supplemented by detailed, binding provisions. Third, whilst there is a notional common concern vested in other States, it seems doubtful whether or not this generates a legal interest strong enough to permit a State or group of States to intervene in the domestic affairs of another State in order to protect

[126] COP Decision II/10.
[127] SBSTTA 1/8.8.12.
[128] SBSTTA 1/8.8.12 (a) and (b).
[129] SBSTTA 1/8.12 (c).
[130] SBSTTA 1/8.12 (d).
[131] SBSTTA 1/8.12 (e).
[132] SBSTTA 1/8.12 (e) and (f).

biodiversity.[133] Despite these deficiencies, the CBD has enjoyed varying degrees of success in its implementation, depending upon such variables as financial, technical and political capacity.[134]

It is clear that the CBD seeks to limit how natural resources may be used, but how effective are such limits? The common concern in the conservation of biodiversity and the multifactoral nature of the threats to marine biodiversity require a holistic and integrated approach within States, as well as cooperative measures when the components of biodiversity occur across the jurisdiction of several States. At a fundamental level, the conservation of biodiversity results from our enhanced understanding of the physical attributes of natural resources. New science demands new regulatory approaches. We have a greater understanding of how natural resources form part of complex systems of cause and effect and dependency, and we know that within these systems resources cannot be exploited in isolation. We also more fully appreciate that regulatory regimes must fit, both spatially and in time, with the reality of natural systems.[135]

These changes in our appreciation of natural resource systems and the importance of protecting and conserving biodiversity present considerable challenges to traditional rule structures based upon exclusive control, joint control or common access. It is notable that the convention does not change nor require particular forms of ownership, such as public property or common property in order to facilitate the protection of such interests, although these remain an option. Indeed, there is some evidence that the CBD has resulted in strengthened private property rights, certainly in the field of intellectual property rights where such rights have been driven by powerful commercial pressures.[136] However, it seems doubtful that traditional approaches based upon exclusive use or common access will be appropriate. Biodiversity does not vest in a single resource. This means that adapting the traditional incidents of ownership, and in particular the prohibition on harmful use is inappropriate for regulating biodiversity. This is because the owner of a resource cannot be responsible solely for protecting and conserving biodiversity. As biodiversity is not located in a single resource (unless

[133] As Birnie and Boyle note, the status of biodiversity was a contentious issue during the negotiations. The relegation of this point to the preamble, leaving it rather obscure was very much a political compromise: n 74 above, 573.

[134] *Ad hoc* open-ended working group on review of implementation of the convention. UNEP/CBD/WG-RI/2/INF/1 11 May 2007.

[135] OR Young and MA Levy, 'The Effectiveness of International Environmental Regimes' in OR Young (ed), *The Institutional Dimensions of Environmental Change: Fit, Interplay, and Scale* (Cambridge, Massachusetts, Massachusetts Institute of Technology Press, 2002) ch 1.

[136] P Cullet and J Raja, 'Intellectual Property Rights and Biodiversity Management: The Case of India' (2004) 4 *Global Environmental Politics* 97.

it is especially rare), the holder or regulator of the natural resource components of biodiversity must be aware of the more complex patterns of use which affect their use of the natural resources or the systems within which they are located. For example, it would not be contrary to the CBD for a single fisherman at a local level to exhaust a particular species in a particular area. As long as the stock can recover, no harm may be done to biodiversity at the species level. However, if all fishermen for the same species adopted the same approach at the same time, then this may cause the collapse of the fishery, and the potential extinction of the species. In order to prevent such scenarios, there is clearly some need to coordinate certain resource exploitation activities, and for individual owners of natural resources to maintain some responsibility to ensure that such resource degradation does not occur. The protection and conservation of biodiversity entails not merely restrictions on use, but positive obligations to act in the interests of the wider community. Furthermore, the interest in biodiversity is *erga omnes*. The CBD establishes a common concern in biodiversity that transcends the interests of the owners or regulators of the component of biodiversity. This interest of the wider community extends to both present and future generations. This presents difficulties enforcing obligations of protection and conservation. For example, if a component of biodiversity is destroyed, who would have standing to bring an action against the wrongdoer on behalf of present and future persons?

Although it is unrealistic to expect any radical reformulation of regulatory authority to fit the newly perceived realities of natural systems, it may be possible to adapt existing structures of sovereignty and ownership to fit these demands. If we start with the observation that vesting mankind with an interest indivisible from the individual components of biodiversity is suggestive of some form of trusteeship over biological diversity, then we can look to the burgeoning body of scholarship advocating the use of stewardship or trust-based structures.[137] As we shall see in the next chapter, the EEZ is particularly susceptible to analysis in terms

[137] See JL Sax, 'The Public Trust Doctrine in Natural Resources Law: Effective Judicial Intervention', (1970) 68 *Michigan Law Review* 471; L Caldwell, 'Rights of Ownership or Rights of Use?—The Need for a New Conceptual Basis for Land Use Policy' (1974) 15 *William and Mary Law Review* 759; VP Nanda and WK Ris Jr, 'The Public Trust Doctrine: A Viable Approach to International Environmental Protection' (1976) 5 *Ecology Law Quarterly* 291; VJ Yannacone, 'Property and Stewardship—Private Property Plus Public Interest Equals Social Property' (1978) 23 *San Diego Law Review* 71; EB Weis, 'The Planetary Trust: Conservation and Intergenerational Equity' (1984) 11 *Ecology Law Quarterly* 495. MJ Glennon, 'Has International Law Failed the Elephant?' (1990) 84 *AJIL* 1, 34–5. JP Karp, 'A Private Property Duty of Stewardship: Changing Our Land Ethic' (1993) 23 *Environmental Law* 735; WNR. Lucy and C Mitchell, 'Replacing Private Property: The Case for Stewardship' (1996) 55 *Cambridge Law Journal* 566; C Redgwell, *Intergenerational trusts and environmental protection* (Manchester, Manchester University Press, 1999).

of trusteeship or stewardship.[138] In some jurisdictions these concepts are more than just conceptual frameworks, they are formal legal concepts used to regulate conflicting uses of natural resources. In US domestic law, the public trust doctrine has a long heritage and although it is often criticised for its rhetorical, rather than legal content, it is used to regulate commercial, fishing and recreational activities in tidal and navigable waters.[139] There are stirrings of similar approaches to the regulation of natural resources in India[140] and Canada.[141] This is echoed by international tribunals seeking new ways to accommodate important environmental values. Thus, in *Gabčikovo-Nagymaros* case, Judge Weeramantry famously referred to 'the principle of trusteeship of earth resources'.[142] Similarly, in a number of cases concerning natural resources and the environment, the ECJ has referred to 'trustees of common interest' and 'common heritage' being entrusted Member States.[143] Although the notions of stewardship or public trust are underdeveloped outside of the US, they remain important because they set stewardship or trusteeship as organising principles within a legal setting. In doing so, they establish them as relevant considerations that judges can draw upon to resolve legal disputes. In the context of biodiversity conservation, stewardship based approaches seem more suited to the regulation of natural resources. Although property structures can accommodate quite complex relationships over things, it seems clear that a strong, private property based approach is ill-suited to ensuring that biodiversity is conserved. First, a stake in any natural resource is vested

[138] C Jarman, 'The Public Trust Doctrine in the Exclusive Economic Zone' (1986) 65 *Oregon Law Review* 1; RG Hildreth, 'The Public Trust Doctrine and Coastal and Ocean Resources Management' (1993) 8 *Journal of Environmental Law and Litigation* 221; JH Archer and C Jarman, 'Sovereign Rights and Responsibilities: Applying Public Trust Principles to the Management of EEZ Space and Resources' (1992) 17 *Ocean and Coastal Management* 253; DF Britton, 'The Privatization of the American Fishery: Limitations, Recognitions, and the Public Trust' (1997) 3 *Ocean and Coastal Law Journal* 217.

[139] See *Illinois Central Railroad v Illinois (1892)* 146 US 384; *National Audubon Society v Superior Court of Alpine County* 658 P2d 709, 724 (1983). For some criticisms, see E Ryan, 'Public Trust and Distrust: The Theoretical Implications of the Public Trust Doctrine for Natural Resource Management' (2001) 31 *Environmental Law* 477, 490. Also Richard J Lazarus, 'Changing Conceptions of Property and Sovereignty in Natural Resources: Questioning the Public Trust Doctrine' (1986) 71 *Iowa Law Review* 631.

[140] *Mehta v Kamal Nath et al*, (1997) 1 SSC 388.

[141] In *R v Canadian Pacific Ltd* [1995] 2 SCR 1031 (SCC), stewardship of the natural environment was described as a fundamental value (para 60). In *Canada (Procureure générale)* c *Hydro-Québec*, [1997] 3 SCR 213 (SCC), legal measures to protect the environment were described as relating to 'a public purpose of superordinate importance': [85].

[142] Above n 86, Separate Opinion, 110.

[143] *European Commission v UK* Case C 804/79 [1981] ECR 1045, [30]; *Ireland v European Commission*, Case C 325/85, [1987] ECR 5041, [15]. *European Commission v The Kingdom of the Netherlands,* Case C 339/87[1990] ECR-I 851, [28]. However, these tend to describe the legal relationship between Member States and the EC in respect of matters that have been reserved to the powers of the EC rather than establish a model of stewardship over natural resources.

in both the immediate holder of the resource and the wider community. Secondly, the interests of the wider community cannot be disaggregated from the individual components of biodiversity. Even if such disaggregation were possible, it is not clear how this would be done for complex resource systems. Finally, the protection of biodiversity requires not just a limitation of the holder's right to use, alienate and manage a thing, it requires positive and complex forms of cooperation between holders of quite diverse but related natural resources.

5. SOVEREIGNTY BOUNDED

Sovereignty legally understood has never permitted the boundless exercise of power. As such human endeavours have rightly focused on its proper limits. What is becoming clear is how the exercise of sovereignty must accord with certain fundamental public interests. These forms of public interest were articulated at a general level in chapter 3. The present chapter has shown how these have found a more precise form in a number of important rules of international environmental law. As in the case of property-type rules generally we can see how the relationship between private rights (sovereignty) and public interests (limitations thereon) are shaped by physical, legal and moral considerations. We can observe how a number of rules and principles of international environmental law have evolved in response to scientific developments. These rules have significant implications for the way in which property rules apply to natural resources at the domestic level because States cannot implement property systems under domestic law that fail to respect the limitations that States have accepted or are bound by under international law. Initially, measures taken tended to follow a pattern that could be explained by reference to the prohibition on harmful use. At a time when the cause or harm was only patently observable, such uncalibrated rules were perhaps appropriate. However, in the latter decades of the 20th century there was growing international consensus that new approaches to the problem of environmental degradation were necessary. International rules on the protection of the environment moved beyond a liberal paradigm, to include rules that prohibit not merely harm to other agents, but also harm the environment irrespective of whether or not this forms part of the territory of other States. Many of these rules, such as duty to notify and consult or to carry out environmental impact assessments are predominantly procedural in form. Even then, they still represent important limits on States' liberty to act, even with respect to natural resources located exclusively within their territory. They also create expectations of conduct that result from procedures being followed and in some cases this will entail substantive limits on how States treat their natural resources.

More recently, with the emergence of biodiversity concerns, there is evidence that the physical qualities of certain natural resources and the consequent imperatives of environmental law require a more significant re-conceptualisation of the structures of sovereignty and ownership. The common concern of mankind in the conservation of biodiversity cannot be treated lightly. It represents an extension of the vital needs principle beyond the mere individual resources that are necessary to survival. In chapter 3 it was noted that there is a first order interest not merely in basic goods, but in their continued provision and ensuring access to such goods. Science now shows that the consumption of a natural resource may have adverse consequences that are not limited to the components of biodiversity so consumed. It may result in loss of genetic resources and potential, or contribute to the collapse of resource systems. Thus the interest in any given natural resource may vest in society as a whole, and, indeed, in future generations. For this reason it may be inappropriate to regard certain biodiversity attributes of a natural resource as forming part of the exclusive holdings of any individual. There is a common concern or interest of mankind in certain resource attributes, which at the very least requires positive acts of consultation and cooperation in the use of natural resources. As a result, the typical incidents of use (either in the form of sovereign rights or ownership) are either broken down into several proprietary groupings, or the holder of the property is burdened with positive duties to ensure the protection and conservation of biodiversity in the interests of the wider community. The absence of an agent in whom certain biodiversity attributes of ownership can be vested suggests that the latter approach will be followed. In effect the holder of the resource is put in the position of steward or trustee of the natural resources. Here we should be careful to note that when it comes to biodiversity there is no one size fits all model of rights and duties. As we have maintained throughout, the balance of rights and duties is necessarily influenced by certain factual considerations. For example, for a particularly rare resource, or a resource which is demonstrably more important to certain vital needs, there is likely to be a higher priority afforded to the duties of protection and conservation. In contrast, for plentiful resources, whose consumption is unlikely to threaten biodiversity, fewer restrictions will be placed upon consumptive uses of the resource. Whether or not strong or weak forms of stewardship are adopted, such a model of control challenges any assumption that private property rights are the only or most appropriate means of regulating natural resources.

7

Sovereignty, Property and Maritime Zones

1. INTRODUCTION

In chapter 5, the development of property rights and sovereignty in maritime zones was traced. It was seen how property concepts evolved in a fashion that was peculiar to the maritime sphere, firstly as a response to the specific physical regime of the seas, and then as a response to the policy interests of States and the way these were advanced through legal processes. Under international law, the traditional means of acquiring title were inappropriate for the purpose of explaining claims to exclusive control of the seas.[1] Maritime spaces are by their nature only susceptible to transient occupation or limited control from the coastline. In any event by the 20th century, limitations on the traditional modes of territorial acquisition through the use of force and the emergence of international institutions capable of designating rights in maritime zones through legal mechanisms resulted in move towards title becoming derivative of law rather than the fact of possession or occupation.[2] The importance of legal title is evident in a number of cases including the *Anglo Norwegian Fisheries* case,[3] the *Tunisia/Libya Continental Shelf* case,[4]

[1] Even today the rules relating to title to territory are closely bound up with *de facto* control, ie effective occupation. See *Island of Palmas* (*US v Netherlands*) RIAA, vol II, 829, reprinted in (1929) 22 *AJIL* 967; the *Clipperton Island* case (*France v Mexico*), reprinted in (1932) 26 *AJIL* 390; and the *Minquiers and Ecrehos* case [1953] ICJ Rep 47, 57; and the *Western Sahara Advisory Opinion*, [1975] ICJ Rep 12, [92]–[93]; SP Sharma, *Territorial Acquisition, Disputes and International Law* (1997) 266–306. However it is arguable that the picture is changing with the emergence of rules on democratic legitimacy, which assert that State authority over areas of the world is contingent on the State acting consistently with norms of democratic legitimacy, as manifested by the holding of free and fair elections and adherence to the rule of law. On democratic legitimacy see the collection of essays in G Fox and B Roth, *Democratic Governance and International Law* (Cambridge, Cambridge University Press, 2000).

[2] See Report of the International Law Commission to the General Assembly, UN GAOR, 11th Sess, Supp No 9, art 68, Commentary, p 7, UN Doc. A/3159 (1956). Also H Lauterpacht, 'Sovereignty over Submarine Areas' (1950) 27 *BYIL*. 376, pp 376 and 415–16; DN Hutchinson, 'The Seaward Limit to Continental Shelf Jurisdiction in Customary International Law' (1985) 56 *BYIL* 111, 113.

[3] [1951] ICJ Rep 116, 133.

[4] [1982] ICJ Rep 18, [62].

and *Gulf of Maine* case.[5] Indeed, as no less an authority than Jennings pointed out, maritime spaces were to be allocated according to 'certain a priori legal principles', whereas disputes over land boundaries were settled by consulting 'the juridical and geographical history of the particular boundary in question'.[6] Hence any limits due to the problem of physical excludability were overcome through the use of positive law to assert legal excludability.

Although property concepts are not explicitly used in contemporary international rules on maritime authority, they remain significant to the present discussion because the rules on maritime authority have a proprietary origin and form, ie they are claims to exclusive control of things or spaces. In this chapter we will see how the rules of international law that establish and govern claims to maritime zones are largely rules on the exclusive allocation of natural resources. These allocative rules are important in a number of respects. First, they serve to justify maritime claims per se. This then provides an effective basis for economic activity in maritime spaces. As Brilmayer and Klein point out, the economics of water ownership require the existence of property rules in maritime spheres.[7] Title is vital in order that States can pass on to the exploiter a legal right that is marketable to the world or which allows it to licence the exploitation activities of other agents.[8] Without the guarantee of legal title to ocean resources, no satisfactory or efficient economic exploitation can take place.[9] As occupation or possession of water is not practicable, States must base their authority on something else: reciprocal legal recognition.[10] Secondly, claims to maritime space may overlap and so allocative rules are necessary to determine the validity of competing claims. This is the province of the rules on maritime delimitation and these are considered at the end of the next section. Finally, and most importantly, the allocative function of international law is not limited in relevance

[5] [1984] ICJ Rep 246. As the Court stated: '[i]t should not be forgotten, however, that "legal title" to certain maritime or submarine areas is always and exclusively the effect of a legal operation': [103].

[6] Sir RY Jennings, 'The Principles Governing Marine Boundaries' in K Hailbronner *et al* (eds) *Staat und Volkerrechtsordung: Feschtrift für Karl Doehring* (1989) 397 and 397–8. See also B Oxman, 'The Third United Nations Conference on the Law of the Sea: The Seventh Session' (1978) 73 *AJIL* 1, 24.

[7] L Brilmayer and N Klein, 'Land and Sea: Two Sovereignty Regimes in Search of a Common Denominator' (2001) 33 *New York University Journal of International Law and Politics* 703.

[8] *Ibid* 733.

[9] This position is clearly demonstrated by the problems faced by those engaged in designing a system for the exploitation of deep-seabed resources. See WC Brewer Jr, 'Deep Seabed Mining: Can an Acceptable Regime Ever Be Found?' (1982) 11 *Ocean Development and International Law* 25, 43.

[10] Brilmayer and Klein, n 7 above, 736.

to the delimitation of maritime zones per se; it is determinative of the whole system of resource access and exploitation. As we will see in this chapter, the application of ownership type rules is not limited to the mere allocation of authority between States. In order to ensure that the various interests of States, both individually and collectively are protected, international law of the sea has assumed increased significance as a means of controlling resources and activities within States' maritime zones. Here law of the sea imposes significant limits on the scope of potential property rights by ensuring that certain public interests form part of the structure of obligations shaping the treatment of natural resources in maritime spaces.

Before considering these rules in detail it is worth recapping upon the importance of physical, legal and moral factors in determining excludability, to signal how these may shape the international law on maritime zones. In chapter 5, physical excludability was a key factor in determining the susceptibility of ocean space and resources to exclusive State control. For much of the historical development of the law of the sea, extensive claims to exclusive authority over ocean space were not reasonably practicable. However, by the 20th century the importance of this factor had waned as positive legal rules became a more effective and secure means of servicing States' exclusive claims of authority over ocean spaces and resources. Here the limits on legal excludability, which include legal rules requiring the protection of certain public interests, assumed greater prominence as the law shouldered primary responsibility for determining the existence of property type-claims. Within this context, those principles that ensure a the minimal subsistence aspect of property systems and those principles which shape the public interest function of (ie the preservation of vital needs, agency, reciprocity, jurisdiction, and other fundamental community values) became a component of maritime property claims. In the following sections, the present configuration of these principles in law is explored as they manifest themselves in each maritime zone.

This is not to say that physical excludability has become obsolete. Political philosophy was entranced by the methods of the natural sciences and it sought to replicate this in the science of law.[11] However, the influence of the natural sciences did not remain limited to the method of legal positivism. If scientific method could vest law with wide secular authority, then so too could the findings of that science influence the content of law. Even in the natural rights tradition of Grotius there has always been some faith in the fact that the physical order of things could enhance the legitimacy of certain legal claims. No less is this the case in the 20th

[11] See S Hall, 'The Persistent Spectre: Natural Law, International Law and the Limits of Legal Positivism' (2001) 12 *European Journal of International Law* 269, 277.

century, when States sought to enhance the legitimacy of claims to the continental shelf by characterising it as a natural prolongation of the continental landmass. Thus science and physical fact remain central components of the rules governing ocean space. As we will see in this chapter, no more so is this influence of science and fact evident than in the United Nations Convention on the Law of the Sea (hereinafter, 'Law of the Sea Convention'), with its use of technical formulas for the delimitation of the continental shelf and its reference to the 'maximum sustainable yield' in the context of fisheries conservation and management.[12] It is now generally accepted that that human activities in the marine environment, such as fishing, navigation or mineral exploitation, cannot be considered apart from each other, nor without due consideration of their impacts upon the marine environment. It is also widely acknowledged that well-settled maritime zones fail to correspond to the reality of ocean life and use.[13] Thus, in recent decades one of the principal dilemmas of international law of the sea has be how to effectively regulate marine resources that are not confined to a single legal jurisdiction. In such circumstances simple rules on exclusive use do not provide an adequate, let alone optimal solution to questions of resource use. Our new and developing appreciation of the operation of natural resource systems requires new approaches to regulation, which invariably place constraints upon rights to exploit natural resources. Thus the emergence of obligations to protect and conserve biodiversity, to adopt an ecosystem approach and to use the precautionary principle are responses to our new understandings of the natural world. These developments not only limit sovereignty over natural resources, in turn they generate responsibilities that cannot easily be accommodated within traditional property structures based upon exclusive, shared or inclusive authority. Accordingly, the influence of these developments on property rights is considered further in this chapter.

In chapter 2 it was noted that different moral justifications of property support different allocations of property, so varying allocations of property will result depending on which justification(s) prevail within a given legal community. The same consideration applies to allocations of resources made under international law, although, as was pointed out in chapter 3, the range and application of such values under international law may be far more complicated due to the scale and complexity of the international legal community. Despite such complexity, some general observations may be made on the relevance of moral factors to the allocation of resources under international law. First, liberal approaches to property and allocation have tended to prevail throughout the history of

[12] United Nations Convention on the Law of the Sea, 1833 *UNTS* 3; (1982) 21 *ILM* 1261. See Arts 61 and 76 respectively.

[13] See, eg, AL Hollick, 'The origins of 200 mile offshore zones' (1977) 71 *AJIL* 494.

the law of the sea. This was seen with the treatment of maritime claims in the previous chapter. Even though new States and new values came into play during the 20th century, these values remain deeply entrenched within the law of the sea, and still exert an influence on questions of allocation. Second, despite this tradition, moral justifications of property remain both plural and potentially universal, and this leaves the door open for other elements of property justification to influence the shape and form of a property system. Thus, forms of property consonant with propriety emerged in the 20th century. This reflected the capacity of coastal States to maintain order in littoral waters more effectively than other States or flag States. It also reflected an idea that exclusive control by the coastal State over certain resources would be in the wider interests of the international legal community, either through the conservation of resources or the strengthening of the autonomy of developing States. As we shall see in the present chapter, these factors, in addition to an emerging desire to secure the optimal utilisation of natural resources, generate significant constraints on how marine resources may be used.

2. MARITIME ZONES AND THE SCOPE FOR PROPERTY RIGHTS

In this section we explore how the relationship between exclusive claims and public interest demands is manifest in the various maritime zones.[14] Coastal States enjoy or may claim a number of maritime zones: the territorial sea, archipelagic waters, the contiguous zone, the continental shelf and exclusive economic zone. Of these the contiguous zone does not provide any specific rules relevant to the regulation of natural resources. In the case of the remaining zones, the status and legal basis of each zone under the Law of the Sea Convention is considered, along with the extent to which coastal States may enjoy exclusive rights. The way in which the elements of physical, legal and moral excludability operate and delimit rules on resource use and allocation are then considered. In the final section brief consideration is give to the rules on maritime delimitation, to consider how these rules may influence the treatment of natural resources.

Before examining the detailed provisions of the Law of the Sea Convention it is necessary to outline some of its general characteristics that influence the treatment of natural resources. First, the Law of the Sea Convention has an important public ordering function, and in this respect it is well-suited to advancing what we have described as public

[14] In the present context of international law of the sea it is not appropriate to refer to private property rights, as claims are not framed in these terms any longer. As we saw in the previous chapter, the language of sovereignty and sovereign rights has superseded the use of explicit property terminology to explain the types of claims that States may make in respect of maritime spaces.

interest limitations upon States. These in turn may limit the operation of domestic property rules. The public ordering function of the Law of the Sea Convention is well-captured by Ambassador Koh's famous reference to it as 'a constitution for the oceans'.[15] Now whether or not the Convention actually stands as a formal constitution is perhaps a moot point, but it certainly bears some important hallmarks of such, including a direct concern with the matters of governance, a keystone status, and near universal participation. It also contains higher order norms.[16] In both spirit and actual textual provision, it is connected with first, second and third order public interests with its explicit desire to establish a legal order for the oceans, and thereby secure certain fundamental interests in peaceful co-existence, communication, equitable use of resources, conservation of resources and protection of the environment.[17] The details of such rules are considered below.

Secondly, the law of the sea forms an integrated network of rules and principles. As the Law of the Sea Convention's preamble states: '[t]he problems of ocean space are closely interrelated and need to be considered as a whole.' An appreciation of certain inherent constraints in the nature of law of the sea's subject matter profoundly affected the way in which legal norms were developed at UNCLOS III. As we have already indicted, whilst any given legal community can choose how to deal with certain incontrovertible physical facts, they cannot change those facts and so must regulate them in a sympathetic manner if they are to regulate effectively. In the case of the law of the sea, this points towards a subtle connection between what ostensibly seem to be quite discreet rules. This is reinforced by our understanding of the prescriptive process. In light of the above facts, UNCLOS III was convened with the intention of settling all matters related to the use of ocean space at one time. As a result, States and groups of States brought a full range of sometimes shared, but often different interests to the negotiating table, and sought to accommodate these in a single coherent instrument. It is suggested that this process was very much influenced by the operation of diffuse reciprocity discussed in chapter 3. Thus States accepted limitations on their interests in one field in return for guarantees in another area. As Buzan notes,

> the nature of issues at stake was such that states could only reap maximum advantage in the context of an international regime. Competitive unilateral action would entail heavy countervailing costs (such as enforcement costs in

[15] Statement of Ambassador Tommy TB Koh, President of the Conference. Reproduced in United Nations, *The Law of the Sea; Official Text of the United Nations Convention on the Law of the Sea with annexes and index* (New York, United Nations, 1983) xxxiii.

[16] See SV Scott, 'The LOS Convention as a Constitutional Regime for the Oceans' in AG Oude Elferink (ed), *Stability and Change in the Law of the Sea: The Role of the LOS Convention* (Leiden, Nijhoff, 2005) 9.

[17] Para 4, the Preamble, n 12 above.

> defence of claims to territorial sea not recognized by major ocean users), as well as the loss of many advantages arising from coordinated behavior.[18]

Inevitably, the Law of the Sea Convention was the product of a complex process of bargaining between States and groups of States and the final product was as much a political settlement as a legal settlement, the so-called 'package deal'.[19] What is important to the present discussion of how international law shapes the regulation of natural resources is, first, a general appreciation that many of the rights secured in the Convention are fundamentally linked to responsibilities. Secondly, the individual subject matter of the Convention is not easily separated and capable of revision in isolation. The integrity of the whole is protected by a ban on incompatible *inter se* agreements and reservations, amendment procedures that are practically impossible to institute and compulsory dispute settlement procedures.[20] This means that the rules on natural resources include important public interest type-responsibilities, responsibilities which are difficult to amend or opt out of as a matter of international law.

Although the public ordering function and package deal nature of the Law of the Sea Convention present important constraints on sovereignty and property regimes, it is important to be aware of some of the limits to this position. Many provisions of the law of the sea as codified in the Law of the Sea Convention are not self-executing provisions, meaning that they must be implemented through domestic legislation before creating legally enforceable rights and duties, at least as far as private persons are concerned. One consequence of this is that international obligations can be avoided or shaded through the process of transposition.[21] This may undermine many of the public interest-type limitations to be found in the Law of the Sea Convention. The extent to which Convention rights and obligations can give rise to domestic rights and duties was at issue before the European Court of Justice in the *Intertanko* case.[22] Here the general nature of the Convention's obligations was critical to a challenge to a Community Directive that was claimed to be at odds with the Community's obligations under international law. The ECJ found that the Law of the Sea Convention's main objective is 'to codify, clarify and develop the rules of general international law relating to the peaceful cooperation of the

[18] B Buzan, 'Negotiating by Consensus: Developments in Technique at the United Nations Conference on the Law of the Sea' (1981) 75 *AJIL* 324, 329.

[19] See H Caminos and M Molitor, 'Progressive Development of International Law and the Package Deal' (1985) 79 *AJIL* 871.

[20] See the discussion in D Freestone and A Oude Elferink, 'Flexibility and Innovation in the Law of the Sea: Will the LOS Convention amendment procedures ever be used?' in A G Oude Elferink (ed), Bove note 16 169–221.

[21] See R Barnes, 'Refugee Law at Sea' (2004) 53 *ICLQ* 47, 54.

[22] Case C-308/06. For some background to this decision see R Barnes and M Happold, '"Intertanko" Case referred to the European Court of Justice' (2007) 22 *IJCML* 331, 338.

international community when exploring, using and exploiting marine areas'. Crucially, the ECJ continued to hold that the Convention 'does not establish rules intended to apply directly and immediately to individuals and to confer upon them rights or freedoms capable of being relied upon against States, irrespective of the attitude of the ship's flag State.' [23] As such the Law of the Sea Convention could not be used to challenge the validity of a Community measure potentially in violation of the Convention. Whilst the Law of the Sea Convention provides a broad framework for the regulation of natural resources, and in some respects quite detailed rules and guidance, in practice we remain heavily dependent upon the implementation of such provisions through domestic law to make them effective.

Aside from such limits it is also important to be aware of the current trend in the law of the sea to regulate matters through the use of 'softer' norms. This is particularly the case in respect of fisheries. With the exception of the 1995 Fish Stocks Agreement, much of the heavy work developing new and binding rules on the regulation of natural resources ended with the adoption of the Law of the Sea Convention. Although numerous regional instruments have been adopted, in particular with respect to straddling and highly migratory fish stocks, these have tended to follow the same broad approach as the Law of the Sea Convention as regards substantive limits on exploitation rights. Instead they tend to focus on institutional measures to secure cooperation in the management of fish stocks. Detailed technical provisions concerning the regulation of fisheries are mostly found in non-binding instruments and guidelines, such as the FAO Code of Conduct on Responsible Fisheries,[24] the related International Plans of Action[25] and numerous technical guidelines.[26] The obvious reason for this is unwillingness on the part of States to accept further restrictions on their rights to regulate natural resources. However, it also results from recognition that there is no 'one size fits all' set of rules appropriate to the regulation of natural

[23] *Ibid* [55]–[65].

[24] FAO, *Code of Conduct for Responsible Fisheries* (Rome, FAO, 1995). Available at <http://www.fao.org/DOCREP/005/v9878e/v9878e00.htm>

[25] See FAO, *International Plan of Action for reducing incidental catch of seabirds in longline fisheries. International Plan of Action for the conservation and management of sharks. International Plan of Action for the management of fishing capacity* (Rome, FAO, 1999); *International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing* (Rome, FAO, 2001).

[26] See FAO, *Technical Guidelines for Responsible Fisheries—No 1 Fishing Operations* (Rome, FAO, 1996); FAO, *Technical Guidelines for Responsible Fisheries—No 2 Precautionary Approach to Capture Fisheries and Species Introductions* (Rome, FAO, 1996); FAO, *Technical Guidelines for Responsible Fisheries—No 4 Fisheries Management* (Rome, FAO, 1997); FAO, *Technical Guidelines for Responsible Fisheries—No 8 Indicators for sustainable development of marine capture fisheries* (Rome, FAO, 1999); FAO, *Technical Guidelines for Responsible Fisheries—No 9 Implementation of the International Plan of Action to Deter, Prevent and Eliminate Illegal, Unreported and Unregulated Fishing*, (Rome, FAO, 2002).

resources and an appreciation that many States simply do not have the institutional capacity to adopt and implement detailed, binding technical measures. In such circumstances a toolbox of optional measures provides a better regulatory alternative to hard rules. Thus experience is shared and States are guided as to best practice. Understandably, there is concern at present with improving compliance and supporting the capacity of States to meet their commitments, rather than the introduction of new commitments.[27] In such a regulatory climate, it is important to maintain a clear distinction between binding and non-binding measures.

(a) Territorial Sea

Under the Law of the Sea Convention, coastal States have, subject to the provisions of the convention, sovereignty over the territorial sea.[28] This sovereignty extends to the air space above the territorial sea as well as the sea bed and subsoil.[29] The coastal State has the exclusive right to appropriate the living and non-living resources of the sea, the sea-bed and subsoil of the territorial sea. No other State may exploit such resources without the permission of the coastal State. The sovereignty of the coastal State is limited by Article 2(3) of the Law of the Sea Convention, which subjects it to the provisions of this Convention and other rules of international law. This general position is universally accepted despite disagreement about any particular limitations upon this sovereignty.[30]

The most specific exception to sovereignty is the right of innocent passage—the right of vessels of third States to navigate through the waters of the territorial sea without stopping or anchoring, unless rendered necessary by force majeure or to provide assistance to persons or vessels

[27] See D Anderson, 'Freedom of the High Seas in the Modern Law of the Sea' in D Freestone, R Barnes and D Ong, *Law of the Sea: Progress and Prospects* (Oxford, Oxford University Press, 2006) 327, 345.

[28] Art 2(1) provides that '[t]he sovereignty of a coastal State extends, beyond its land territory and internal waters and, in the case of an archipelagic State, its archipelagic waters, to an adjacent belt of sea, described as the territorial sea'. See also Art 1(1) of the Territorial Sea Convention 1958. It should be noted that the sovereignty applicable in the territorial sea is an extension of the sovereign regime applicable to the land territory of the State and not a derivative form of sovereignty or sovereign right.

[29] Art 2(2).

[30] Opinion differs on a number of important matters including the nature of the right of innocent passage, rights of passage for warships and the extent of coastal State jurisdiction over vessels in the territorial sea. See generally G Marston, 'The evolution of the concept of sovereignty over the bed and subsoil of the territorial sea' (1976–77) 48 *BYIL* 321, 332. Also DP O'Connell, *The International Law of the Sea* (Oxford, Clarendon Press, 1982) 59–123; RR Churchill and AV Lowe, *The Law of the Sea*, 3rd edn (Manchester, Manchester University Press, 1999) 77.

in distress.[31] Such a right is not absolute. Passage cannot be exercised in a manner that is prejudicial to the peace, good order, or security of the coastal State.[32] Passage remains subject to the laws and regulations of the coastal State concerning navigation, conservation of living resources, fisheries regulation, pollution control, marine scientific research and customs, fiscal, immigration and sanitary laws.[33] At all times the interests of the transiting vessel and the coastal State are to be balanced, and in many respects there are parallels between this and the domestic rules on rights of access over private land.

Before considering how property rules may be shaped by the regime of the territorial sea, it should be observed that the territorial sea does not have quite the exact same status as land territory, apart from any limitation imposed by the regime of innocent passage. This is because its existence is contingent on its appurtenance to the land territory of the coastal State.[34] This places an important limitation on what States may do with their territorial sea: it cannot be ceded without a piece of land.[35] Thus, in the *Grisbardana* case which concerned the cession of land territory to Sweden, the Permanent Court of Arbitration held that maritime territory 'constituting an inseparable appurtenance of this land territory must have automatically formed part of this cession'.[36] Brownlie notes that although this rule is generally accepted, the logical and hence legal rationale of appurtenance is not compelling.[37] In particular, he views it as a singular restriction on the otherwise unrestricted right of the State to dispose of territory. One explanation is that only the coastal State may effectively control and regulate such waters, and therefore only the coastal State may enjoy the extensive rights that comprise the territorial sea.[38] This is wholly consistent with the origins of the territorial sea in effective occupation. It is also commensurate with the idea of propriety, the view that effective

[31] Arts 17–18 of the 1982 Convention.

[32] Art 19(1). More specifically Art 19(2) sets out those activities, such as the use of force, spying, fishing, polluting, that is prejudicial to the coastal State.

[33] Art 21(1).

[34] See the *Grisbadarna* case (*Norway v Sweden*), in Scott, *Hague Court Reports* 121, 147. Also the *Beagle Channel* case (1977) 52 *ILR* 93. Also the *Anglo Norwegian Fisheries* case [1951] ICJ Rep 116, at 128.

[35] See the Dissenting Opinion of Sir A McNair in the *Anglo Norwegian Fisheries* case, *Ibid*, at 160. Also CR Symmonds 'Who Owns the Territorial Waters of Northern Ireland? A Note on *DPP for Northern Ireland v MacNeill*' (1976) 27 *NILQ* 48. *Cf* T Towey, 'Who Owns the Territorial Waters of Northern Ireland? The *McNeill* case: Another View.' (1983) 32 *ICLQ* 1013.

[36] Above n 34, 127.

[37] See I Brownlie, *Principles of Public International Law*, 6th edn (Oxford, Oxford University Press, 2003) 117–8.

[38] This reflects the idea of effective occupation that was influential in the development of the territorial sea. Of course this is now unnecessary, and inconsistent with more generally accepted notions such as recognition and legitimacy as the basis of title. Notably, Brownlie suggests that an abandonment of the territorial sea should result in the simple extension of the high seas: *Ibid* 118.

control of the territorial sea is a vital component of order at sea. This is certainly preferable, particularly in view of the heavy use to which coastal waters are subject, to any alternative such as freedom of the high seas or control by a non-littoral State. Despite any scepticism as to the logic of the rule, it is good law that the coastal State cannot alienate its territorial sea. This does not mean, however, that it is prevented from alienating the resources of its territorial sea. Thus it clearly falls within the sovereignty of the coastal State to allocate exploration and exploitation rights to third States in its territorial sea.

As coastal State sovereignty extends to the territorial sea it follows that the State may implement property systems in this zone in the same way that it can in respect of its land territory. Although such authority is exclusive, rather than absolute, this is a sufficient degree of authority for quite extensive systems of private property in the territorial sea. Of course, any specific restrictions on sovereignty, namely innocent passage, and any general restrictions on the treatment of natural resources, as outlined in section 4 of the previous chapter, must be respected by any domestic institution of property. Given that innocent passage is an exception to the coastal State's sovereignty, that there is no right to navigate in a particular section of the territorial sea, and that it is subject to rules concerning the management of living resources, it seems difficult to conceive of circumstances where innocent passage constitutes a bar or impediment to the implementation of property rights in fisheries.[39] At most it may require a modification of particular rights to ensure that their exercise does not infringe rights of navigation.

Important limitations on the grant of property rights may arise in cases where nationals of other States enjoy historic fishing rights or where States grant fishing rights to other States.[40] In respect of the former, the decisions of the Permanent Court of Arbitration in the *Eritrea/Yemen Arbitrations* are significant because they suggest that traditional fishing rights may operate as a powerful limitation on a coastal State's sovereignty over its natural resources.[41] At the same time that it awarded sovereignty over a disputed

[39] Potential problems may arise with the construction of large scale marine fish farms that effectively close off areas of the territorial sea. However, potential problems ought to be avoided through the careful application of marine planning systems. See EJ Molenaar, *Resolving Conflicting Uses in Coastal Waters. Some Legal Reflections in an International and European Context*, Studies in Law Series (The Law School, The University of Hull, 2003). For a UK approach to this see the Draft Marine Bill 2008, Cm 7351.

[40] We should also recall those potentially far-reaching general limitations outlined in section in the previous chapter.

[41] The award was delivered in two stages. The Award of the Tribunal in the First Stage—Territorial Sovereignty and Scope of Dispute, 9 October 1998; reproduced in (1998) RIAA, vol 22, 209. Award of the Tribunal in the Second Stage—Maritime Delimitation, 17 December 1999; reproduced in (1998) RIAA, vol 22, 335. Both awards are available online at <http://www.pca-cpa.org/showpage.asp?pag_id=1160> accessed 17 October 2008. These decisions are also discussed in section 2(e) below.

area to Yemen, it declared that such sovereignty 'entails the perpetuation of the traditional fishing regime in the region, including free access and enjoyment for the fishermen of both Eritrea and Yemen.'[42] In order to guarantee traditional fishing rights the Tribunal was explicit in its rejection of what it termed 'classical western territorial sovereignty' because this would have allowed Yemen to exclude Eritrean fishermen from its territorial sea.[43] The traditional fishing regime was perceived to be in the interests of all parties, including the actual fishermen, and recognition of this seems to have motivated the Tribunal to reach a most unusual decision. However, this was done without articulating a clear rule of international law in effect restricting the exercise of territorial sovereignty. Whilst it is widely accepted that international law limits the exercise of sovereignty, it is not at all clear how other legal orders may do so. For the Tribunal, the basis of the fishing regime was rooted in a mix of fundamental moral principles drawn from Islamic legal concepts of the region drawn from the *Qur'an* and *sunna*, and from long tradition.[44] The Tribunal was clear in its view that the former could be used to consolidate, support and develop positive international law. There was no indication that such considerations could run counter to or derogate from the law. Whilst the sensitivity of the Tribunal to the consequences of any determination of sovereignty is to be lauded, it is suggested that the reasoning of the Tribunal would have been more convincing if it had been explicit about its desire to secure the means of subsistence to the fishermen and how this would take priority over any formal allocation of competence between the two States. The Tribunal earlier noted 'as a matter of common sense and judicial notice, that interest in and development of fish as a food source is an important and meritorious objective.'[45] However, this was not explicitly relied upon to justify the traditional fishing regime, except to the extent that this goal was implicit in a religious precept of stewardship.[46] Not every religious precept or long standing tradition can or should generate legal effects, let alone qualify a well-established provision of law. However, it is the case that securing the means of subsistence is a fundamental goal. A decision couched in these terms would have much more appeal as a matter of legal reasoning, being a universal value that possesses coherence with a broader framework of moral and legal values.[47] Antunes suggests another rationale for the decision lies in the principle of *quieta non movere*: that a state of things that exists and has existed for a long period of time should be

[42] First Stage Award, *Ibid* para 527(vi).
[43] Second Stage Award, *Ibid* para 95.
[44] *Ibid* paras 94 and 95.
[45] *Ibid* para 71.
[46] *Ibid* para 92.
[47] See, eg, Art 25 of the Universal Declaration on Human Rights 1948 and Arts 2–11 of the International Covenant on Economic Social and Cultural Rights 1966.

changed as little as possible.[48] However, whilst this principle might have some useful application in the context of international boundaries, where the need for stability is often paramount, it is not at all clear that it can be used to justify substantive resource regimes.

As regards the status of this new regime, the Tribunal was explicit in holding that the regime was 'not an entitlement in common to resources nor is it a shared right in them.' That said, the Tribunal indicated that rights which Eritrea could enjoy extended to typical incidents of ownership, and in particular use and management rights. Thus the Tribunal noted that the parties were free to mutually agree regulations for the protection of this traditional fishing regime.[49] Furthermore any measures to protect the environment that would impact on traditional fishing rights could only be taken with the agreement of Eritrea.[50] The *Eritrea-Yemen Arbitrations* provide an interesting example of how extra-legal consideration may shape the scope of sovereignty. This aspect of the decision is important because it demonstrates an appreciation that traditional structures of ownership and control do not always provide appropriate solutions to questions of resource use. However, given the unusual circumstances of this case and the forced reasoning of the Tribunal, the ratio of the case is best regarded as confined to its own facts.

In practice, there are numerous examples of property rights operating in the territorial sea. Typically, such rules commonly relate to off-shore mineral exploitation, including the permission to construct and operate offshore installations and the grant of rights to mine offshore mineral resources. In many jurisdictions marine fishing was carried out as a public right with no grant of private property rights in any fishery.[51] However, for commercial reasons the scope and extent of this right has been reduced considerably. For example, it is quite common to find exclusive use rights being granted in respect of particular species or particular geographic areas.[52] In an increasing number of States, property rights are now being

[48] NSM Antunes, 'The 1999 *Eritrea-Yemen* Maritime Delimitation Award and the Development of International Law' (2001) 50 *ICLQ* 299, 309. See the *Grisbardana* case, where the tribunal held that '*c'est un principe bien établi, qu'il faut s'abstenir autant que possible de modifier l'état des choses existant de fait et depuis longtemps.*': (1909) RIAA, vol XI, 147, 161.

[49] Above n 43, para 108.

[50] *Ibid*.

[51] See SA Moore and HS Moore, *The History and Law of Fisheries* (London, Stevens and Haynes, 1903).

[52] For example, in the United Kingdom property rights are established under the Fisheries (Shellfish) Act 1967. The Act provides that the Minister may grant an exclusive fishery in the UK exclusive fishery limits. The grant confers upon the grantee exclusive rights within the area of the fishery to deposit and propagate and take shellfish of the species covered by the Order, to make and maintain beds and to take all steps necessary for the operation of the fishery. The Act makes it clear that shellfish covered by the Order shall be the absolute property of the grantee and be deemed to be in his actual possession, further protecting the grantee from unlawful interference in his property.

used to regulate fisheries in the territorial sea. Private property rights in fisheries in territorial waters fall into three distinct regimes: fishing quotas, marine ranching and ocean fish-farming.[53] Strictly speaking the property right exists in the quota or right to fish, rather than the actual resource itself. This is a necessary legal fiction that enables exclusive rights to be granted over a fungible and unascertained resource in the wild. Marine ranching involves the establishment of hatcheries and nurseries, where the fry is taken through the period of high mortality and then liberated into high seas to supplement natural stocks.[54] Ocean farming involves the stock being held through the entire period of its life cycle from juvenile to marketable size.[55] At no time is it released into the wild and so remains in the full possession of the farmer. This latter approach has the benefit of ensuring that the benefits are restricted to the farmer, and so encourages responsible and efficient practice, whereas the ranching system is, without further measures, at the mercy of natural predators and free-riders. Typically, full ownership rights arise over shellfish, whilst more attenuated rights have been granted in respect of other living resources.[56] In the case of the former, private property-based fishing rights have already been prosecuted in many countries, whereas the latter is still developing and faces considerable difficulties with respect to the delimitation of the property right.[57] In both cases the existing legal framework inhibits commercial investment.[58] The point is that ocean farms require the exclusive allocation of seed areas and seed to the farmer, as well as subjecting the farming to requirements of reasonable use. Mollusc farms may involve the construction of offshore structures, which in turn may affect rights of navigation and the rights of other ocean users. Ocean fish farming invariably requires areas of the sea to be penned off and protected from external interference. In short, the farmer requires security of property along with its attendant rights, and other users need to be protected from the harmful use of such property.[59] This brief schematic illustrates how property rights may conflict with other uses of the territorial sea. It also

[53] Pickering regards marine ranching as a spectrum ranging from stock enhancement activities such as the release of juveniles, to the establishment of private commercial enterprises. H Pickering, 'Marine Ranching: A Legal Perspective' (1999) 30 *Ocean Development and International Law* 161, 161–2.

[54] See LK Newton and ID Richardson, 'Marine Fish Farming—Some Legal Problems' in RR Churchill, KR Simmonds and J Welsh, *New Directions in the Law of the Sea* (London, British Institute of International and Comparative Law, 1973) vol III, 61, 62.

[55] *Ibid*.

[56] H Pickering, 'Legal Issues and Artificial Reefs', in AC Jensen (ed), *European Artificial Reef Research: Proceedings of the First EARRN Conference, Ancona, Italy, 26–30 March 1996* (Southampton, Southampton Oceanography Centre, 1997) 195.

[57] Above n 54, 63.

[58] *Ibid* 64.

[59] Newton and Richardson note that a fragmented regulatory approach rather than a more developed property system has inhibited mussel cultivation in the Wash: *Ibid* 65.

serves to emphasise the point that property rights in a resource are closely connected to the physical nature of a resource. The full range of such property rights in fisheries are considered in more detail in the next chapter.

To summarise, although international law may impose additional restrictions upon the exercise of this sovereignty, these do not significantly affect the competence of the coastal State to introduce property rights within the territorial sea per se. In cases of doubt as to the extent of any such limitations, the presumption must be in favour of the exclusive rights of the coastal State. This much flows from the presumption against restrictions upon the freedom of States.[60] This view is reinforced by the absence of specific conservation rules in respect of the living resources of the territorial sea, and is in stark contrast to the EEZ.[61] Similarly, there are no obligations to share resources with other States, even geographically disadvantaged or developing States, or respect historic rights of other States. However, it is clear that general limitations on sovereignty, as outlined in the previous section, may significantly limit the form and extent of such property rights. Exceptionally, international tribunals may seek to limit the exercise of sovereignty, as illustrated in the *Eritrea-Yemen Arbitrations*. Although such decisions indicate a commendably flexible approach to the question of resource access and use, they need to be much more securely reasoned if they are to have wider significance beyond the facts of the dispute.

(b) Archipelagic Waters

The term archipelago refers to a group of islands, or to a sea studded with islands.[62] Archipelagic claims are justified according to the existence of a special relationship between the land and sea. This is reflected in the perception of 'an archipelago [as] essentially a body of water studded with islands, rather than islands with water around them'.[63] Initially,

[60] This position is a reflection of the famous principle expounded by the Permanent Court in the *Lotus cas*e. 'International law governs the relations between independent States. The rules of law binding upon States therefore emanate from their own free will as expressed in conventions or by usages generally accepted as expressing principles of law and established in order to regulate the relations between those coexisting independent communities or with a view to the achievement of common aims. Restrictions upon the freedom of States cannot therefore be presumed.': (1927) PCIJ Reports Ser A, No 9, 18.

[61] See below s 2(d).

[62] Art 46 defines an archipelagic State, which is 'a State constituted wholly by one or more archipelagos and may include other islands'. An archipelago is ' a group of islands, including parts of islands, inter-connecting waters and other natural features which are so closely inter-related that such islands, waters and other natural features form an intrinsic geographical, economic and political entity, or which have historically been regarded as such.'

[63] The Representative of Indonesia. *Third United Nations Convention on the Law of the Sea: Official Records* vol III, 43–4.

claims to archipelagic waters were based upon the cultural ideal of a unity between land and water.[64] Of course the practical aim of asserting such a unity was to legitimate the enclosure of greater areas of water within the national territory than would be provided for under the territorial waters doctrine.[65] Claims were also articulated in terms of security, that the archipelagic State required exclusive control over the archipelagic waters to ensure that foreign powers did not threaten the peace and security of the archipelago.[66] Archipelagic States could not be expected to simply watch the warships of foreign powers move freely in waters close to their coasts, nor let the risk arise of foreign powers supplying arms to insurgent or disaffected groups. As some archipelagic States have suffered long-standing political instability, this rationale had particular resonance.[67] It was further suggested that the waterways in an archipelago form the economic arteries of the nation and so require adequate maintenance and protection.[68] Clearly, these particular rationales relate closely to the agency of the State and its capacity to function as an effective political entity. As control over immigration, customs, criminal activities, and sanitation concerns in coastal waters generally fell within the public responsibility of the State, this further reinforced claims for exclusive control over the waters in question.[69] Although all of these rationales were instrumental at a formative stage, later claims tended to focus upon economic justifications. The claim of economic dependence on coastal waters was not unique to archipelagos, but it served to associate archipelagic claims with burgeoning claims to continental shelf areas and the EEZ. It would be difficult for other States to justify the notion of economic dependence in one case, but not another. Interestingly, this approach ought to have imbued claims to archipelagic waters with some of the same proprietary elements that characterise the continental shelf and EEZ regimes. However, as we will see shortly, conservation and management restrictions on the exercise of sovereignty in archipelagic waters did not materialise. Between UNCLOS

[64] See the comments of M Kusumatmadja, reprinted in HP Rajan, 'The Legal Regime of Archipelagos' (1986) 29 *GYIL* 137, 141. See also RP Anand, who comments on the psychological gain that archipelagic waters were for claimant states. 'Mid-ocean Archipelagos in International Law. Theory and Practice' (1979) 19 *IJIL* 228, 254.

[65] See DP O'Connell, 'Mid-Ocean Archipelagos in International Law' (1971) 45 *BYIL* 1, 4; HW Jayewardene, *The Regime of Islands in International Law* (London, Nijhoff, 1990) 106.

[66] O'Connell notes that this was particularly important to Indonesia and the Philippines, who were troubled by internal dissent: *Ibid* 53.

[67] On Indonesia and the secessionist movements in Aceh and Papua, see E Drexler, *Aceh, Indonesia: Securing the Insecure State* (Philadelphia, University of Pennsylvania Press, 2008). On Muslim separatism in the Philippines, see T M McKenna, *Muslim Rulers and Rebels: Everyday Politics and Armed Separatism in the Southern Philippines* (Berkeley, California, University of California Press 1998).

[68] Jayewardene, n 65 above, 108.

[69] JR Coquia, 'The Territorial Waters of Archipelagos' (1962) *Philippine International Law Journal* 139, 155.

I in 1958 and UNCLOS III, a number of mid-ocean archipelagic States had become independent. Although this number of States did not significantly alter the composition of the international community of States, it was enough to constitute an influential negotiating group at UNCLOS III. Ultimately, the particular interests of archipelagic States were recognised as justifying the creation of a new regime, a regime that extended exclusive control over considerable areas of ocean space.

The rules on archipelagic waters are set out in Part IV of the Law of the Sea Convention. Arguably this now represents customary international law.[70] Article 49 describes the sovereignty of the archipelagic State as extending to its archipelagic waters, including the airspace above and their seabed and subsoil. Prima facie, it would appear that the archipelagic State has plenary powers in its waters akin to those of the territorial sea. However, the regimes are distinct, with different limitations being imposed on the exercise of sovereignty. In the aftermath of the *Anglo-Norwegian Fisheries* case, States claiming archipelagic waters placed most emphasis on economic and geographic factors, rather than security concerns. Moreover, they point to the significant and symbolic place of such waters in the identity of the State.[71] Although some archipelagic States consider that archipelagic waters are akin to internal waters they cannot be so assimilated, firstly because there exists the right of archipelagic passage through such waters, and secondly, internal waters are distinguished from archipelagic waters in Article 50. This makes the regime much more similar to the territorial sea. However, the degree of coastal State control over archipelagic passage is considerably greater than over innocent passage, thus distinguishing between these regimes.[72]

The most important limitation on sovereignty is the restriction in favour of archipelagic passage. Archipelagic passage can be regarded as a form of qualified innocent passage, with the qualifications being set forth in Article 53. In summary, this Article provides the archipelagic State with the right to control navigation through the designation of mandatory sea lanes and air routes.[73] As in the case of the territorial sea,

[70] See Churchill and Lowe, n 30 above, 129.

[71] See J Peter and A Bernhardt, 'The Right of Archipelagic Sea Lanes Passage: A Primer' (1998) 35 *Virginia Journal of International Law* 719, 724.

[72] See CF Amerasinghe, 'The Problem of Archipelagos in the International Law of the Sea' (1974) 23 *ICLQ* 539, 552.

[73] All ships and planes enjoy the right (Art 53(2)). Such sea lanes and air routes must include all normal passage routes and navigational channels used as routes for international navigation, except that duplication of routes of similar convenience between the same entry and exit points shall not be necessary, and in the absence of designated sea-lanes passage is via routes normally used for international navigation (Art 53(4) and (12)). Like innocent passage, archipelagic sea-lanes passage is regarded as transit passage rather than navigational freedom (Art 53(3)). Moreover, an archipelagic state may designate sea lanes and prescribe traffic separation schemes for the safe passage of ships through narrow channels in such

the archipelagic State enjoys sovereignty over the archipelagic waters, to which navigational rights must be regarded as an exception. In this light any such navigation rights should be construed narrowly.[74] However, the anomalous nature of archipelagic waters and the fact that they include a number of vitally important navigation routes means that maritime States are keen to ensure that navigational rights are not infringed. They are anomalous in the sense that they are both *sui generis* and enjoyed only by a select group of states. Whereas all coastal States enjoy territorial waters only a limited group of States enjoy archipelagic waters. Thus much of the element of reciprocity that informs the regime of territorial seas is absent. As a result the majority of States not enjoying archipelagic waters are keen to ensure that their navigational interests are adequately protected.[75] Accordingly, it is open to argue that any navigational rights are to be prioritised in archipelagic waters. That said, such rules do not generally detract from the archipelagic States authority to implement property rights over natural resources in its archipelagic waters.

A further limitation on sovereignty arises under Article 51, which specifically concerns the use of natural resources. First, the archipelagic State must respect rights enjoyed by third States under existing agreements.[76] Secondly, the archipelagic State must recognise 'traditional fishing rights and other legitimate activities of the immediately adjacent neighbouring States in certain areas falling within archipelagic waters'.[77] This does not entail a particular form of management regime. Even where other States enjoy either type of fishing right, this does not detract from the fact that it is the archipelagic State that will regulate their activities. Thirdly, archipelagic States shall respect existing submarine cables laid by other States that pass through their waters without making landfall.[78] They shall also permit their maintenance and replacement upon receiving due

sea lanes and may substitute other sea lanes or traffic separation schemes for previously designated zones, but they must all conform to generally accepted international regulations (Art 53(6) and (7)). Such sea-lanes or traffic separation schemes must be referred to the 'competent international organisation', namely, the International Maritime Organisation (IMO), for their adoption. The IMO may, however, only adopt such sea-lanes or traffic separation schemes as may be agreed with the archipelagic state (Art 53(9)).

[74] Above n 60 and the discussion therein.

[75] See generally, Bernhardt, n 71 above.

[76] Art 51(1). For example, a bilateral agreement between Indonesia and Malaysia guarantees Malaysian fishermen the right to fish using traditional methods in part of Indonesia's archipelagic waters east of the Anambas Islands. See the Treaty relating to the Legal Regime of Archipelagic State and the Rights of Malaysia in the Territorial Sea, Archipelagic Waters and the Territory of Indonesia lying between East and West Malaysia 1982: United Nations, *The Law of the Sea. Practice of Archipelagic States* (New York, United Nations, 1992) 144.

[77] Art 51(1). These rights shall be regulated by bilateral agreement between the States concerned, and shall not be transferred or shared with third States or their nationals. For parallels, see the preceding discussion of the *Eritrea Yemen Arbitrations*.

[78] Art 51(2).

notice. Article 51 was included to protect existing rights from the vast expansion of exclusive archipelagic State control over areas of the sea that were previously high seas. Notably, its provisions address matters of substantive rights rather than competence. With respect to resource entitlements, given the extent of archipelagic States' regulatory competence it seems likely that third State rights may be quite effectively eroded by the archipelagic States. As Rajan points out, a number of archipelagic States have carried out surveys to determine the scope of such rights, and although it is unclear whether such surveys are solely determinant of third State rights in legal terms, they tend to be in practice.[79] Furthermore, the archipelagic State may set out the terms and conditions for the exercise of such rights.[80] For example, Djalal sets out a number of criteria that may have to be satisfied for the existence of such rights, including the length of time rights have been enjoyed, the actual use of traditional methods, the exclusion of modern methods in the future, and frequent and observable usage.[81] Although such requirements are not binding formal requirements, they demonstrate how the archipelagic State may in practice obviate limitations on its sovereignty. They also show a tendency for sovereignty to consolidate in the hands of littoral States.

As in the case of territorial waters, the Law of the Sea Convention contains no reference to any conservation and management responsibilities within archipelagic waters. Neither does it contain an express statement that the exercise of sovereignty is subject to the other rules of international law.[82] This must be an oversight, for it would be absurd to imagine that sovereign rights could be exercised in any other way. Accordingly, the archipelagic State must adhere to those general limitations on sovereignty mentioned in section 4 of the previous chapter. Within these limits, archipelagic States enjoy the full panoply of rights associated with sovereignty. Accordingly, there is no impediment to the implementation of property rights in archipelagic waters, and property rights over natural resources may be instituted in much the same way that they can within the territorial sea. It is worth noting that under Article 51 any fishing rights may not be 'transferred to or shared with other third States or their nationals'. This provision is not necessarily incompatible with the introduction of property rights in archipelagic waters. However, it may limit the scope of such rights, and some of

[79] Rajan, n 64 above, 149.

[80] Art 51(1).

[81] H Djalal, 'Indonesia and the New Extension of Coastal State Sovereignty and Jurisdiction at Sea' in DM Johnson (ed), *Regionalism and the Law of the Sea. Proceedings of the Eleventh Annual Conference of the Law of the Sea Institute* (Cambridge, Mass, Ballinger, 1978) 284.

[82] See, eg, the provision on the territorial sea in Art 2(3). That said, the preamble to the 1982 Convention notes 'that matters not regulated by this Convention continue to be governed by the rules and principles of general international law'.

the efficiency benefits derived from such rights by preventing the reallocation of quotas or property rights to a user who can optimise the economic value of such rights.

In summary, archipelagic waters constitute a zone in which the coastal State exercises largely untrammelled powers, with the only significant limit being in favour of navigational rights. This permits the implementation of quite extensive property rights-based systems to regulate natural resources. The regime is significant in light of the justifications advanced by archipelagic States for such waters and the subsequent recognition afforded to these claims. It is not at all clear that the degree to which the special identity attaching to archipelagic waters and their association with the agency of the archipelagic State has resulted in a regime of almost untrammelled control over natural resources. It seems more likely that the extent of authority in archipelagic waters was the product of the nuanced negotiating process that resulted in the package deal nature of the Law of the Sea Convention. Although conservation and management obligations would have been a reasonable concomitant to the extension of sovereignty over vast areas, it is arguable that developments in general international law that require the protection of natural resources have reduced the material significance of any such gap in the Law of the Sea Convention.

(c) Continental Shelf

Although the significance of the continental shelf has been reduced as a result of the emergence of the EEZ, separate consideration of the regime is important for a number of reasons. First, the EEZ and continental shelf regimes are neither legally nor geographically synonymous. As noted above, the continental shelf can extend beyond 200 nautical miles to the outer continental shelf. Secondly, sedentary species are regulated as part of the continental shelf, the legal regime for which differs from the EEZ in its treatment of living resources. Thirdly, natural reserves of gas and oil occurring within the continental shelf may form a unitary deposit, straddling the continental shelf of more than one State. This necessitates cooperation and joint regulation of exploitation activities. Finally, because continental shelves may extend over significant areas, there is an increased incidence of conflict between States with overlapping claims to the same area. In the cases of opposite States the competition for a limited resource means that delimitation agreements must be reached. The influence of property-type considerations on the allocation of maritime space under delimitation settlements differs from those justifying maritime claims generally. Given these particularities, we must consider the nature and extent of coastal State rights in the continental shelf, and how these

shape the nature and extent of property rights granted over any natural resources therein. After considering the nature and extent of rights in the continental shelf, the implementation of property rights is examined in the context of rights in respect of sedentary species and petroleum exploitation rights.

The current legal regime of the continental shelf is set out in Part VI of the Law of the Sea Convention. Under Article 76, the 'inner' continental shelf comprises the sea-bed and subsoil of the submarine areas that extend beyond the territorial sea to the outer edge of the continental margin or a distance of 200nm from the baselines from which the territorial sea is measured.[83] This provision ensures that States with or without a physical continental shelf can claim rights over a zone up to 200nm from the baseline. States whose physical continental shelf extends beyond 200nm are entitled to claim a more expansive zone, known as the 'outer continental shelf'. The outer limits of the physical continental shelf are determined according to a complex set of calculations set out in Article 76.[84] Significantly the outer continental shelf is subject to additional commitments, requiring coastal States to make payments to the International Seabed Authority (ISA) as a proportion of the value of any non-living resources produced from the outer continental shelf.[85] No contribution is made in the first five years of production. In the sixth year contribution is set at one per cent of the value or volume of production and shall increase one per cent each year until the 12th year and remain constant at seven per cent thereafter.[86] A developing State which is a net importer

[83] See Art 76(1).

[84] Art 76(4)(a) provides that 'the coastal State shall establish the outer edge of the continental margin wherever the margin extends beyond 200 nautical miles from the baselines from which the breadth of the territorial sea is measured, by either: (i) a line delineated in accordance with paragraph 7 by reference to the outermost fixed points at each of which the thickness of sedimentary rocks is at least 1 per cent of the shortest distance from such point to the foot of the continental slope; or (ii) a line delineated in accordance with paragraph 7 by reference to fixed points not more than 60 nautical miles from the foot of the continental slope'. Art 76(b): '[i]n the absence of evidence to the contrary, the foot of the continental slope shall be determined as the point of maximum change in the gradient at its base'. Art 76(5): '[t]he fixed points comprising the line of the outer limits of the continental shelf on the sea-bed, drawn in accordance with paragraph 4 (a)(i) and (ii), either shall not exceed 350 nautical miles from the baselines from which the breadth of the territorial sea is measured or shall not exceed 100 nautical miles from the 2,500 metre isobath, which is a line connecting the depth of 2,500 metres. Art 76(6): '[n]otwithstanding the provisions of paragraph 5, on submarine ridges, the outer limit of the continental shelf shall not exceed 350 nautical miles from the baselines from which the breadth of the territorial sea is measured. This paragraph does not apply to submarine elevations that are natural components of the continental margin, such as its plateaux, rises, caps, banks and spurs'. Art 76(7): '[t]he coastal State shall delineate the outer limits of its continental shelf, where that shelf extends beyond 200 nautical miles from the baselines from which the breadth of the territorial sea is measured, by straight lines not exceeding 60 nautical miles in length, connecting fixed points, defined by co-ordinates of latitude and longitude'.

[85] Art 82(1).

[86] Art 82(2).

of minerals produced from its continental shelf is exempt from such contributions.[87] These payments shall then be distributed by the ISA

> on the basis of equitable sharing criteria, taking into account the interests and needs of developing States, particularly the least developed and land-locked among them.[88]

These provisions represent a considered attempt to engage in the redistribution of wealth arising from the allocation of exclusive control over important natural resources. It is clear that Article 76 obviates any strict requirement for a physical continental shelf, and this runs somewhat counter to the ideas of contiguity and inherence that served to justify earlier claims. Apart from illustrating that legal title can subsist in the absence of physical factors, this seems to demonstrate a degree of triumph for pragmatisms over principle. No doubt there is a strong element of pragmatisms, but if one looks closer, then it is clear that where 'arbitrary' physical factors result in potentially uneven allocations of wealth, they will have to be mediated in order to gain wider political acceptance. As indicated earlier, these provisions were the result of a complex negotiating process, where States sought to accommodate and balance a wide range of interests. In such a process, diffuse reciprocity serves to mediate claims and ensure a degree of equity in the outcome of a transaction. This desire for some degree of equity in allocations of wealth is reinforced by the benefit sharing constraints of Article 82(4).[89]

The coastal State enjoys sovereign rights for the purpose of exploring and exploiting the natural resources of the continental shelf.[90] These rights exist *ab initio*, meaning that no other State may claim to exercise rights of exploration and exploitation, even in the absence of the coastal State claims. This inherency is reaffirmed by Article 77(3), which states that the 'rights of the coastal State do not depend on occupation, effective or notional, or any express proclamation'. It must be emphasised here that the coastal State exercises sovereign rights in the continental shelf. Not sovereignty. Such rights are limited to what is necessary for the purpose of exploring and exploiting the continental shelf's natural resources. At this point it is necessary to ask whether or not this more limited authority places any limits on the extent to which coastal States may implement property systems in the continental shelf areas? Some reflection upon the genesis and import of the phrase suggests

[87] Art 84(3).

[88] Art 82(4).

[89] For some reservations about the effectiveness of these provisions see M Lodge, 'The International Seabed Authority and Art 82 of the UN Convention on the Law of the Sea' (2006) 21 *International Journal of Marine and Coastal Law* 323.

[90] Art 77(1). This reflects the ICJ's judgement in the *North Sea Continental Shelf* cases [1969] ICJ Rep 3, [23].

not. 'Sovereign rights' was adopted as a compromise term during the drafting of the Continental Shelf Convention 1958.[91] Prior to the adoption of the final text, discussions at the ILC where the draft text was formulated, indicated that some prominence was attached to the territoriality of the continental shelf.[92] This was primarily to avoid its characterisation as *res nullius* which might have exposed continental shelf areas to claims by non-littoral States. As such a number of States were in favour of couching littoral State rights in terms of sovereignty.[93] In any event, as Brierly remarked, the terminology did not matter because these rights belonged to coastal States *ipso jure*.[94] Any control was exclusive and amounted to sovereignty and could be so described. Indeed, O'Connell notes that only one State, Denmark, objected to the term sovereignty.[95] During the drafting process, subsequent opinion fell into two camps, the first favouring the term sovereignty and the second favouring a wording based around 'control' and 'jurisdiction'. The phrase 'sovereign rights' was adopted to break this stalemate. Despite some later objections, Fitzmaurice adopted a firm stance against any change and observed that the expression sovereign rights should be used because the term made it clear that the coastal State enjoyed property rights and because it avoided the ambiguity inherent in the terms 'control' and 'jurisdiction'.[96] After further debate at the Geneva Conference this phrase was finally adopted.[97]

After the adoption of the phrase, the ICJ had the opportunity to consider the nature of coastal State authority over the continental shelf in the *North Sea Continental Shelf* cases. The Court stressed that natural prolongation of the landmass was relevant in determining the quality of the coastal State's powers over the continental shelf and that there is a link between sovereignty over land and sovereign rights over the continental shelf.[98] It further observed that:

> the submarine areas concerned may be deemed to be actually part of the territory over which the coastal State already has dominion.[99]

O'Connell notes that this reflects the court's assimilation of physical fact and legal power; that the link between fact and law 'remains an important

[91] O'Connell, n 30 above, 477.
[92] The United Kingdom argued that its rights over the continental shelf were the same as its rights over land territory. [1953] *Ybk ILC,* vol II, 13.
[93] [1950] *Ybk ILC*, vol I, 214–5.
[94] *Ibid* 227.
[95] O'Connell, n 30 above, 479.
[96] [1956] *Ybk ILC,* Vol I, 140.
[97] UNCLOS I, *Official Records,* vol I, 14.
[98] Above n 90, at [19].
[99] *Ibid*, [43].

element for the application of the coastal State's legal rights'.[100] This approach was followed in the *Aegean Sea Continental Shelf* case, where the Court noted that:

> legally a coastal State's rights over the continental shelf are both appurtenant to and directly derived from the State's sovereignty over the territory abutting on that continental shelf. … In short, continental shelf rights are legally both an emanation from and an automatic adjunct of the territorial sovereignty of the coastal State. It follows that the territorial regime—the territorial status—of a coastal State comprises, *ipso jure*, the rights of exploration and exploitation over the continental shelf to which it is entitled under international law. A dispute regarding those rights would, therefore, appear to be one which may be said to 'relate' to the territorial status of the coastal State.[101]

This, O'Connell claims, shows that the ICJ has 'endorsed the propensity of "sovereign rights" to crystallise as "sovereignty"'.[102] Indeed, there is evidence of State practice attempting to further consolidate territorial authority over the continental shelf. For example, in its continental shelf legislation, Brazil has claimed the exclusive right to control marine scientific research and environmental protection.[103] The then stated Yugoslavia claimed sovereign rights over 'other resources' in addition to 'natural resources'.[104] This is regarded as including archaeological and other submerged objects.[105] The term 'natural resource' in Article 77(1) of the Law of the Sea Convention is taken from Article 2(4) of the 1958 Convention and refers only to mineral and other non-living resources of the seabed and subsoil. The adoption of a consistent terminology in international law and its general acceptance in the State practice suggests that the term has a narrow meaning.[106] Wider claims like those of Brazil and Yugoslavia should be regarded as contrary to international law, but they do demonstrate the strong tendency towards territorializing claims to maritime jurisdiction in order to ensure that more complete regulatory control is exercised by the coastal State.

It has already been noted that international law does not grant 'property rights' to States, it defines the scope of their sovereignty. However, as the above discussion of the term 'sovereign rights' shows, this amounts to much the same thing. Sovereign rights are limited. The principal limitation prohibits the coastal State from exercising any rights

[100] O'Connell, n 30 above, 481.
[101] [1978] ICJ Rep 3, [36].
[102] O'Connell, n 30 above, 482.
[103] Art 13 of Law No 8617 (4 Jan 1993). Noted in the Report of the Committee on the Legal Issues of the Outer Continental Shelf, in International Law Association, *Report of the Seventieth Conference, New Delhi* (London, International Law Association, 2002) 741, 759.
[104] Art 24 of the 1987 Law on the Coastal Sea and Continental Shelf. Official Gazette of the Socialist Federal Republic of Yugoslavia, No. 49/1987. Cited in M Skrk, 'The 1987 Law of Yugoslavia on the Coastal Sea and the Continental Shelf' (1989) 20 *ODIL* 501.
[105] *Ibid* 508.
[106] ILA Report, n 103 above, 759–60.

over the continental shelf in such a way that infringes or constitutes an unjustifiable interference with navigation and the rights and freedoms of other States.[107] In addition to this, the coastal State must also respect the general restrictions on the exercise of its authority under international law.[108] As property regimes generally require exclusive territorial control, this would to allow States sufficient authority to establish quite wide ranging property based regimes within their continental shelf areas. However, difficulties may arise because coastal State authority is functional rather than plenary within this geographic space. In practice the introduction of property regimes for certain functional matters, such as mineral exploitation, cannot be isolated in their impact from other activities within the same spatial extent. Potential use conflicts between the coastal State and other users of the same space can give rise to uncertainty and this may undermine any potential property rights provided for in the continental shelf. At the very least this will require limits on any private property rights, typically in respect of management incidents and the extent of the prohibition on harmful use, to ensure that other legitimate activities on the continental shelf are protected. This suggests that the use of property rights to regulate the resources of the continental shelf is not entirely straightforward. In addition to these general problems, particular property rights issues arise in respect of sedentary species, shared non-living resource reserves and continental shelf delimitation.

Article 77(4) includes sedentary species among the natural resources of the continental shelf, meaning those species that at the harvestable stage are immobile on or under the seabed or are unable to move except in constant physical contact with the sea-bed or subsoil. Apart from the practical implications this has for the exploitation of resources that might otherwise fall under the regime of the high seas this is worth noting for two reasons. First, it reflects the trend towards consolidated coastal State authority over resource zones. The inclusion of sedentary species within the regime of the continental shelf was largely due to the insistence of Australia and Ceylon during the negotiation process. This indicates how the nuances of the negotiating process can generate rather anomalous results. As Goldie suggests, it was not something that logically followed from the juridical nature of the continental shelf.[109] However, as we noted above, the continental shelf doctrine now transcends its origin in mere notions of physical prolongation from the land mass. Now entitlement

[107] Art 78(2) and 79.

[108] See ch 6, s 4.

[109] Goldie argues strongly against the inclusion of sedentary species within the scope of the continental shelf, which is regarded as a 'natural prolongation' of land territory. LFE. Goldie, 'Sedentary fisheries and Art 2(4) of the Convention on the Continental Shelf—a plea for a separate regime' (1969) 63 *AJIL* 86.

to the shelf is a matter of positive law rather than physical fact. So long as proper legal process is followed in the creation of legal entitlements such anomalous provisions matter little. Secondly, and of greater practical importance to any potential property rights in sedentary species, it frees coastal States from the important conservation and management requirements that normally pertain to living resources in the EEZ.[110] This may require fewer conservation and management limitations on potential private property rights in sedentary species.

As noted above, the coastal State has the exclusive right to exploit the non-living resources of the continental shelf. For oil and gas deposits located wholly within a single State's continental shelf, the only explicit limitation on exclusive use rights is to ensure that the exercise of such rights does not infringe or result in an unjustifiable interference with navigation and the rights and freedoms of other correlative States.[111] There are, of course, further limits drawn from general international law as set out in section 4 of the previous chapter. However, where a petroleum deposit straddles the continental shelf of two or more States, unilateral exploitation is impossible without affecting the rights of the correlative State(s).[112] The absence of a rule of capture under international law means that exploitation must be coordinated.[113] For some commentators this flows from the obligation to abstain from unilateral development of a common deposit.[114] For others it arises from a positive obligation to cooperate in the exploitation of the resource.[115] Either approach may effectively render the mineral resource joint property of the correlative States. If so, then this will in turn impact upon the nature and extent of any property rights allocated under domestic law. The potential significance of any approach

[110] Sedentary species are specifically excluded from the scope of Pt V on the EEZ by Art 68.

[111] Art 78(2).

[112] 'These deposits are characterized by a complicated "equilibrium of rock pressure, gas pressure and underlying water pressure," so that extracting natural gas or petroleum at one point unavoidably changes conditions in the whole deposit. One possible result is that other states cannot extract the minerals from their part of the deposit, even if the first state has extracted only that portion originally situated in its territory or continental shelf.': D Ong, 'Joint Development of Common Offshore Oil and Gas Deposits: "Mere" State Practice or Customary International Law?' (1999) 93 *AJIL* 771, 776.

[113] Ong, *Ibid* 777; Miyoshi, summarising the views of those Third Workshop on Joint Exploration and Development of Offshore Hydrocarbon Resources in Southeast Asia, held in Bangkok from 25 February to 1 March 1985, notes broad agreement that no such rule exists: M Miyoshi, 'The Basic Concept of Joint Development of Hydrocarbon Resources on the Continental Shelf (1988) 3 *International Journal of Estuarine and Coastal Law* 1, 6; *Cf* W Morris, 'The North Sea Continental Shelf: Oil and Gas Legal Problems' (1967) 2 *International Lawyer* 206.

[114] Miyoshi, n 113 above.

[115] See WT Onorato, 'Apportionment of an International Common Petroleum Deposit' (1967) 17 *ICLQ* 85, and 'Apportionment of an International Common Petroleum Deposit' (1977) 26 *ICLQ* 324; Ong, n 113 above.

for property systems requires us to consider whether or not an actual obligation exists.

What is certain is the existence of a general obligation to cooperate in the exploitation of common or shared resources. However, what is less certain is the precise extent of this obligation. In an influential article on joint development in 1967, Onorato argued that although the principle of unitization was not yet an established rule of customary international law, it could be given effect to through municipal law.[116] A growing body of State practice adopted this approach and by 1980 Onorato was able to confidently conclude that joint development of a unitary resource had become an established rule.[117] The body of practice that he referred to was not inconsiderable and it has since grown.[118] However, the point which remains contested is whether such practice is regarded as obligatory. As Ragoni and Miyoshi note, although States may take account of the unity principle, they are not bound by it.[119] In light of recent State practice, Ong suggests it is at least arguable that there is an obligation to cooperate towards a joint development. This appears to be supported by the Law of the Sea Convention provisions on semi-enclosed seas,[120] the views of the Jan Mayen Commission,[121] and the dissenting opinion of Judge Evensen

[116] Onorato, *Ibid*. Unitisation treats a field as a single production unit, usually with a single producer responsible for all production operations.

[117] WT Onorato, 'Joint Development of Seabed Hydrocarbon Resources: An Overview of Precedents in the North Sea' in MJ Valencia (ed), *The South China Sea: Hydrocarbon Potential and Possibilities of Joint Development* (New York, Pergamon Press, 1981) 1311, 1315. See also 'A Case Study in Joint Development: The Saudi Arabia—Kuwait Partitioned Neutral Zone' in MJ Valencia (ed), *Geology and Hydrocarbon Potential of the South China Seas and Possibilities of Joint Development* (New York, Pergamon Press, 1985) 539.

[118] Revisiting the matter of transboundary oil and gas deposits in 1999, Ong provides a comprehensive review of bilateral agreements; n 113 above. There are at least 15 such arrangements in operation.

[119] R Lagoni, 'Oil and Gas Deposits Across National Frontiers' (1979) 73 *AJIL* 215, 221.

[120] Art 123 provides that 'States bordering an enclosed or semi-enclosed sea should co-operate with each other in the exercise of their rights and in the performance of their duties.' This provision is especially significant given that many important shared resources occur in semi-enclosed seas, such as the Persian Gulf and North Sea. Reliance on this provision is problematic, firstly, because it is exhortatory rather than obligatory, and secondly, because it does not specifically apply to non-living resources. This has not discouraged some commentators from relying on the provision as indication of a wider obligation to cooperate, inclusive of non-living resources. See J Symonides, 'The Legal Status of the Enclosed and Semi-Enclosed Seas' (1984) 27 *German Yearbook of International Law* 315, 327; R Lagoni, 'Commentary' in Choon-ho Park (ed), *The Law of the Sea in the 1980s: Proceedings* (Honolulu, Hawaii, Law of the Sea Institute, 1983) 520; Also B Vukas, *Ibid* 531. One can also point towards the cooperative elements on the delimitation provisions and Art 142, which seeks to establish cooperative mechanisms where deep seabed mining may infringe the coastal State's interests. These are dealt with separately below.

[121] Conciliation Commission on the Continental Shelf Area between Iceland and Jan Mayen, Report and Recommendations to the Governments of Iceland and Norway, (1981) 20 *ILM* 797, 839. The recommendation to effect a unitisation agreement was subsequently adopted by Iceland and Norway. Agreement on the Continental Shelf between Iceland and Jan Mayen 1981, (1982) 21 *ILM* 1222.

in the *Tunisia Libya Continental Shelf* case which provided the basis for the subsequent exploitation agreements between Tunisia and Libya.[122] However, Ong is quick to point out that the threshold for establishing such a rule of international law is particularly high. Despite the extent of State practice, it is insufficiently consistent and lacking in the requisite *opinio juris* to establish a rule of customary international law.[123] However, he suggests that the case for a regional customary rule would be stronger in the North Sea, Persian Gulf and certain other areas.[124] This is because each exploitation agreement must be adapted to fit localised needs:

> These regional examples also highlight the *sui generis* nature of each joint development arrangement, which in turn reflects the functional purpose of such agreements. Every joint development scheme is adjusted to serve the physical, economic and political circumstances surrounding it.[125]

He goes on to note that although the joint development may be a progressive choice of exploitation regime, it is not the only such means. Ultimately, international law does not require this despite its prevalence in practice.[126] At the end of the day, all that can be ascertained with any surety are the obligations to cooperate[127] and exercise mutual restraint.[128]

[122] [1982] ICJ Rep 18, 320–23. On the actual agreements see Fox *et al*, *Joint Development of Offshore Oil and Gas* (London, British Institute of International and Comparative Law, 1989) vol 1, 64.

[123] The various bilateral agreements adopt a variety of solutions to the exploitation of shared or common resources, only some of which are in the form of a joint development. Neither is there evidence that States are acting in a manner that is anything more than convenient. Ong, n 113 above, 794–5.

[124] *Ibid* 804.

[125] *Ibid* 795; See also I Townsend-Gault, 'Joint Development of Offshore Mineral Resources—Progress and Prospects for the Future' (1988) 12 *Natural Resources Forum* 275, 282.

[126] Ong, n 113 above, 802.

[127] The obligation to cooperate is merely one of process, and not one of substance. Although States must engage in the process this does not oblige any particular outcome. The *Gabčíkovo-Nagymaros Project* case [1997] ICJ Rep 7, [141]. See Lagoni, n 119 above, 231; Onorato (1977), n 115 above, 327; PC Reid, 'Petroleum Development in Areas of International Seabed Boundary Disputes: Means for Resolution' (1984) 8 *OGLTR* 214, 215.

[128] This is the point that unilateral exploitation is prohibited if it would harm the other State's interests. This may amount to recognition of an effective power of veto by one State over another's right to exercise its sovereign rights. In this respect the decision by the ICJ in the *Gabčíkovo-Nagymaros Project* case is illuminating. *Ibid*. The unilateral diversion of the waters of the Danube onto Slovakian territory was held to be unlawful. 'Czechoslovakia, by unilaterally assuming control of a shared resource, and thereby depriving Hungary of its right to an equitable and reasonable share of the natural resources of the Danube—with the continuing effects of the diversion of these waters on the ecology of the riparian area of the Szigetkoz—failed to respect the proportionality which is required by international law.' (para 85). With reference to the idea of proportionality, Judge Higgins suggests that the Court is holding that the unilateral act of deprivation cannot be regarded as proportionate to any prior illegality of Hungary (in refusing to fulfil prior treaty obligations to cooperate in respect of a waterways project). The reference to general international law would suggest that this applies to any prior obligation to cooperate. See R Higgins,

For present purposes two aspects of the international law on joint developments are important. First, it is clear that any regime of joint control, based on equitable allocation of resources is difficult to reconcile with the principle of permanent sovereignty over natural resources.[129] Secondly, even though a rule may have emerged or is emerging which conjoins cooperation towards a joint development, there is no evidence that international law prescribes the substantive rules of such a joint development. The obligation to cooperate is a procedural rule. It does not amount to an obligation to achieve a particular result.[130] For these reasons it is suggested that international law does not impose a joint property regime on States. The resources of each State sharing a unitary resource remain under their sovereign rights. At best international law seems to endorse such an approach where it is appropriate.[131] As Schrijver notes:

> These documents and decisions do not imply that territorial sovereignty has been replaced by shared jurisdiction or common management, but suggest that States today are under an obligation to recognise the correlative rights of other States and at least to consult with them as regards concurrent uses of transboundary resources.[132]

It may be possible to argue that a combination of physical and legal factors effectively rendered transboundary mineral deposits joint property. However, one must be clear that just because a certain type of regime is inevitable in practice does not mean that it is rendered obligatory. Accordingly, if any regime approximating to common or joint property arises, although loosely encouraged by international law, it will, in reality, be shaped by the terms of the agreement between the correlative States, and by any concession which may be granted.

'Natural Resources in the Case Law of the International Court' in A Boyle and D Freestone (eds) *International Law and Sustainable Development* (Oxford, Oxford University Press, 1999) 87, 109–110. In respect of petroleum deposits, Ong suggests that the only way out of this is to require the reluctant State to justify its refusal to cooperate, which would in effect create a presumption in favour of joint development: n 113 above, 803. Clearly, Ong recognises that a combination of practical expediency militates in favour of some form of joint development rule.

[129] N Schrijver, *Sovereignty Over Natural Resources* (Cambridge, Cambridge University Press, 1997) 338.

[130] Unless one wishes to argue that any cooperative agreement in respect of a shared or common resource must achieve an equitable allocation of the resource between the parties. This may be derived from the general rule on equitable allocation noted above. Of course the nature of such an equitable result is highly contentious.

[131] In the *Eritrea Yemen Arbitration Second Stage*, the tribunal seemed to infer an obligation based on historical connections, friendly relations, and State practice to 'give every consideration to the shared or joint or unitised exploitation of any such resources': n 41 above, para 86.

[132] Schrijver, n 129 above, 338.

Given the prominence afforded to exclusive sovereign rights over non-living resources in international law, it is clear that domestic rather than international law considerations will be more influential in determining the content of any property rights regimes. As the tribunal noted in *Aramco v Saudi Arabia*, any analysis of the nature of an oil concession has to make reference to municipal law, as 'the Law of Nations contains no principle regarding the characterisation of concessions'.[133] In the United Kingdom, it is undisputed that the Crown owns all the petroleum reserves under the territorial sea, and has the exclusive right to explore for and exploit it.[134] The status of rights in the continental shelf is less clear, given that the relevant statute reiterates the ambiguous terminology of international law.[135] There is some judicial authority, albeit obiter, that the nature of the Crown's rights is proprietary.[136] Leading commentators on oil and gas law tend to support this position, although the position is not unanimous.[137] The view that such rights are proprietary in character is consistent with actual production operations under domestic law.[138] In practice, physical exploration and exploitation takes place under a licence agreement, whereby the Crown grants exclusive rights to a private enterprise, who will then obtain ownership of the resources it extracts.[139] Clearly, if the Crown can grant extensive property rights under a licence, then its own rights must be of a proprietary character. This is further reinforced by the way in which licensee rights

[133] 27 *ILR* 117, 157.

[134] See Petroleum Act 1998 s 2. Specifically in relation to mineral reserves see TC Daintith, 'The Licence' in T Daintith and G Willoughby (eds), *Manual of UK Oil and Gas Law*, 2nd edn (London, Sweet and Maxwell, 1984) 18, 19.

[135] Continental Shelf Act 1964 s 3(1).

[136] As per Slade J In *Earl of Lonsdale v Attorney General* [1982] 1 WLR 887, 945–7.

[137] In favour of the property view see Daintith, n 134 above, 19. TC Daintith, 'Correlative Rights in Oil Reservoirs on the United Kingdom Continental Shelf' in *Proceedings of the European Offshore Petroleum Conference and Exhibition* (London, European Offshore and Petroleum Conference and Exhibition on behalf of the Society of Petroleum Engineers, 1978) paper 7. R Higgins, 'Ten Years of State Involvement in the Petroleum Industry: UK' in International Bar Association, *Energy Law Seminar* (1979) 2, 5–6. GDM Willougby, 'Property Rights in Petroleum' (1978) 75 *Law Society Gazette* 6. PD Cameron, *Property Rights and Sovereign Rights: The Case of North Sea Oil* (London, Academic Press, 1983) 48 *ff*. *Cf* P Marriage, 'North Sea Petroleum Financing in the United Kingdom' (1977) 5 *IBL* 207, 209. FW Bentham, 'The Concept of a Continental Shelf and the Financial Problems of Exploitation' in the Proceedings and Papers of the Fifth Commonwealth Law Conference, Edinburgh, Scotland, 24–29 July 1977 (1978) 435.

[138] In contrast with international law, most domestic systems operate a rule of capture, whereby ownership of the oil vests in the person who extracts it. See generally, JS Lowe, *Oil and Gas law in a Nutshell* (St Paul, Minnesota, West Publishing Co, 1995) 1.

[139] See the Petroleum Act 1998 and the Petroleum (Production) (Landward Areas) Regulations 1991. As Hill notes, any ownership of joint venture property and any petroleum found is shared by licensee holders according to their respective share of the licence. If there is only one holder then the right is considered like any other personal property. DG Hill, 'Offshore Licence Operations: The Exploitation' in Daintith and Willougby (eds) n 134 above, 91.

are regarded as a *profit a prendre*.[140] In any case, as Cameron argues, this may be moot:

> By 'having' these rights, the Crown 'owns' the resources of the sea-bed and subsoil to the extent that sovereign rights are granted to the State by international law. In other words, the State can in practice adopt a stance in which it need not examine the exact nature of the rights to petroleum *in situ* which it is granted.[141]

The point is that the State has the best claim *vis a vis* other States, and for geographically fixed resources this is tantamount to ownership. This is not to say that they are equivalent to other forms of private property, but to signify that they have sufficient 'propertyness' about them for them to fulfil their given function.[142]

Any doubt about the precise extent and nature of sovereign rights has not prevented coastal States from implementing strong private property-based systems for the regulation of oil and gas deposits. The nature and extent of such property systems are largely at the discretion of the coastal State. In the case of shared oil and gas deposits, where exploitation cannot take place without affecting any correlative State, international law strongly urges what amounts to a joint property regime between States. This is in part determined by the physical nature of the resource, but also in part by the fact that cooperation is a more stable and 'proper' means of regulating a resource. Both sovereign rights under international law and any property rights under domestic law are heavily driven commercial expediency, and this tends to consolidate in strong private use rights with few allocative restrictions. Despite the origins of the continental shelf having a broad proprietary mandate, few limits on coastal States' exclusive use rights are to be found in the Law of the Sea Convention and this is in stark contrast to living resources. It may be that non-living resources are not to be regarded as vital goods like air, food and water, and so subject to overriding regulation in the public interest. However, this ignores the huge economic dependence upon energy reserves for the basic functioning of modern societies. There are some constraints on oil use, but these tend to occur downstream

[140] See, eg, the remarks by Whyatt CJ in the *Singapore Oil Stocks* case (1956) 23 *ILR* 810. As the closest analogous legal regime to the one in the North Sea this approach is approved by Willougby: n 137 above, 7.

[141] Cameron, n 137 above, 48.

[142] Thus, Cameron notes that licensee rights were strengthened—by providing greater security and transferability—so that they would be better suited for developing the economy of the oil industry: *Ibid* 52–6. He draws upon the thesis of Karl Renner, that law changes its function over time without necessarily changing its form, to support his view about the changing function of the licence. See K Renner, *The Institutions of Private Law and their Social Function* (London, Routledge and Kegan Paul, 1949).

of exploitation and certainly do not apply to matters of allocation.[143] General restrictions on the exercise of sovereignty, as outlined in the previous chapter, apply to non-living resources. However, it seems that such restrictions will be limited to the general requirements of non-harmful use and protection of habitats. David Ong has argued that there is in principle no reason why non-living resources should not be subject to conservation in the same way as living resources.[144] Indeed, as oil reserves become increasingly scarce there are even stronger reasons for conserving finite non-renewable resources.[145] However, despite wide ranging general conservation obligations, and soft law exhortations, there is no binding commitment to conserve the non-living resources of the continental shelf.[146] The imposition of any strict duty of conservation would be a profound regime change.[147] At best all that can be argued for is a duty to engage in a careful, rational and non-wasteful use of non-living resources, and this seems commensurate with the extant private interests of oil and gas producers.

(d) Exclusive Economic Zone

Although firmly entrenched within customary law, the EEZ cannot be considered to be a monolithic regime.[148] Although most States adhere approximately to the provisions of the Law of the Sea Convention, State practice is neither universal nor consistent. Some writers claim that plenary sovereignty in fact exists, whilst others claim that the EEZ is *sui generis*, or a regime of stewardship, and yet others claim it to be residually high seas in status. Perhaps all that can be said with certainty is that the EEZ involves a complex interrelationship of legal rights,

[143] See, eg, the International Convention on Civil Liability for Oil Pollution Damage 1969, (1970) 9 *ILM* 45; Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage, (1972) 11 *ILM* 284; International Convention for the Prevention of Marine Pollution from Ships, as amended by the Protocol of 1978 (MARPOL), 1340 *UNTS* 61.

[144] D Ong, 'Towards an International Law for the Conservation of Offshore Hydrocarbon Resources within the Continental Shelf' in Freestone, Barnes and Ong, n 27 above, 93.

[145] *Ibid* 98.

[146] See, eg, para 10(d) of the World Charter for Nature, UNGA Res 37/7 (7 October 1982); para 1(2) of the ILA Declaration of Principles of International Law Relating to Sustainable Development 2002, ILA Res 3/2002. Reproduced in ILA, *Report of the Seventieth Conference* (London, International Law Association, 2002) 22–9.

[147] Ong, n 144 above, 116.

[148] The status of the EEZ as a valid institution was confirmed in the *Libya/Malta Continental Shelf* case, with the Court stating that 'the institution of the exclusive economic zone … is shown by the practice of States to have become part of customary law'. [1985] ICJ Rep 13, [34]. This was reaffirmed in the *Greenland/Jan Mayen Maritime Delimitation* case [1993] ICJ Rep 38, [47].

duties, powers and privileges. However, given the significance that each approach has for the regulation of natural resources, it is necessary consider each in greater detail and assess the extent to which they present an accurate account of law. In this section the provisions of Law of the Sea Convention are considered, followed by an evaluation of State practice and doctrinal opinions as to the juridical nature of the EEZ. Finally, some observations are made on the influence of Law of the Sea Convention on the use of property rights to regulate natural resources in the EEZ.

The EEZ is an area of sea adjacent to the coastal State which 'shall not extend beyond 200 nautical miles from the baselines from which the breadth of the territorial sea is measured'.[149] The spatial extent of the EEZ is well settled and may be regarded as a rule of customary international law.[150] The figure of 200nm appears to be something of an accident. Hollick reveals it to originate in the desire of a weak whaling industry to secure exclusive control over their target catch and framing their claims on a mistaken assumption about an earlier security zone.[151] Churchill and Lowe point out that it has no geographical, ecological or biological significance.[152] This would suggest that there is little in the physical characteristics of the zone which automatically entitle coastal States to claim an EEZ. This is important because as a creature of positive law, its development was far more susceptible to negotiated qualifications than other zones that were much more contingent upon physical control, or were viewed as extensions of territorial sovereignty. As such we can contrast the balance of rights and duties that shape the EEZ, with the relatively unqualified regimes of the territorial sea and continental shelf.

In terms of potential property rights it is essential to understand this balance of rights and duties within the EEZ. The key provision in this respect is Article 56, which provides the coastal State with

> 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 and of the seabed and subsoil, and with regard to other activities for the economic exploitation and exploration of the zone, such as the production of energy from the water, currents and winds.

[149] Art 57.

[150] See D Attard, *The Exclusive Economic Zone in International Law* (Oxford, Clarendon, 1987) 284–5. Some disputes may arise as to the outer limit of the EEZ but these tend to result from contentiously drawn baselines or delimitations between opposite and adjacent States. Churchill and Lowe note that the status of these provisions is less certain given their absence in States' national legislation and their inherent vagueness, which may be such as to inhibit their norm-creating power: n 30 above, 233.

[151] Hollick, n 13 above.

[152] Churchill and Lowe, n 30 above, 163.

In addition to sovereign rights over living, non-living and economic fruits of the EEZ, the coastal State enjoys jurisdiction over the establishment and use of artificial islands, installations and structures, marine scientific research, and the protection and preservation of the marine environment.[153] These rights and duties are to be exercised with due regard to the rights and duties of other States, and in a manner compatible with other provisions of the Law of the Sea Convention.[154]

The coastal State is given a wide discretion to determine the conservation and utilisation of the living resources of the EEZ. Article 61(1) authorises the coastal State to determine the total allowable catch (TAC) of living resources. The first duty incumbent on the coastal State is, using the 'best scientific evidence available', to ensure that 'the maintenance of the living resources … is not endangered by over-exploitation'.[155] There is an obligation to cooperate with any competent regional, sub-regional or global organisation to this end. The second duty is to restore and maintain harvestable fisheries at levels which can produce the 'maximum sustainable yield' (MSY).[156] This is qualified by relevant environmental and economic factors, including the economic needs of the coastal fishing communities, the special requirements of developing States, fishing patterns, the interdependence of fishing stocks, and any sub-regional, regional or global minimum standards.[157] Thirdly, any management measures must take an integrated approach to the marine environment. Thus the coastal State has to take account of associated or dependent species affected by harvesting activities.[158] Finally, the coastal State is under an obligation to share scientific data concerning the conservation of fish stocks with competent organisations, and with any concerned States.[159] These duties have been subject to a number of criticisms, which highlight the overall shortcomings of the Convention's conservation and management duties.[160] Thus, the language used in the Convention is quite general or hortatory, and few of the duties laid down as absolute obligations, thereby allowing coastal States a wide degree of latitude in giving effect to their conservation and management responsibilities. The use of scientific advice in management decisions is facultative rather than mandatory. The MSY is generally regarded

[153] Art 56(1)(b).
[154] Art 56(2).
[155] Art 61(2).
[156] Art 61(3).
[157] *Ibid*.
[158] Art 61(4).
[159] *Ibid*.
[160] See eg, D Christie, 'It Don't Come EEZ: The Failure and Future of Coastal State Fisheries Management' (2004) 14 *Journal of Transnational Law and Policy* 1; R Barnes, 'The LOSC: An Effective Framework for Domestic Fisheries Conservation?' in Freestone, Barnes and Ong (eds), n 27 above, 233.

as failing to prevent overfishing.[161] The adoption of the Convention predated ecosystem considerations, which are now considered to form a fundamental component of environmentally sound fisheries management regimes. Although there are allusions to the impacts of fishing on interdependent species, these fail to take account of the wider impacts of fishing activities on the marine environment. It is arguable that developments in these concepts and approaches outside of the Law of the Sea Convention, such as are outlined in the previous chapter, have shaped the application of the Convention's internal rules and thereby reaffirmed and strengthened its conservation and management responsibilities.

Article 62(1) requires the coastal State to promote the objective of the optimum utilisation of the living resources within its EEZ. In order to do this the coastal State must determine its own harvesting capacity, and when this does not exhaust the total allowable catch, it is obliged to give other States access to the surplus through agreements or other arrangements.[162] In determining such access the coastal State shall

> take into account all the relevant factors, including, *inter alia*, the significance of the resource of the area to the economy of the coastal State concerned and its other national interests, [the position of land-locked and geographically disadvantaged States,] the requirements of developing States in the region or sub-region in harvesting part of the surplus and the need to minimise economic dislocation in States whose nationals have habitually fished in the zone or which have made substantial efforts in research and identification of the stocks.[163]

Nationals of other States fishing in the EEZ must adhere to the laws of the coastal State, of which the coastal State must give due notice.[164] It may be noted that the use of general and qualified terminology weakens the distributive import of Article 62.[165] Indeed, the fact that access charges may be readily levied under Article 62(4)(a) suggests that Article 62 is concerned with selling a surplus rather than sharing it.

Where stocks of the same species straddle the EEZ of two or more States, these States shall seek to cooperate to ensure the conservation and development of such stocks.[166] Where the stocks straddle the EEZ and the adjacent high seas, the coastal State and the high seas fishing States shall

[161] See MP Sissenwine, 'Is MSY an adequate foundation for optimum yield?' (1978) 3 *Fisheries* 22; S Garcia, 'Indicators for Sustainable Development of Fisheries' in FAO, *Land Quality Indicators and Their Use in Sustainable Agriculture and Rural Development* (Rome, FAO, 1997) 27–8; G Lugten and N Andrew, 'Maximum Sustainable Yield of Marine Capture Fisheries in Developing Archipelagic States—Balancing Law, Science, politics and Practice' (2008) 23 *International Journal of Marine and Coastal Law* 1.

[162] Art 62(2).

[163] Art 62(3).

[164] Art 62(4) and (5).

[165] See Churchill and Lowe, n 30 above, 290.

[166] Art 63(1).

seek to agree upon measures necessary to conserve those resources.[167] The obligation is merely to cooperate in good faith and in a meaningful way. It does not require States to reach actual agreement.[168] The position in respect of highly migratory species is slightly different in that the obligation to cooperate is specific rather than exhortatory.[169] However, it is clear that in both cases cooperation is a pre-requisite to successful regulation, and that competent institutional organisations are likely to play an important role in facilitating this.[170] These quite basic provisions dealing with straddling and highly migratory fish stocks, and in particular with those stocks located on the high seas, are generally regarded as too minimal or insufficient.[171] In the 1990's, heightened awareness of the problem of overfishing of high seas fisheries put the matter high on the political agenda.[172] At the United Nations Conference on Environment and Development it was agreed to convene a conference to deal with the problem of unsustainable high seas fishing.[173] The result of this conference was the UN Fish Stocks Agreement.[174] Although it goes beyond the scope of this book to deal with natural resources in areas beyond national jurisdiction, it is important to consider the key provisions of the Fish Stocks Agreement. Not only do they impact upon domestic marine living resources under domestic law, they go beyond the strict letter of the Law of the Sea Convention and provide a more detailed set of conservation and management obligations to balance against rights of use.

[167] Art 63(2).

[168] See M Hayashi, 'The Management of Transboundary Fish Stocks under the LOS Convention' (1993) 8 *International Journal of Marine and Coastal Law* 245, 251.

[169] Art 64(1).

[170] Thus ITLOS ordered the Australia, Japan and New Zealand to intensify their efforts to cooperate with a view to ensuring conservation and optimum utilization of fish stock. *Southern Bluefin Tuna (New Zealand v Japan; Australia v Japan), Provisional Measures, Order of 27 August 1999* ITLOS Reports 1999, 280, para 78 and operative para (e).

[171] See ILA, 'Principles Applicable to Living Resources Occurring both within and without the Exclusive Economic Zone or in Zones of Overlapping Claims'. International Law Association, Report of the Sixty-Fifth Conference (1992) 254–85; E Meltzer, 'Global Overview of Straddling and Highly Migratory Fish Stocks: The Nonsustainable Nature of High Seas Fishing' (1994) *25 Ocean Development and International Law* 255; K Gjerde, 'High Seas Fisheries Management under the Convention on the Law of the Sea' in Freestone, Barnes and Ong (eds), n 27 above, 281.

[172] For background see PGG Davies and C Redgwell, 'The International Legal Regulation of Straddling Fish Stocks' (1996) 67 *BYIL* 199; D Anderson, 'The Straddling Stocks Agreement of 1995—An Initial Assessment' (1996) 45 *ICLQ* 463; Hayashi, n 168 above; L Juda, 'The 1995 United Nations Agreement on Straddling Fish Stocks and Highly Migratory Fish Stocks: A Critique' (1997) 28 *Ocean Development and International Law* 147. More generally on high seas fisheries, see F Orrego Vicuña, *The Changing International Law of High Seas Fisheries* (Cambridge, Cambridge University Press, 1999).

[173] See *Agenda 21*, para 17.49(e), UN Doc A/CONF 151/26 (vol II).

[174] 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, (1995) 34 *ILM* 1542.

The Fish Stocks Agreement is intended to implement the provisions of the Law of the Sea Convention relating to straddling and highly migratory fish stocks. Accordingly, it provides that nothing in the Fish Stocks Agreement shall prejudice any rights and obligations under the Convention, and that the Agreement shall be interpreted consistently with the Convention.[175] The Law of the Sea Convention preserves the right of all States to fish on the high seas set forth in Article 116 of the Law of the Sea Convention. This is then subject to the interests of other States and the international community, which include the conservation and optimum utilisation of marine living resources. This includes a duty to cooperate in the conservation and management of high seas living resources.[176] The Fish Stocks Agreement has three broad objectives: to provide a statement of principles and practices for the better management of fish stocks, to improve compliance with fisheries regulations, and to encourage the peaceful settlement of disputes. Of these the first is most directly relevant to domestic fisheries regulations. The key principles of the Fish Stocks Agreement include: the adoption of measures to ensure long-term sustainability,[177] ensuring the use of best scientific evidence in setting catch levels,[178] collecting and sharing in a timely manner data on fishing activities,[179] the application of the precautionary approach,[180] the elimination of over-fishing and excess capacity,[181] and the requirement to take into account the interests of artisanal and subsistence fishermen.[182] The wider impacts of fishing are addressed by Article 5(g) which requires States to adopt measures, where necessary, to protect species within the same ecosystem. Similarly, States shall minimise pollution, waste, discards, and impacts on associated or dependent species.[183] Furthermore, States shall assess the impact of fishing, other human activities and environmental factors on target stocks, associated and dependent species, and other species in the same ecosystem.[184] The use of the precautionary principle, developed in Article 6, provides that States 'shall be more cautious when scientific information is uncertain, unreliable or inadequate' and that 'the absence of adequate scientific information shall not be used as a reason for postponing or failing to take conservation and management measures'.[185] Although the Fish Stocks Agreement retains use of the MSY

[175] Fish Stocks Agreement (Hereafter, FSA), Art 4.
[176] Arts 118–9.
[177] FSA, Art 5(a).
[178] FSA, Art 5(b).
[179] FSA, Art 5(j).
[180] FSA, Art 5(c).
[181] FSA, Art 5(h).
[182] FSA, Art 5(i).
[183] FSA, Art 5(f).
[184] FSA Art 5(d).
[185] More detailed methodology is set out in Annex II.

concept, its operation is modified by the precautionary principle. The Fish Stocks Agreement requires the use of limit reference points which are intended to constrain harvesting levels to within biologically safe limits.[186] Moreover they are intended to facilitate the activation of conservation measures in advance of any actual harm to fish stocks. Although some commentators view these principles as a progressive development or evolution of the provisions of the Law of the Sea Convention, which does not rule out such approaches, the framing of the duties is much more explicit and forceful.[187] Moreover, the detailed methodology for the application of the precautionary principle goes far beyond what was intended by the loosely framed conservation and management provisions of Part V and VII.

Through the operation of the compatibility principle these provisions have direct relevance to the regulation of domestic fisheries.[188] The compatibility principle requires conservation and management measures for areas within national jurisdiction and the high seas to be compatible, and may result in the principles contained in the Fish Stocks Agreement being more widely applied to fisheries within national jurisdiction. However, the precise operation of the compatibility principle is a matter of debate.[189] Although Article 7(2) sets out a range of factors to be taken into account in determining compatibility, such as Article 61 measures under the Law of the Sea Convention, prior agreements and the biological unity of the stock, there is no indication of the relative weight to be given to such measures and even whether the innovative principles of the Fish Stocks Agreement will prevail in domestic fisheries. It seems likely that coastal State interests are likely to prevail here. Thus Davies and Redgwell point to the inclusion of Article 61 factors, the physical characteristics of the stock and the extent to which it is fished in areas under national jurisdiction when determining compatibility measures.[190] Given that domestic fisheries management arrangements are likely to be more developed than international arrangements, then they will invariably influence the content of the latter. As such it seems clear that the extension of such principles into domestic fisheries depends largely on the political good will of coastal States, and securing the cooperation of all interested

[186] Annex II, para 5.

[187] See S Garcia, 'The Precautionary Principle: Its implication in capture fisheries management' (1994) 22 *Ocean and Coastal Management* 99; G Hewison, 'A Precautionary Approach to Fisheries Management: An Environmental Perspective' (1999) 11 *International Journal of Marine and Coastal Law* 301.

[188] FSA, Art 7.

[189] See further A Oude Elferink, *The Impact of Art 7(2) of the Fish Stocks Agreement on the Formulation of Conservation and Management Measures for Straddling and Highly Migratory Fish Stocks.* FAO Legal Papers Online No 4 (1999).

[190] Davies and Redgwell, n 172 above, 263.

fishing States. This point is crucial given that the commitments set out in Article 5 are more onerous than the duties that are set out in the Law of the Sea Convention.

There is little doubt that a number of the above principles are innovatory and do not feature explicitly in the Law of the Sea Convention. Yet is also difficult to see how the provisions of the Fish Stocks Agreement deviate in principle from the broad objects and purposes of the Law of the Sea Convention. A number of States that are party to the Law of the Sea Convention have chosen to remain outside the Fish Stocks Agreement in order to avoid its more onerous provisions, and this raises questions about the extent to which these States can be bound by such provisions, either under general international law or by virtue of their interpretative weight in determining the meaning of obligations under the Law of the Sea Convention. As a matter of strict law, treaties are only binding on the parties *inter se* and so the Fish Stocks Agreement can have no effect on third parties.[191] However, it should be noted that one of the most important provisions of the Agreement is to make compliance with internationally agreed management and conservation measures a condition for access to high seas fish stocks for all States.[192] If the Fish Stocks Agreement is truly an implementing agreement, rather than an amendment of the Law of the Sea Convention, this suggests that it is merely amplifying or giving effect to existing obligations. As a matter of general international law, Article 31(3) of the Vienna Convention on the Law of Treaties provides that subsequent agreements, practices, and any relevant rules of international law may be used to interpret a treaty.[193] Ultimately, the acid test of the 'interpretative' or modifying qualities of the Fish Stocks Agreement will be the practice of States.

In addition to the Law of the Sea Convention's general rules on fisheries conservation and management, special provision is made for specific species. Marine mammals are not subject to the objective of optimum utilisation. Under Article 65, coastal States are empowered to prohibit, limit or regulate marine mammals more strictly than other species.[194] Despite a greater ethical dimension to the exploitation of such species, the desire to protect such species is not sufficiently universal to generate a duty to protect, hence the facultative scope of Article 65. Anadromous species, ie salmon, spend most of their life cycle at sea, but return to

[191] See Art 34 of the Vienna Convention on the Law of Treaties 1969, 1155 *UNTS* 331.

[192] See generally, E Franckx, *Pacta Tertiis and 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*. FAO Legal Papers Online No 8 (2000). Available at <http://www.fao.org/legal/prs-ol/lpo8.pdf> accessed 17 October 2008.

[193] Davies and Redgwell, n 172 above, 272.

[194] Art 65.

fresh water to spawn. Article 66 provides that States in whose rivers such stocks originate shall have primary interest in and for such stocks. For the most part the State of origin enjoys the same control over such species as it does over other stocks in its EEZ. Fishing for anadromous species is prohibited beyond the EEZ, except where this would result in economic dislocation to States other than the State of origin. Again, the emphasis in such cases is on cooperation.[195] Catadromous species, ie eels, spawn at sea but spend most of their life cycle in fresh water. The State in whose waters such species spend the greater part of their life cycle shall have responsibility for the regulation of the resource, and harvesting outside the EEZ is prohibited.[196] Again, where such species migrate through the waters of other States, cooperation in the management of such species shall take place.[197] Clearly the regulation of catadromous and anadomous species reflect essential qualities of each species, and a desire to ensure that the vested interests of States within whose waters the stocks spend a greater part of their life cycle have a primary role on their regulation. Finally, sedentary species are excluded from the provisions on the EEZ, and are to be regulated according to the rules on the continental shelf.[198]

Land-locked States have the right to participate, on an equitable basis, in the exploitation of any surplus stock.[199] This is to be achieved through agreements which take into account, inter alia, the need to avoid detrimental effects to the fishing community and fishing industry of the coastal State, existing agreements, the interests of other participating land-locked and geographically disadvantaged States, and the nutritional needs of each State.[200] Notably, land-locked developed States may only participate in resource exploitation activities in the EEZs of developed coastal States in the same region or sub-region.[201] Article 70 replicates these provisions in respect of geographically disadvantaged States.[202] These provisions pay some lip service to distributional equity. However, the rights of such States are not particularly strong, being contingent upon subsequent agreements and taking into account a wide range of variables.

[195] See Art 66(2), (3), (4) and (5).
[196] Art 67(1) and (2).
[197] Art 67(3).
[198] Art 68.
[199] Art 69(1).
[200] Art 69(2).
[201] Art 69(4).
[202] Geographically disadvantaged States 'means coastal States, including States bordering on enclosed or semi-enclosed seas, whose geographical situation makes them dependent upon the exploitation of the living resources of the exclusive economic zones of other States in the subregion or region for adequate supplies of fish for the nutritional purposes of their populations or parts thereof, and coastal States which can claim no exclusive economic zone of their own.': Art 70(2).

This reflects the weak or unharnessed bargaining position of such States during the negotiation process at UNCLOS III.[203]

Against this background, it is commonly asserted that the EEZ is a *sui generis* regime.[204] The outer limit of the territorial sea marked the limit of plenary coastal State sovereignty, subject only to rights of navigation. The residual status of the territorial sea is sovereignty, and in cases of doubt the coastal State's interests prevail. Equally, the rights of other states were exceptions to the general provision and so to be interpreted restrictively. Beyond the outer limit of the territorial sea, the contrary presumption operated. The general position was that the freedom of the seas applied in favour of the international community and that only certain exceptional rights were to be accorded to the coastal State. In cases of doubt or conflict the presumption was in favour of the international community. Characterising the EEZ as *sui generis* regime distinguishes it from this approach. Article 55 describes the EEZ as

> an area beyond and adjacent to the territorial sea subject to the *specific legal regime* established by this Part, under which the rights and jurisdiction of the coastal State and the rights and freedoms of other States are governed by the relevant provisions of this Convention.[205]

However, describing the EEZ as *sui generis* is of little help in defining its exact nature.[206] For present purposes, the key issue is whether 'sovereign rights' provide a sufficient legal basis for the implementation of property rights in fisheries. This is also important because it has implications for the regulation of transboundary resources and migratory fish stocks.[207] O'Connell, writing prior to the Law of the Sea Convention entering force, leaves the answer to the exact nature of the EEZ open, commenting that its nature will depend on how the interests and forces at work in the regime prevail.[208] He suggests, however, three potential outcomes. In the first, the freedoms of the seas prevail over coastal State interests.[209] In the second, the interests of the coastal State come to prevail. In the third,

[203] See L Caflisch, 'Land-Locked States and Their Access to and from the Sea' (1978) 49 *BYIL* 71; IJ Wani, 'An Evaluation of the Convention on the Law of the Sea from the Perspective of Landlocked States' (1981–2) 22 *Virginia Journal of International Law* 627.

[204] See ED Brown, *The International Law of the Sea,* vol 1 (Aldershot, Dartmouth, 1994) 217; Churchill and Lowe, n 30 above, 136–7; Attard, n 150 above, 61–7.

[205] Emphasis added.

[206] Indeed, O'Connell noted that it was illogical to characterise the basic quality of the EEZ as that of the high seas, as the high seas is itself the product of several propositions as to behaviour: n 30 above, 575.

[207] This is due to the compatibility principle, which requires that conservation and management measures established for areas within national jurisdiction and for the high seas must be compatible. See Orrego Vicuña, above note 172 188–94.

[208] DP O'Connell, n 30 above, vol 1, 579.

[209] A Schreiber in F Orrego Vicuña (ed), *The Exclusive Economic Zone: A Latin American Perspective* (Boulder, Colorado, Westview Press, 1984) 123 *ff*.

the EEZ is assimilated with the territorial sea.[210] To this we can add a fourth possibility, the notion of stewardship. Each of these outcomes has implications for the introduction of property rights, and raises questions about the compatibility of property rights in fisheries with the State's international obligations. As O'Connell's second and third outcomes are effectively the same, consideration will be given to the following accounts of the EEZ: the plenary sovereignty view, the residual high seas view and the *tertium genus*/stewardship approach.

The leading proponent of this plenary sovereignty view is Burke, who argues that the balance of authority is firmly vested in the coastal State albeit subject to specific duties and obligations.[211] His analysis of the key provisions of the Law of the Sea Convention indicates that the power of the coastal State is largely unfettered.[212] Under the broad mandate of Article 56, the coastal State is to determine the access and harvesting regime. Article 61 provides that the coastal State has discretion to set the TAC, subject only to the requirement to prevent over-exploitation of living resources. This constraint is vaguely worded so as to impose only an insignificant burden on the coastal State.[213] The obligation to achieve the MSY is qualified by 'relevant environmental and economic factors'. This must, according to Burke, permit political and social considerations to seep into the calculation.[214] His argument is reinforced by the practical inadequacy of the cooperative and sharing mechanisms.[215] Thus Article 62 is not couched in absolute terms, but merely as an obligation to promote, and the coastal State will only do so where it is in its own interests. He emphasises that where a coastal State permits a surplus, Article 62 provides the coastal State with broad discretion in imposing terms and conditions upon foreign vessels seeking access to the surplus.[216] Although this must be exercised in good faith, in accordance with Article 300, the range and extent of controls is considerable. It includes the right to levy fees, which suggests that the other States' rights to a surplus may amount to no

[210] See G Pohl 'The Exclusive Economic Zone in the Light of the Negotiations at the Third United Nations Conference on the Law of the Sea' in F Orrego Vicuña (ed), *Ibid* 40. In light of the court's decision in *Aegean Sea Continental Shelf* case, O'Connell suggests that this territorial propensity may be hard to resist: n 30 above, 482.

[211] WT Burke, 'The Law of the Sea Convention provisions on conditions of access to fisheries: subject of national jurisdiction', (1984) 63 *Oregon Law Review* 73. See also Pohl, n 209 above, 40.

[212] Burke points out that although a State does have considerable powers to lawfully exclude other States' fishing vessels it may not always exercise these, and will do so only if it is in its interests to do so: *Ibid* 77–8.

[213] *Ibid* 81.

[214] *Ibid* 81–2.

[215] *Ibid* 90–1. See also J Gulland, 'Conditions of Access to Fisheries: Some Resource Considerations' in *Expert Consultation on the Conditions of Access to the Fish Resources of the Exclusive Economic Zones*, FAO Fisheries Report No 293 (Rome, FAO, 1983) 2, 6–10.

[216] *Ibid* 92–3.

more than a right to purchase a good in an open market.[217] The unfettered scope of coastal State authority is reinforced by the exclusion of disputes over living resources from the compulsory dispute settlement procedures of the Law of the Sea Convention.[218] Once a coastal State adopts measures for resource exploitation in its EEZ, there is no possibility of appeal to an external decision making process that could impose any conservation and utilisation duties on the coastal State.[219] The absence of dispute settlement procedures effectively guarantees the coastal State the power to eliminate any surplus fishing rights, and so render meaningless the obligation to provide access to foreign fishing vessels.[220]

If one recalls the nature of sovereign rights discussed above in relation to the continental shelf this approach seems persuasive. In respect of the continental shelf, although the phrase 'sovereign rights' was adopted as a compromise expression, many States favoured it as signifying full sovereignty, and that compromise was only necessary because some States feared a blurring between the seabed and superjacent waters. There was no intention to limit the coastal State's powers in respect of the actual continental shelf. Use of the same terminology suggests that the same approach was favoured in respect of the EEZ and at the very least exposes the EEZ to a consolidation of coastal State authority. However, it must be noted that the EEZ does not exist *ipso facto* and *ab initio*, indicating that the same link between territorial authority and control is missing.

Burke draws some support for his view from the Canadian pleadings and dissenting minority in the *La Bretagne arbitration*.[221] The decision is significant because it is the only international decision on coastal State authority in an EEZ since the conclusion of the Law of the Sea Convention. At the heart of the dispute was the question whether or not Canada had the power to prohibit French trawlers fishing in the Gulf of St Lawrence from filleting fish under the terms an agreement between the parties in force since 1972.[222] Canada argued that it had residual authority to regulate fishing activities under general international law, whereas France maintained that the 1972 Agreement was the sole basis of Canadian authority and that as it did not provide the powers that Canada

[217] Art 62(4)(a).
[218] Art 297(3).
[219] Burke, n 211 above, 118.
[220] *Ibid* 90.
[221] *Dispute Concerning Filleting Within the Gulf of St Lawrence*, Award of 17 July 1986. The text of the award is reproduced in (1986) 90 *Revue Générale de Droit International Public* 713–786. Hereinafter referred to as '*La Bretagne arbitration*'. The decision is subject to extensive commentary by Professor Burke. WT Burke, 'Coastal State Fishery Regulation Under International Law: A Comment on the *La Bretagne* Award of July 17, 1986 (The Arbitration Between Canada and France)' (1988) 25 *San Diego Law Review* 495.
[222] The award contains the text of the 1972 Agreement. *La Bretagne arbitration*, paras 5–7.

claimed the prohibition was invalid.[223] The tribunal was 2:1 in favour of France, with Professor Pharand submitting a strong dissenting opinion.[224] In his dissenting opinion, Professor Pharand suggests that the coastal State is absolutely sovereign in respect of those purposes set out in Article 56.[225] The powers of the coastal State are not limited to regulations in the economic interest of the coastal community and such powers remain in the hands of the coastal State unless renounced.[226] In the context of the *La Bretagne arbitration,* in the absence of any contrary agreement, the coastal State's authority was unfettered. Accordingly, Canada could regulate the processing of fish on vessels within the 200-mile EEZ if the fish had been caught there. Although Pharand was the Canadian appointed arbiter, and his opinions might be regarded as biased, Burke considers his opinion to be more significant because it is consistent with actual fisheries management and the provisions of the Law of the Sea Convention.[227] Of particular note is Pharand's view that a plain reading of the relevant provisions of the Law of the Sea Convention provides broad authority for coastal State fishing activities. In particular, Article 62 contains no subject matter limitations on such regulatory authority.[228] This is consonant with the realities of fisheries management and echoes Burke's argument above.

There may be problems with the plenary sovereignty view. First, any textual reading of the Law of the Sea Convention reveals that coastal States simply do not enjoy full sovereignty in the EEZ.[229] Article 55 holds that the EEZ is a regime beyond the territorial sea, subject to the provisions of Part V, clearly differentiating the EEZ from the territorial sea and a regime of plenary sovereignty. Furthermore, a review of State practice clearly shows the majority of States to have adopted measures that do not amount a 'territorialisation of the EEZ'.[230] That said, much of the balancing of interests at play in the EEZ seems to depend on the ability of States to gain access to the resources of another State's EEZ and to enforce that State's conservation and utilisation responsibilities. Certainly, in the case of the former there is clear evidence of coastal States preventing access.[231] This points to the weak character of the conservation and utilisation obligations.

[223] *Ibid*, para 24.
[224] *Ibid*, paras 24, 36–7.
[225] *Ibid*, para 45.
[226] *Ibid*, paras 13, 17.
[227] Burke, n 221 above.
[228] Above n 221, Dissenting Opinion, para 17.
[229] Art 89, which provides that no State may 'validly purport to subject any part of the high seas to its sovereignty', is made applicable to the EEZ by virtue of Art 58(2).
[230] Above n 150, 288–301.
[231] Attard notes that there is little evidence of such rights being recognised in practice: n 150 above, 206.

The second view of the EEZ is that it is residually high seas, meaning that in cases of doubt over the meaning of specific provisions, or where rights of coastal States and other states conflict, the matter will be decided by reference to the principles governing the high seas.[232] At UNCLOS III there was some discussion whether the same could be said of the EEZ. This view seems to have arisen because the waters of the contiguous zone and the superjacent waters of the continental shelf were considered as part of the high seas.[233] However, this view is patently incompatible with Article 86, which expressly excludes the EEZ from the regime of the high seas. Although Article 86 provides that it does not 'entail any abridgement of the freedoms enjoyed by all states in accordance with Article 58', this should not be regarded as incorporating the whole doctrine of the freedom of the seas into the EEZ. Article 58 restores certain high seas freedoms contained in Article 87, with the exception of fishing, construction of artificial islands and installations, and marine scientific research. Furthermore, Article 87(2) notes that any such rights must be exercised with due regard to other rights provided for under the Convention. Thus, any high seas freedoms in the EEZ are limited to *ius communicationes*, and must be exercised with regard to coastal States' rights under Part V. Article 58(1) extends rights of other States to any 'other internationally lawful uses of the sea related to these freedoms'. However, as Attard notes, it is likely that determination of such lawful uses will depend largely on the coastal State.[234]

There is some support for the residual high seas approach in the majority ruling in the *La Bretagne arbitration*.[235] Although the dispute concerned a bilateral agreement, the majority took the view that the coastal State's rights within the 200 mile zone did not extend to the regulation of onboard processing of fish. As the tribunal stated, referring to Article 62(4) of the Law of the Sea Convention, which lists the typical conservation measures of coastal States

> Although the list is not exhaustive, it does not appear that the regulatory authority of the coastal State normally includes the authority to regulate subjects of a different nature than those described.[236]

Implicit in the Tribunal's decision is the idea that the coastal State enjoys only those rights specified by the Law of the Sea Convention; that although the Convention has given the coastal State a greater interest in resource

[232] JC Lupinacci 'The Legal Status of the Exclusive Economic Zone in the 1982 Convention on the Law of the Sea' in F Orrego Vicuña (ed), n 209 above, 75, 98 *ff*; Schreiber, n 209 above, 123.

[233] See Attard, n 150 above, ch 4.1(a).

[234] Attard, *Ibid* 64.

[235] Above n 48.

[236] *Ibid*, para 55.

matters, it has not radically altered the balance between the coastal State and distant water fishing concerns. However, the reasons for this position are not clearly provided in the judgment. Given developments in State practice which generally arrogate such powers to the coastal State, this view should be regarded as incorrect.[237]

This brings us to the final approach, the EEZ as a *tertium genus*. In the *Fisheries Jurisdiction* case, the ICJ described a 12-mile fishing zone as a '*tertium genus* between the territorial sea and the high seas'.[238] This sparked a move away from the traditional approach and by the time of UNCLOS III, the majority of delegates were of the opinion that the EEZ was another such *tertium genus*.[239] This is by far the most common approach in the literature.[240] It would also appear to be in broad conformity with State practice since the adoption of the Convention. As a *sui generis* regime, the EEZ is to be interpreted in the light of its own particular nuances rather than considering it residually territorial seas or high seas. Attard provides a detailed argument in favour of this approach.[241] He notes that, although the EEZ provides for a number of rights and duties, it does not assign any of them priority, and what results is a complex balance of interests.[242] The EEZ is regarded as a functional regime, where the legal issues are settled according to the nature of the subject matter, rather than broad designations of exclusive or inclusive authority. His argument is reinforced by reference to residual rights under Article 59.[243] These are unattributed rights that will be resolved on the basis of

> equity and in the light of all the relevant circumstances, taking into account the respective importance of the interests involved to the parties as well as the international community as a whole.

As such rights are not defined, their form and content will accord with the general status of the EEZ. Attard considers this provision to have its roots in the 'balancing of equities' rule used to resolve delimitation disputes.[244] What is crucial here is the fact that Article 59 refers not only to the parties'

[237] Burke, n 221 above, 531–33. As Oda states, 'the argument as to whether it still is part of the high seas seems to be purely academic.': S Oda, 'Fisheries under the United Nations Convention on the Law of the Sea' (1983) 77 *AJIL* 739, 741. See also Churchill and Lowe, n 30 above, 165; Attard, n 150 above, 67; Brown, n 204 above, 218–20.

[238] [1974] ICJ Rep 3, [54].

[239] See A Aguilar, Chairman of the Conference's Second Committee *Third United Nations Convention on the Law of the Sea:Official Records* (1973-82–) vol 5, 153.

[240] W Riphagen, 'Some Reflections on "Functional Sovereignty"' (1975) 6 *NYIL* 121; B Kwiatkowska, *The 200 mile Exclusive Economic Zone in the New Law of the Sea* (London, Nijhoff, 1989) 4–6; Churchill and Lowe, n 30 above, 166.

[241] Attard, n 150 above, 61–67. See also F Orrego Vicuña, *The Exclusive Economic Zone* (Cambridge, Cambridge University Press, 1989) ch 3, 258 *ff*.

[242] Attard, *Ibid* 66.

[243] Attard, n 150 above, 64. See also Aguilar n 239 above, and J-P Queneudec, '*Un problème en suspens: la nature de la zone économique*' (1975–6) 5–6 *IRIR*, 39 *ff*.

[244] Attard, n 150 above, 65.

interests but also those of the international community, thereby extending the categories of interest that are determinative of any dispute. As noted above, the functionalist approach places emphasis on the activity in question rather than focusing on geographic location. There is nothing wrong with this approach per se. However, although it accurately describes the position under the Law of the Sea Convention, it does not offer a way out of the potential stalemate presented by Article 59. For example, should bunkering be classified as an activity, the regulation of which falls within the scope of the exercise by the coastal State of its 'sovereign rights to explore, exploit, conserve and manage the living resources in the exclusive economic zone', or as an independent activity whose legal regime should be that of the freedom of navigation? Clearly any such characterisation would have a significant impact on the outcome of any dispute.[245] In a *sui generis* regime, where the law is ambiguous or silent on the priority of rights, there is no template of principles to draw upon for an answer. If disputes are decided on an *ad hoc* basis then fragmentary and inconsistent practice may arise in respect of the EEZ. This is why having a coherent and broadly accepted conceptual status for the EEZ is so important. In this respect, stewardship may provide some guidance.

Stewardship is a recognised legal concept that seeks to achieve certain identifiable social objectives through the manipulation of the bundle of rights and duties that constitute property.[246] Its particular emphasis is on the duties of the steward to secure certain first order public interests, such as satisfaction of basic human needs, but may also extend to measures necessary to secure a healthy and sustainable environment, the maintenance of biodiversity, the reasonably efficient use and production of resources, and security of expectations and other third order interests. These interests may take priority over the individual interests of the steward, although they should not always be regarded as incompatible. In return for taking measures necessary to ensure public interests are met, the steward receives a priority of interest in the use of the resource over any other individual user that is consistent with these ends. One difficulty with the stewardship approach to the EEZ is the absence of a centralised agency capable of ensuring that the steward does not abuse its capacity. The coastal State is in the first instance, both the steward and

[245] Exactly just this issue was canvassed by the ITLOS in the *M/V 'Saiga' Case (St Vincent and the Grenadines v Guinea)* (Judgment of 4 December 1997) *ITLOS Reports 1997*, [56]–[59]. It may be noted that in their dissenting opinions Judges Mensah (Dissenting Opinion, [22]) and Wolfrum and Yamamoto (Joint Dissenting Opinion, [20]) considered that the implication of the court's judgement, albeit unfounded, was that bunkering is connected with the former. It is interesting to note that the tribunal was reluctant to make similar observations in the *'Volga' (Russian Federation v Australia) Prompt Release, Judgment, ITLOS Reports* 2002, 10, [76].

[246] See ch 4, s 5.

the agency responsible for complying with the duties. Arguably international law has a mediating role to play here. However, this would mean that responsibility is diffused across the international system, without any power being localised in an effective enforcement agency. The success of the stewardship approach to the EEZ will depend on whether a wider range of physical and social values are properly taken into account in the regulation of the EEZ, whether affected persons actually participate in the regulation and management of the EEZ, and whether States and other agencies hold coastal States accountable for their stewardship responsibilities. Such practical difficulties have not prevented a number of commentators from developing a stewardship-based approach to the EEZ.[247] Moreover, since the adoption of the Law of the Sea Convention, regulatory developments have started to shore up the conservation and management duties of coastal States.

Noting that it is easier to adapt emerging rights rather than change existing rights, Lowe suggests that the EEZ represents a change from a proprietary conception of the sea as it applies to the territorial sea, to one of 'custodianship' or 'stewardship'.[248] This is substantiated through a textual interpretation of the Law of the Sea Convention concerning the EEZ and Area, which is juxtaposed with the traditional proprietary approach of the Territorial Sea Convention, Continental Shelf Convention, and the Law of the Sea Convention provisions on the territorial sea and continental shelf.[249] The obligations imposed by Articles 62, 69 and 70 of the Law of the Sea Convention are part and parcel of the rights of access that the coastal State enjoys and cannot be disregarded.[250] This is reflected in the phraseology of the Law of the Sea Convention, which describes the nature of the coastal State's authority in terms of sovereign rights rather than sovereignty.[251] The patent difference between the extent of the coastal State's rights over the territorial sea or continental shelf and the EEZ

[247] See A V Lowe, 'Reflections on the waters: changing conceptions of property rights in the Law of the Sea', (1986) 1 *International Journal of Estuarine and Coastal Law* 1; P Allott, '*Mare Nostrum*: A New International Law of the Sea', (1992) 86 *AJIL* 764; LDM Nelson, 'The Patrimonial Sea' (1973) 22 *ICLQ* 668, esp 680–2; A Rieser, 'Prescriptions for the Commons: Environmental Scholarship and the Fishing Quotas Debate' (1999) 23 *Harvard Environmental Law Review* 393, 403 *ff*; R Bratspies, 'Finessing King Neptune: Fisheries Management and the Limits of International Law' (2001) 25 *Harvard Environmental Law Review* 213; WM von Zharen, 'Ocean Ecosystem Stewardship' (1998) *William and Mary Environmental Law and Policy Review* 1. For the application of a similar approach to the high seas see JM Van Dyke, 'International Governance and Stewardship of the High Seas and Its Resources' in JM Van Dyke, D Zaelke and G Hewison (eds), *Freedom for the Seas in the 21st Century* (Washington DC, Island Press, 1993) 13; Also CD Stone, 'Mending the Seas through a Global Commons Trust Fund', in JM Van Dyke, D Zaelke and G Hewison (eds), *Ibid* 171.

[248] Lowe, *Ibid* 9.

[249] *Ibid* 4–9.

[250] *Ibid* 7–9.

[251] *Ibid* 10.

are further proof of the shift towards a custodial paradigm. For Lowe, this change in perception is reflected in the difference between property right conceptions in western legal systems and, for example, East African legal systems. In the latter, the obligation to pay heed to the interests of others is an integral component of the property right, not some extrinsic constraint.[252] In this sense 'the absolute proprietor of the 1958 Convention has given way to the custodian of the Law of the Sea Convention'.[253] Although the reasons for this change are not fully explored, Lowe points to one significant factor—wealth allocation.[254] In the past, allocation of 'property' was aligned with manifestations of State power. To determine title, analysis of evidence of the exercise of effective sovereignty was sought.[255] However, the post-World War II claims to 'property' involved areas of considerable economic importance especially compared to the relatively localised earlier claims.[256] This change was apparent in the *North Sea Continental Shelf* cases, where in the absence of evidence of effective sovereignty the Court had to rely upon the principle of appurtenance and equitable principles, of which the latter plays a crucial role in maritime boundary delimitation.[257] The relevance of property justifications is brought home when Lowe borrows from Nozick to explain the significance of this change.[258] As Lowe argues, boundaries have traditionally been determined 'according to rules which decide what areas States have already taken into possession by displays of sovereignty in the past.'[259] This historical approach can be contrasted with 'end result principles' of equitable delimitation where

> the concern is not with what went on in the past but with the current state of affairs—the length of a state's coastline, the effect of islands upon the course of the boundary, the configuration of a coastline, and so on—and the appropriateness of the delimitation in that context.'[260]

The EEZ represents a form of holding in the tradition of property as propriety, influenced by the need to secure an ordered exploitation of natural resources, where considerable reallocations of wealth are mitigated by conservation and management duties.

[252] *Ibid*.
[253] *Ibid*.
[254] As a matter of process the fact that UNCLOS took place during a period of landmark decisions on equitable delimitation may also be significant: *Ibid* 13. During this period legal developments were heavily informed by the *Anglo-French Continental Shelf arbitration*, (1979) 18 *ILM* 397, and *Tunisia Libya Continental Shelf* case, [1982] ICJ Rep 18.
[255] Lowe cites the *Minquiers and Ecrehos* case, [1953] ICJ Rep 47 and *Rann of Kutch* case, 50 *ILR* 2.
[256] Lowe, n 247 above, 12. See also ch 6, s 4, above.
[257] *Ibid* 13.
[258] *Ibid*.
[259] *Ibid*.
[260] *Ibid*.

A similar approach is adopted by Philip Allott, who elicits four pointers to an understanding of the Law of the Sea Convention as a new form of participatory social order beyond the traditional paradigm of 'mine and thine' or coastal waters and high seas.[261] First, he argues that the regimes established by the Law of the Sea Convention implicitly acknowledge that traditional property relations could no longer meet the demands of new international social objectives. Although Article 56 is framed in traditional property-type terms such as 'sovereign rights' and jurisdiction, he considers that Part V as a whole creates an

> intricate network of legally constituted social interactions, which can easily be seen as something more than a mere accumulation of essentially bilateral relationships.[262]

The thrust of his vision is similar to Lowe's. His second pointer is the language of the Convention. By articulating concepts such as 'developing States' and 'geographically disadvantaged States', it creates a new dialectical level. For Allott, these concepts embody substantive characteristics, the effect of which is to incorporate distributive values into the legal superstructure.[263] Thirdly, the actual legal relations established by the Law of the Sea Convention are articulated more in the form of social objectives than contingencies, and this suggests that the regime as a whole is aimed at international social development and not merely the development of law.[264] Finally, taken as a whole, the *gestalt* of the Convention is that of a public law system rather than a contractual arrangement. He argues that in every case the 'exercise of the supposed property right is, in all cases, actually a process of decision making within procedural and substantive constraints'.[265]

Allott links changes in the Law of the Sea Convention to changes in the philosophy of the law of the sea more generally. In particular, he suggests four axiomatic principles that underpin this new law of the sea. The first principle is integration.[266] Land, sea and air space are not separate regimes. Cause and effect work across such spaces and so the law of the sea must not be considered in isolation. Accordingly, law making must adopt an integrated approach to achieving social objectives. This is evident in rules concerning biodiversity and pollution, and reflects our argument that legal regimes are influenced by physical exigencies. The second principle is participation.[267] The entrenched position of property concepts and their

[261] Allott, n 247 above, 766.
[262] *Ibid* 784.
[263] *Ibid* 785.
[264] *Ibid*.
[265] *Ibid*.
[266] *Ibid* 766–8.
[267] *Ibid* 768–74.

effect on the development of international law has been noted.[268] The result of this has been to leave an outmoded form of property closely tied to the power of government, both of which are largely unrestricted, at the heart of international law. Domestically, property and government have been subject to greater regulation and this democratic dimension needs to be extended to the law of the sea. Allott describes it as a move away from a relationship of possession to one of participation. Accordingly, all those interested in and affected by the use of the sea should have a voice in decision making. The third principle is public interest.[269] In the past, international law has lacked any sense of public interest, which Allott characterises as a 'gravitational force' shaping the direction of other social forces.[270] In short this represents the transposition of a public law type system onto international law to supplement the classical private law technique. With this new public interest, new social goals, such as the protection of the environment and redistribution of wealth, can be achieved. Consonant with this is the emergence of public interest norms in the Law of the Sea Convention, which we would suggest give effect to the notion of the public interest set forth in chapter 3. The fourth principle is accountability.[271] In short, decision-making must be conditioned by principles of accountability. This may be according to democratic principles, but would seem to need more. In particular, it requires the fulfilment of the above three principles.

Certainly, these principles are laudable goals, but the challenge is to move away from the high ground of theory to practice. However, Allott's *modus vivendi* cannot be imposed on the international law of the sea abruptly. It must emerge organically. Allott would agree that this process starts at the conceptual level of ideas, which in turn can be used to shape social reality.[272] This is somewhat reflective of the way in which extra legal values feed into the process of legal reasoning. In the context of the EEZ such ideas have emerged, although not without their limitations. These values include the balancing of rights and duties, and the iteration of certain conservation and utilisation objectives and responsible management. Whilst it remains difficult to shake off the concepts that have shaped the law of the sea so far and, in particular, exclusive ownership based property structures, stewardship, as a moderation of existing ownership based structures, is perhaps a means of progress consonant with this process.

[268] See ch 5.

[269] Allott, n 247 above, 774–9.

[270] Any interests that have emerged in the past have done so through the distorting effects of the State system which aggregates domestic public interests through inter-State relations. Only the aggregated interests of States, which are often detached from the needs and desires of individuals, could shape the direction of international public policy: *Ibid* 775–6.

[271] *Ibid* 779–83.

[272] P Allott, *Eunomia. New Order for a New World* (Oxford, Oxford University Press, 1990) ch 1.

There are some indicators that this stewardship-based approach is taking firm root in the law of the sea.[273] Here we might allude to the Cousteau Society's Ocean Charter[274]or the work of the Marine Stewardship Council.[275] Most important, however, is the FAO Code of Conduct for Responsible Fisheries.[276] The Code provides a framework of principles and guidelines for ensuring the sustainable exploitation of fisheries.[277] Although the Code is voluntary and does not directly create legal rights or obligations, it is firmly located within the framework of obligations set out in the Law of the Sea Convention.[278] Indeed, it is clear from the text of the Code that it is designed to remedy a number of perceived failings in the Law of the Sea Convention's conservation and management framework. The central tenet of the Code is the idea that the right to fish carries with it the duty to conserve and manage living marine resources.[279] This is then fleshed out in more detailed provisions which emphasise the public importance of sustainable fisheries. Thus Article 6.2 provides that fisheries management should promote the maintenance of the quality, diversity and availability of fishery resources in sufficient quantities for present and future generations in the context of food security, poverty alleviation and sustainable development. It then requires States to take measures to ensure that fishing effort is commensurate with the productive capacity of the fishery resources and their sustainable utilization.[280] More specifically, States should take measures to rehabilitate populations as far as possible and when appropriate.[281] It further suggests a mandatory role for science, rather than the facultative approach taken in the Law of the Sea Convention.[282] Crucially, it requires the precautionary approach to be adopted in the conservation, management, and exploitation of living aquatic resources.[283]

[273] Von Zharen exhaustively lists those regimes which touch upon any of the facets of stewardship, n 247 above, 31 *ff*.

[274] The Charter is reproduced in the magazine of the Cousteau Society *Calypso Log*, March–April 1998, 2. See also the Cousteau Society website at http://www.cousteau.org.

[275] The Marine Stewardship Council is an independent, global, non-profit organisation, which was set up in 1997 by Unilever and the WWF. It aims to find a solution to the problem of over fishing. It has established a number of criteria aimed at ensuring sustainable fishing practices and accredits firms that adhere to these through a system of product labelling. It also seeks to stimulate stakeholder interest. For further details see <http://www.msc.org/> accessed 20 October 2008.

[276] N 24 above. (Hereinafter 'the Code').

[277] See WR Edison, 'Current Legal Development: The Code of Conduct for Responsible Fisheries: An Introduction' (1999) 11 *International Journal of Marine and Coastal Law* 233. Also G Moore, 'The Code of Conduct for Responsible Fisheries' in E Hey (ed), *Developments in International Fisheries Law* (London, Kluwer Law International, 1999) 85.

[278] Art 3.

[279] Art 6.1.

[280] Art 6.3.

[281] *Ibid*.

[282] Art 6.4.

[283] Art 6.5.

Crucially, the Code's provisions are not limited to conservation measures for target fish stocks. It emphasises the importance of habitat protection.[284] It also requires that management measures deal with species belonging to the same ecosystem, or associated with or dependent upon the target species.[285] To this end, selective and environmentally safe fishing gear and practices should be developed and applied, to the extent practicable, in order to maintain biodiversity and to conserve the population structure and aquatic ecosystems and protect fish quality.[286] This is important because it shows that regulatory structures for fisheries management must correspond to the wider environmental context within which target species exist.

The aim of the Code is to provide a series of principles that can be drawn upon by States in designing domestic fisheries regimes. As such it may contribute to the formulation of State practice and the development of customary international law on fisheries regulation. Indeed, there is growing evidence of States implementing the Code, although this is still unsystematic in practice.[287] The increasing reference to the Code in other agreements is further indicative of the general support for the Code.[288] Indeed, it is arguable that inclusion of the Code within binding agreements may result in its provisions achieving binding effect by incorporation or reference. However we should be cautious about expecting too much from this approach. As noted above it is difficult to amend or modify the provisions of the Law of the Sea Convention. Although the Code may be used to interpret the meaning of the general provisions of the Law of the Sea Convention, the success of this depends upon the extent to which it is compatible with the terms of the Convention. Such compatibility is not always clear. For example, the treatment of scientific evidence, the ecosystem approach and the detailed provisions on the precautionary principle go beyond the strict letter of the Law of the Sea Convention.[289] Another important variance from the Law of the Sea Convention is the Code's introduction of limit reference points for

[284] Art 6.8.
[285] Art 6.2.
[286] Art 6.7.
[287] See COFI, *Progress in the Implementation of the 1995 Code of Conduct for Responsible Fisheries, Related International Plans of Action and Strategy* COFI/2007/2 (Nov 2006). Indeed, para 6 indicates that more than almost 90% of Members have reported to be in conformity with the Code, or working towards legal and political conformity.
[288] See, eg, the Preamble to the Fish Stocks Agreement, n 174 above; the Preamble to the Agreement on the International Dolphin Conservation Programme 1998 (1998) 38 *ILM* 1246; the preamble to the Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas 1993, (1994) 33 *ILM* 968; the preamble and Art 4 of the Southern Indian Ocean Fisheries Agreement 2006, reproduced in [2006] OJ L196/15 (18/07/06).
[289] See Art 7.5.

the control of fishing levels.[290] It also provides a more detailed list of the 'relevant environmental and economic factors' capable of qualifying the MSY, thus potentially restricting its use to a greater extent than in the Law of the Sea Convention.[291] Of course, the issue of compatibility is mitigated by the fact that many of the new concepts remain quite general. For example, Erik Molenaar highlights the treatment of the ecosystem approach, and noting the absence of a generally accepted definition of ecosystem, finds the concept treated in an indirect fashion.[292] Ultimately the acid test of compatibility will be the general acceptance of the enhanced conservation and management responsibilities by States Parties to the Law of the Sea Convention. The fact that the Code is non-binding allowed for the articulation of more detailed and potentially onerous responsibilities than would have been possible in a formally binding agreement. This is important because it means that the general acceptance of the general principles contained within the Code now form part of the value structure of international fisheries law. Accordingly, although such principles might not yet have the status of formal rules, they may be legitimately used in legal fora to resolve disputes or develop new norms.[293]

The FAO has adopted a series of guidelines to support the implementation of the Code.[294] They are primarily educational, and avoid prescribing

[290] Art 7.5.3. See further J Caddy and R Mahon, *Reference points for fisheries management* (Rome, FAO, 1995).

[291] Art 7.2.2.

[292] E J Molenaar, 'Ecosystem-Based Fisheries Management: Commercial Fisheries, Marine Mammals and the 2001 Reykjavik Declaration in the Context of International Law' (2002) 17 *International Journal of Marine and Coastal Law* 561, 575. On the ambiguity of legal principles see Vaughan Lowe's critique of the principle of sustainable development. 'Sustainable Development and Unsustainable Arguments' in A Boyle and D Freestone (eds), *International Law and Sustainable Development: past achievements and future challenges* (Oxford, Oxford university Press, 1999) 19.

[293] Boyle cautions against over ambitious attempts to cross fertilise treaty provisions, noting the difficulties that Ireland encountered in the *Mox Plant Arbitration*. A Boyle, 'Further Development of the 1982 Convention on the Law of the Sea' in Freestone, Barnes and Ong (eds), n 27 above, 40, 46.

[294] See FAO, *Fishing Operations*. Technical Guidelines for Responsible Fisheries No 1 (Rome, FAO, 1996); FAO, *Precautionary Approach to Capture Fisheries and Species Introductions*. Technical Guidelines for Responsible Fisheries No 2 (Rome, FAO, 1996); FAO, *Integration of fisheries into coastal area management*, Technical Guidelines for Responsible Fisheries No 3 (Rome, FAO, 1996); FAO, *Fisheries Management*. Technical Guidelines for Responsible Fisheries No 4 (Rome, FAO, 1997); FAO, *Indicators for sustainable development of marine capture fisheries*. Technical Guidelines for Responsible Fisheries No 8 (Rome, FAO, 1999); FAO, *Implementation of the International Plan of Action to Deter, Prevent and Eliminate Illegal, Unreported and Unregulated Fishing*. Technical Guidelines for Responsible Fisheries No 9 (Rome, FAO, 2002); FAO, *The ecosystem approach to fisheries*. FAO Technical Guidelines for Responsible Fisheries No 4, Suppl 2 (Rome, FAO, 2003); FAO, *Increasing the contribution of small-scale fisheries to poverty alleviation and food security*. Technical Guidelines for Responsible Fisheries No 10 (Rome, FAO, 2005).

optimal approaches. Although they have no formal legal status, the content of these guidelines may be taken to represent consensus on acceptable principles and processes in the field of international fisheries law. Like the Code, they may influence the development of customary international law or provide the basis for technical provisions in future fisheries agreements. Similar considerations apply to the four International Plans of Action that have been adopted to deal with Seabirds, Sharks, Fishing Capacity, and Illegal, Unreported and Unregulated Fishing (IUU).[295] The non-binding nature of these instruments may be mitigated by FAO initiatives which are designed to educate States and which provide technical and financial support for the implementation of sustainable fisheries management regimes.[296] The continued iteration of the Code's principles in these instruments further consolidate the principles position within the framework of international fisheries law.

The EEZ represents a change in the nature of claims to ocean space, away from absolute territorial type claims to a more limited but still exclusive form of control. In part this was stimulated by technological advances which enabled States to appropriate resources far from their shores, and in part by a more flexible approach to the formulation of claims to exclusive authority.[297] By framing the EEZ as a package of rights and responsibilities, sensitive to its distributive repercussions, the Law of the Sea Convention was able to imbue it with a high degree of legitimacy. As noted above, international law relies upon a high degree of voluntary compliance, and in part this is achieved through the development of norms that are distributively fair.[298] Although claims focused on ocean resources, such claims were still made in respect of geographic areas because exclusive spatial competence remains a prerequisite for domestic regulatory competence. The exclusivity of interests which coastal States enjoy is sufficient to allow the introduction of quite extensive property rights in marine living resources. However, there are a number of important responsibilities imposed upon the coastal State, which in turn limit the form and scope of any domestic property rights-based management systems. These constraints on the exercise of exclusive power in favour of community type interests are part and parcel of the rights of the coastal State. First, it is clear that the exclusive rights of the coastal State are intimately bound up with conservation and

[295] Above n 25.

[296] See, eg, the FAO Interregional Programme of Assistance to Developing Countries and the FishCode Programme.

[297] O'Connell notes that at the start of the 20th century claims to extended territorial seas were advanced solely to protect and conserve fisheries resources because legal concepts were not available to support coastal State jurisdiction over the high seas: n 30 above, 525.

[298] See ch 3, pp 76–7 above.

utilisation responsibilities.[299] Although a coastal State can moderate the restrictive impact of such duties, they cannot discount them completely. Indeed, as post-UNCLOS developments show, such responsibilities are becoming increasingly onerous. Secondly, the Law of the Sea Convention implicitly acknowledges the nature of some marine living resources; that their fungible and moveable character requires States to cooperate in their regulation. These two factors suggest that strong forms of exclusive ownership or access control will not be compatible with the Law of the Sea Convention. Further limits on excludability seek to cater for developing, land-locked and geographically disadvantaged States. These resonate strongly with notions of redistributive justice, but are weakened by the absence of any effective institutional measures to ensure and enforce distributive measures in the community interest. Finally, we should note that the provisions of the Law of the Sea Convention provide increased scope for economic considerations in the make up of States' obligations, ie the aim of optimum utilisation in Article 62 and the explicit reference to economic factors in Article 61(3). These may work against the effectiveness of public interest-type obligations by focusing attention on, and justifying, potentially more efficient private property-based management regimes.

(e) Maritime Delimitation

The drawing of boundaries is an exercise in allocation, ie the distribution of maritime space between two or more States. In this respect a number of general rules have been developed by international courts and tribunals. These are, however, limited by the fact that no two coastlines are the same and so will generate different outcomes. As Churchill and Lowe note:

> It is extremely difficult to offer any precise account of the principles of delimitation, such as might be applied in future to unresolved boundaries.[300]

We can remark without controversy that the extant principles of delimitation are overly general and vague.[301] We can remark that this clearly

[299] That said, it is generally agreed that in respect of conservation and management the coastal State enjoys near unfettered discretion. It may qualify conservation according to other factors, including economic needs, and it may effectively exclude other State from access to the resources of the EEZ by manipulating the TAC or its own harvesting capacity. Although the coastal State does not enjoy complete exclusivity in theory, this may be the case in practice. This view is reinforced by the fact that these provisions are not subject to objective and compulsory third party dispute settlement procedures under Art 297.

[300] Above n 30, 182.

[301] For example, Schneider notes that the US and Canada disagreed to the extent of 30,000 square miles in their application of equitable principles to the Gulf of Maine. J Schneider, 'The Gulf of Maine case: The Nature of an Equitable Result' (1985) 79 *AJIL*, 539, 563–4. Indeed the court itself noted that 'there has been no systematic definition of the equitable

illustrates the influence of physical exigencies on legal regimes. Of course, this is not to rule out legal considerations. Maritime delimitation concerns the allocation of important natural resources and this should not be left to purely physical considerations. Neither can it be left entirely to the parties directly affected. Thus even bilateral delimitation scenarios are mindful of international community interests.[302] Maritime delimitation is particularly important to the present analysis of international law, property and natural resources because it is predominantly judge made and shows how the requirements of legal reasoning may influence the weighting of private and public interests.

Delimitation of the territorial sea between opposite States has normally been in accordance with the equidistance/special circumstances rule. This is embodied in Article 15 of the Law of the Sea Convention, which is generally regarded as representing customary international law.[303] A degree of complication arises because any such delimitation is aimed at an end result that is 'in all respects equitable'.[304] This suggests a degree of discretion or adjustment that will take account of subjective factors. Likewise, delimitation of the continental shelf and EEZ is geared towards an end result, rather than reflecting the historic exercise of power. In the *North Sea Continental Shelf* cases the ICJ observed that there was no single determinative method of delimitation and that:

> delimitation is to be effected by agreement in accordance with equitable principles and taking account of all the relevant circumstances, in such a way as to leave as much as possible to each Party all those parts of the continental shelf that constitute a natural prolongation of its land territory.[305]

This approach has been broadly followed in successive continental shelf and EEZ delimitations.[306] However, it is crucial to emphasise that equitable delimitation is not to be regarded as an exercise in distributive

criteria that may be taken into consideration … and this would in any event be difficult a priori, because of their highly variable adaptability to different concrete situations': *Gulf of Maine* case [1984] ICJ Rep 246, 312, [157].

[302] For example delimitation of a territorial sea will have implications for navigational users. Such interests were explicitly referred to in the *Eritrea-Yemen Arbitration Second Stage*, where the tribunal undertook to avoid the creation of awkward enclaves in the vicinity of a major international shipping route: n 41 above, paras 125 and 128.

[303] Churchill and Lowe note that this approach would appear to be customary as well as conventional: n 30 above, 183.

[304] See *Dubai/Sharjah Border Arbitration* (1981) 91 *ILR* 543, 663.

[305] [1969] ICJ Rep 3, 54.

[306] *Anglo-French Continental Shelf arbitration*, (1979) 18 *ILM* 398, 421; *Greenland/Jan Mayen* case, n 148 above, para 58. In practice the starting point for delimitation is the drawing of an equidistance line, which is then modified to achieve an equitable solution. See the *Libya/Malta Continental Shelf* case, [1985] ICJ Rep 13, 47 *ff*.

justice. Indeed, the ICJ has explicitly rejected any such suggestion.[307] It is also manifest in the Court's almost singular reliance on 'relevant circumstances' or geographic factors in delimitation settlements.[308] Although 'relevant circumstances' was suggested to be an open category in the *North Sea Continental Shelf* cases, subsequent cases have tended to adopt a narrower interpretation of 'relevant circumstances'.[309] These circumstances include, inter alia, the configuration of the coastline,[310] the length of the coastline,[311] and the presence of islands.[312] Geographic considerations do not generally include geological and geomorphological factors.[313]

The extent of relevant circumstances is mostly limited to geographic factors and to this extent the term 'equitable' is misleading. That said, the ICJ is keenly aware that control over resources forms the object of all maritime claims and although it will not look at such factors in isolation, where such factors are sufficiently acute it is likely that they will shape the delimitation.[314] Thus the ICJ noted in the *Libya/Malta Continental Shelf* case that access to resources may be a relevant consideration.[315] However, there is some inconsistency in this respect, suggestive of the difficulty reconciling the inclusion of natural resources with a rejection of any distributive function for the Court. For example, in the *Tunisia/Libya Continental Shelf* case the Court dismissed Tunisia's assertion of historic waters over which it claimed historic rights deriving from long established fixed fisheries, although it did admit the relevance of such rights to its decision.[316] In the *Gulf of Maine* case, the ICJ paid scant regard to the division of economic resources, which included important fisheries on the Georges Bank, as a factor relevant to delimitation. However, it indicated that they would

[307] 'Delimitation in an equitable manner is one thing, but not the same thing as awarding a just and equitable share of a previously undelimited area.': *North Sea Continental Shelf* cases n 90 above, [18]. As the same court noted, 'the sharing out of the area is therefore the consequence of the delimitation, not vice versa'. *Greenland/Jan Mayen* case, n 148 above, [64].

[308] These have been assimilated to special circumstances under Art 6 of the 1958 Convention. *Greenland/Jan Mayen* case, n 148 above, [56].

[309] *North Sea Continental Shelf* cases, *Ibid*, [50].

[310] See the *North Sea Continental Shelf case*s, where the concavity of the German coastline was a relevant factor: n 90 above, [83]–[101]. Also *Land and Maritime Boundary between Nigeria and Cameroon* case, [2002] ICJ Rep 303, [297].

[311] See *Libya/Malta Continental Shelf cas*e, where the court noted that the allocation of the continental shelf should not be disproportionate to the length of a party's coastline: n 306 above, 43–6, 49–50. Also the *Greenland/Jan Mayen* case, n 148 above, [61]–[65]; *Gulf of Maine* case, n 5 above, [221]–[222]; *Land and Maritime Boundary between Nigeria and Cameroon* case, *Ibid*, [301].

[312] Thus the tribunal gave a half effect to the Scilly Isles in the *Anglo-French Continental Shelf arbitration*, n 254 above, 454–6.

[313] Churchill and Lowe, n 30 above, 109.

[314] On the relevance of resources to boundary disputes see J Paulsson, 'Boundary Disputes into the Twenty-First Century: Why, How … and Who?' (2001) 95 *ASIL Proc*, 122.

[315] *Libya/Malta Continental Shelf* case, n 306 above, [50].

[316] Above n 4, [97]–[100]. In any case the delimitation by the Court left Tunisia with the full and undisturbed exercise of its historic rights. *Ibid*, [105].

be relevant considerations if the provisional boundary line adopted by the Court was 'radically inequitable.'[317] Then in the *Greenland/Jan Mayen* case the boundary line was adjusted so that Denmark was 'assured of an equitable access to capelin stock'.[318] Fishery resources were an important aspect of the tribunal's decision in the *Eritrea-Yemen Arbitration*.[319] Here the tribunal was put in the position of having to 'codify' a traditional fishing regime, although such matters were not directly relevant to the actual delimitation.[320] In its first stage award, the tribunal held that both Eritrean and Yemeni fishermen were entitled to carry out artisanal fishing around islands that were under the sovereignty of Yemen.[321] This regime was one of free access and enjoyment, extending to the diving for shells and pearls, and any associated uses of the islands including, inter alia, drying fish, temporary shelter and effecting repairs.[322] In its decision the tribunal buttressed its decision by reference to Islamic law.[323] In particular the tribunal noted:

> The basic Islamic concept by virtue of which all humans are 'Stewards of God' on earth, with an inherent right to sustain their nutritional needs through fishing from coast to coast with free access to fish on either side and to trade the surplus, remained vivid in the collective mind of the Dankhalis and Yemenites alike.[324]

Although this reference to stewardship is rather specious, it reinforces the point that tribunals are sensitive to the wider implication of delimitation agreements, and may be inclined to take wider considerations into account. In general, it should be noted that, quite apart from the pre-eminence given to geographical factors in delimitation, there is an increasing tendency to establish single maritime boundaries as a matter of practical convenience, despite evidence that different limits would produce more equitable results.[325] This may in turn diminish the scope for equitable

[317] The concern of the court was to ensure that delimitation did not entail 'catastrophic repercussions for the livelihood and economic well-being of the population of the countries concerned'. *Gulf of Maine* case, n 5 above, [237]. However, the exclusion of fishing, navigation and petroleum exploration and exploitation as equitable considerations does not rule out the possibility of their future relevance. The chamber disregarded them because until very recently the area in question was high seas, meaning that such activities were open to all. Thus any claim to exercise such rights could not be regarded as determinative: [235].

[318] Above n 148, [76].

[319] Both stages, n 41 above. Professor Reisman notes that a significant part of the judgment was devoted to defining artisanal fishing and the nature of each State's rights in the zone so delimited. WM Reisman, 'Eritrea-Yemen Arbitration Award, Phase II: Maritime Delimitation' (2000) 94 *AJIL* 721, 722.

[320] Above n 302, [64].

[321] First Stage Award, n 41 above, [527(vi)].

[322] Second Stage Award, n 41 above, [103].

[323] *Ibid*, [92].

[324] *Ibid*.

[325] See Churchill and Lowe, n 30 above, 195.

considerations coming in to play. It should be further noted that regardless of the degree to which access to resources is relevant, this in no way means that purely socio-economic factors are relevant. These have been absolutely rejected by the court.[326]

Despite some equivocation, the basic approach to delimitation boils down to the equidistance/special circumstances rule. Indeed, the modus operandi in most recent delimitations is to draw an equidistance line and then consider whether factors call for an adjustment of that line.[327] Delimitation disputes are essentially claims between two private parties. However, there is a public interest in resolving such disputes. This includes ensuring the clear allocation of jurisdictional competence. Having secure and stable boundaries determined in a peaceful manner also contributes to the maintenance of international peace and security. Although international courts and tribunals are sensitive to the distributive consequences of delimitation, they have refrained from straying too far down this road. As a matter of legal reasoning there are good grounds for this. First, it accommodates the range of factors relevant to delimitation without degenerating into a purely *ad hoc* exercise in line drawing. It accommodates the need for determinacy in law whilst being adaptable to various factual contexts.[328] Second, it is demonstrably universalisable, thus its repeated application in most maritime delimitations. Thirdly, and most importantly, the explicit rejection of socio-economic factors and a limited consideration of access to natural resources betray a desire to avoid opening up delimitation to immeasurable values and consequences, such as the economic position of a State, the impact of resource access on its economic well-being and so on. Invariably this would entail highly subjective assessments of need and then predicting the consequences of such a decision upon all potentially affected parties. As a matter of legal reasoning the inclusion of such factors would render the process unworkable, as well as running counter to the allocative rules set forth in the Law of the Sea Convention as regards maritime zones. That these may be exceptionally taken into account in order to protect vital needs was alluded to by the ICJ in the *Gulf of Maine* case, where it pointed to the need to avoid 'catastrophic repercussions for the livelihood and economic well-being of the population of the countries concerned'.[329] It is notable that no delimitation has been required to admit such exceptional circumstances. Fourthly, the rule is consistent with the wider set of rules

[326] *Libya/Malta Continental Shelf* case, n 306 above, [50].

[327] See *Land and Maritime Boundary between Cameroon and Nigeria (Cameroon v Nigeria: Equatorial Guinea intervening)* [2002] ICJ Rep 303, [288].

[328] See generally, Y Tanaka, *Predictability and Flexibility in the Law of Maritime Delimitation* (Oxford, Hart, 2006).

[329] Above n 5, [237].

on entitlement to maritime zones, hence the appreciation of natural prolongation in the *North Sea Continental Shelf* cases and its observation that delimitation is about drawing a boundary line between areas that already appertain to one or other of the States involved.[330] Whilst the rule might be criticised for having very little legal content, other than to frame the relevant physical criteria, this simply misses the point that delimitation is a legal process, and the value of law in ensuring that there is a process to follow.

3. CONCLUDING REMARKS

Each maritime zone is a distinct bundle of legal relationships that define the extent of coastal State authority over the zone and its resources. Exclusive competence over a geographically determinate zone is the crucial prerequisite to the establishment of property rights in marine natural resources. In each of the above maritime zones States possess sufficient competence to introduce property rights-based management regimes. Indeed, such regimes have been quite commonplace for hydrocarbon resources where they are prerequisite to their commercial exploitation. In the territorial sea and archipelagic waters, States' competence is near plenary, subject only to navigational rights of other States. The assimilation of the continental shelf to the territorial sea has resulted in a high degree of exclusivity in this zone. Although the term 'sovereign rights' is used to describe the coastal State's competence, this does not generally detract from what is *de facto* ownership of the seabed and its resources. This does not necessarily mean that strong exclusive rights will always result in continental shelf resources. Thus, unitary deposits in the continental shelf demonstrate how the physical nature of a resource determines the allocation of regulatory competence, which in this case points towards some form of joint ownership or co-management of a resource. The same considerations apply to fisheries that straddle international boundaries. Indeed, the imprimatur of physical and natural factors on the regulation of marine natural resources is a defining feature of the Law of the Sea Convention, with its frequent resort to technical and scientific standards.

The EEZ represents a qualitatively different type of regime, where the exclusive rights of coastal States are intimately bound up with conservation and management responsibilities, responsibilities which take into account other States' and community interests. It is clear from the language of the Law of the Sea Convention that many of the responsibilities of States are aligned to distinct community interests (or international

[330] Above n 90, [20].

public interests) of the international community. In chapter 5 this was evident in the nature and rationale for claims to exclusive economic zones. Ultimately, these public interests are manifest in the Convention's explicit references to the international community, for example in Article 59, and its preambular aim of contributing 'to the realization of a just and equitable order'. More specifically, the goals of the international community are found in a number of provisions which accord special rights to developing States or modify the application of hard rules to take account of the varied capacity of States.[331] The balance of rights and duties in the EEZ, and the advancement of rights according to need are fundamentally tied to the political negotiations at UNCLOS III and operation of diffuse reciprocity that resulted in the text of the Law of the Sea Convention. This also means that this balance of rights and duties and needs-based considerations will be difficult to change. As a result the EEZ is more like a regime of stewardship, albeit a flawed one, than a regime of private property. It follows that any property-rights-based regulatory systems that States introduce under domestic law should ensure that such responsibilities can be met. This does not preclude the privatisation of resource regimes, so long as the State maintains a high level of regulatory supervision to ensure sustainable use of resources and to ensure that the exercise of private rights in one sector of the marine environment does not adversely impact upon other areas, or upon other protected interests.

Maritime delimitation settlements were also briefly noted. Although physical limits on excludability are no longer directly germane to the extent of entitlement, they provide an important means of determining allocation between States in cases of overlapping claims. Also, even though there is some evidence of delimitation being moderated by 'equitable considerations', such as access to natural resources, this will only be done in exceptional cases.

[331] See, eg, Arts 61(3), 62(2) and (3), 69, 70, 82(3) and (4), 119, 202, 203, 207(4), 244(2). See generally, Pt X on rights of access to the sea for land-locked States, Pt XI on the regulation of the mineral resources of the deep seabed, and Pt XIV on the development and transfer of marine technology.

8

Property Rights and Fisheries

1. INTRODUCTION

Although both law and economics have the a prominent role in shaping the form and content of property rights, as we saw in chapter 1 it has been the latter discipline which has driven the development of property rights as a regulatory instrument in fisheries management.[1] The driving role of economics is captured in Barzel's observation about the construction of property rights:

> Economic rights are the end (that is, what people see), whereas legal rights are a means to achieve that end. Legal rights play a primarily supporting role—a very prominent one, however, for they are easier to observe than economic rights.[2]

[1] More recently there has been a burgeoning of legal commentaries on the problem, from which the present chapter takes its point of departure. See JD Weiss, 'Note: A Taxing Issue: Are Limited Entry Fishing Permits Property?' (1992) 9 *Alaska Law Review* 93; FT Litz, 'Harnessing Market Forces in Natural Resources Management: Lessons from the Surf Clam Fishery' (1994) 21 *Boston College Environmental Affairs Law Review* 335; WJ Milliken, 'Individual Transferable Fishing Quotas and Antitrust Law' (1994) 1 *Ocean and Coastal Law Journal* 35; KA Marvin, 'Protecting Common Property Resources through the Marketplace: Individual Transferable Quotas for Surf Clams and Ocean Quahogs' (1994) 16 *Vanderbilt Law Review* 1127; BJ McCay, 'Social and ecological implications of ITQs: an overview' (1995) 28 *Ocean and Coastal Management* 3; DA Dana, 'Overcoming the Political Tragedy of the Commons: Lessons Learned from the Reauthorization of the Magnuson Act' (1997) 24 *Ecology Law Quarterly* 833; S Hsu and JE Wilen, 'Ecosystem Management and the 1996 Sustainable Fisheries Act' (1997) 24 *Ecology Law Quarterly* 799; A Rieser, 'Property Rights and Ecosystem Management in US Fisheries: Contracting for the Commons?' (1997) 24 *Ecology Law Quarterly* 813 (hereinafter 'Contracting'); ND Black, 'Balancing the Advantages of Individual Transferable Quotas against their Redistributive Effects: The Case of *Alliance Against IFQs v Brown*' (1998) 9 *The Georgetown International Environmental Law Review*. 727; A Rieser, 'Prescriptions for the Commons: Environmental Scholarship and the Fishing Quotas Debate' (1999) 23 *Harvard Environmental Law Review* 393 (hereinafter, 'Prescription'); PH Pearse 'From open access to private property: Recent innovations in fishing rights as instruments of fisheries policy' (1992) 23 *Ocean Development and International Law* 71; CA Tipton, 'Protecting Tomorrow's Harvest: Developing a National System of Individual Transferable Quotas' (1995) 14 *Virginia Environmental Law Journal* 381; R Shotton, 'FAO Rights-Based Fisheries Management Perspective' in MH Nordquist and JN Moore (eds), *Current Fisheries Issues and the Food and Agriculture Organisation of the United Nations* (Boston, Martinus Nijhoff Publishers, 2000) 225; C Leria and A Van Houtte, 'Rights-Based Fisheries: A Legal Overview' in Nordquist and Moore, *Ibid* 263.

[2] Y Barzel, *Economic Analysis of Property Rights* (Cambridge, Cambridge University Press, 1989) 3.

Such an approach, which plays down the importance of means, risks the marginalisation of non-economic values in the construction of fisheries management regimes.[3] The purpose of this book so far has been to show how the means, ie the development of legal rights, entail certain unavoidable consequences for the form and application of any particular property right. The aim of the present chapter is to consider how far the factors which dictate the form and content of legal rules have been taken into account in the literature and practice of fisheries management.

So far it has been argued that certain physical, legal and moral factors determine the excludability of things and hence the scope of private property rights. First, legal rules must be responsive to physical exigencies. For example, the impossibility of bounding the oceans initially resulted in marine spaces and resources being treated as common property. Fisheries as a common pool natural resource were left as an open-access resource. Of course, this changed with the advent of international boundaries being designated and enforced through positive international law. This resulted in an extension of exclusive rights over vast areas of the world's oceans. However, our changing understanding of the physical world, such the functioning of ecosystems, is driving the development of legal rules in a different way. Our appreciation of the physical interconnectedness of natural resource systems, and of the cause and effect of human activities thereupon, increasingly requires rules that entail some degree of shared responsibility for the management of natural resources. Our review of international rules on the regulation of natural resources in general and marine resources in particular shows that many rules are now contingent upon technical or scientific factors, which in turn dictate how property rights may operate.

Second, law may place limits on excludability. In part this results from the fact that legal rules are the product of a social process that results in certain fundamental public interests shaping the form of property rights. In chapter 3, the contours of the public function of property were laid down. In addition to protecting the essential components of a community's legal structure and ensuring that certain fundamental goals of a community are respected, it reaffirmed the importance attaching to vital needs. Even within justificatory theories that advocate the use of private property, there are strong constraints in favour of the preservation and facilitation of certain vital needs. Justifications of property rights may

[3] Thus McManus observes that 'some people fish for reasons other than maximising profit', and calls into question the underlying assumption of maximising economic return that influences much economic theory: R McManus, 'Statement of the Centre for Marine Conservation Before the Subcommittee on Fisheries', cited in T A Steelman and RL Wallace, 'Property rights and property wrongs: Why context matters in fisheries management' (2001) 34 *Policy Sciences* 357, 364.

also place strong constraints on the use of private property to ensure that particular forms or levels of social order are maintained.[4] It is also important to emphasise that many regimes regulating natural resources are either firmly rooted in international law or are heavily influenced by States' international obligations. This means that in many cases the regulation of natural resources is influenced both by international and domestic public interests. The scope of exclusive rights and public interest limits on natural resources under international law were traced in chapters 6 and 7. Although the efficient use of natural resources may constitute a public good, and this is to be encouraged through the use of private property rights, this is not the only public function required of property rights. Under general international law there is a long-established prohibition on the harmful use of resources. This now extends to harm to the environment per se, and not just other States' rights and interests. There are positive obligations of a largely procedural nature that constrain the use of natural resources. These include duties to notify and consult and to carry out EIAs. The protection of biodiversity and ecosystems further constrains States' freedom to exploit natural resources, by vesting an interest in the components of biodiversity in the wider community. Ultimately this may result in certain management and use rights being excepted from the bundle of rights granted to the holder of a property right. Alternatively it may result in certain stewardship duties being placed on the holder or requiring some form of joint management of a resource. Specific limits are placed on the exclusive use of marine natural resources. The most important of these are the conservation and management duties that balance exclusive rights in the EEZ. The stewardship nature of such duties is further enhanced by developments taking place since the adoption of the Law of the Sea Convention, including the FAO Code of Conduct, IPOAs and technical guidelines on fisheries management.

Constraints on the shape and form of property rights may also result from limits inherent in the process of legal reasoning, as outlined in chapter 4. Universalisation commits law-makers and judges to the similar application of the same rule in similar circumstances. Rules and decisions should be consequence sensitive, to both the impact of the rule on the coherence of the legal system and the influence that it will have on peoples' behaviour in light of the law. Legal decisions, and hence rules, must be reasonable. This means that decisions are only taken with due regard to relevant circumstances. Finally, legal rules must be coherent; they must fit with higher order principles so as to avoid contradictory norms. Although law is defeasible, thereby allowing for the development of complex rules to deal with new circumstances, the precepts of legal reasoning constrain the development of new laws. The precepts ensure

[4] See ch 2, s 3(e).

that existing legal values and structures are protected where appropriate, and point towards a rather organic and progressive evolution of new legal rules. Here we may observe that all legal systems possess well-established institutions of property law. These, in addition to burgeoning obligations to protect the environment or ensure certain basic rights, constrain the development of new property rules in the field of marine living resources.

Finally, we considered how the discipline of law is inclusive of values. Law may be a means to an end, but the ends are not always economic goals of efficiency. All legal rules are the product of a wider moral, political and philosophical discourse. Thus we saw in chapter 2 how property rights are justified by a plurality of values. Some legal rules even provide explicit scope for moral factors to a decision-making context. More fundamentally, however, law is a form of practical reason which necessarily allows recourse to extra-legal values as part of the process of legal reasoning. In particular, legal rules must be sensitive to their consequences and these include a rule's moral and behavioural repercussions.

The point of the foregoing analysis is to show that the values entrenched within law, or which shape the operation of the law, impact on the form and operation of particular property rights. For example, a key requirement for the development of legal norms is the requirement of coherence. Thus new rules must fit with existing legal principles, and this may limit the evolution of new rules that run counter to well-established legal principles—even where there are compelling reasons for their introduction. All of these factors may result in limitations on legal rights to exclude and in some cases they may even require alternative forms of property holding to be adopted. Such constraints may pull against the creation of private property rights in fisheries. Even if private property rights are used to regulate fisheries then any assumptions that economic theories make about their scope and operation must be sensitive to these factors. A failure to do so may result in claims about the virtue of private property-based regulatory mechanisms being misplaced.

Having examined the nature of and justifications for property as a legal concept in previous chapters, and having traced property's fundamental influence on the development of marine resource regimes, this analysis can be brought to bear upon the current the debate about the virtues of extending private property-based rights into fishery management regimes. The next section examines the general form that property rights in fisheries can take, focusing on the structure of the principal entitlements and the quality of the property rights embodied therein. In section 3, the practice of those States having implemented property rights in fisheries is evaluated. This will provide the basis for an evaluation of domestic rights-based fisheries management systems against the criteria set forth in the earlier parts of this book.

2. FORMS OF PROPERTY IN RIGHTS-BASED FISHERIES MANAGEMENT SYSTEMS

Management measures may be classed as input and output controls. Input controls regulate fishing effort. Output controls directly control catch amounts. Input controls such as licensing may create limited property rights, although more sophisticated output control mechanisms have been adopted by a number of countries. These include territorial use rights in fisheries (TURFS), stock use rights in fisheries (SURFS), and community development quotas (CDQs). Increasingly common are quota based systems, such as the individual quota (IQ), the individual fishing quota (IFQ), individual vessel quotas (IVQ), the individual transferable share quota (ITSQ), and the individual transferable quota (ITQ). Each of these approaches shall be considered in turn.

(a) Input Controls

Input controls are the most common management instrument in use.[5] Such measures seek to limit the number of people fishing, or the efficiency of the fishing effort, rather than control how many fish are caught. They include gear restrictions, closed seasons, and vessel size restrictions.[6] Input controls are attractive because they are simple to design and implement.[7] They may also be effective if used in the right circumstances.[8] Such measures may be implemented individually or cumulatively. Individually, they tend to fail because fishermen react by channelling their fishing effort into areas that are not subject to restriction.[9] For example, closed seasons

[5] They are termed input controls as they effectively increase the cost to the fisherman of participating in the fishery. D Wesney, 'Applied Fisheries Management Plans: Individual Transferable Quotas and Input Control' in P Neher *et al* (eds), *Rights Based Fishing. Advanced workshop on the scientific foundations for rights based fishing* (Boston, Kluwer Academic Publishers, 1989) 153, 163. See also NB McKeller, *Restrictive licensing as a fisheries management tool*, FERU Occasional Paper No 6 (Edinburgh, Fishery Economics Research Unit, 1977).

[6] See National Research Council, *Sharing the Fish. Toward a National Policy on Individual Fishing Quotas* (Washington DC, National Academy Press, 1999) 115 (hereinafter 'NRC').

[7] See generally, MP Sissenwine and JE Kirkley, 'Fishery management techniques: Practical aspects and limitations' (1982) 6 *Marine Policy* 43.

[8] Greenburg and Herrmann note some success with pot limits in the red king crab fishery. JA Greenberg and M Herrmann, 'Allocative consequences of pot limits in the Bristol Bay red king crab fishery: An economic analysis' (1994) 14 *North American Journal of Fisheries Management* 307.

[9] LG Anderson, *The Economics of Fisheries Management* (Baltimore, Johns Hopkins University Press, 1977) 204. Also RE Townsend, 'Entry restrictions in the fishery: a survey of the evidence', (1990) 66 *Land Economics* 359; DR Leal, 'Fencing the Fishery: A Primer on Rights-Based Fishing in DR Leal (ed), *Evolving Property Rights in Marine Fisheries* (Lanham,

typically result in intensified fishing effort during the open season using more effective gear.[10] Of course regulations may be combined to prevent this type of response, and when various methods have been combined there has been a degree of success. However, this may lead to extremely complex and cumbersome regulatory structures, that are difficult to enforce and which result in highly inefficient fishing practices.[11] Crucially, such measures do not offer fishermen any incentive to decrease their share of the catch and so perpetuate over fishing. It is generally agreed that the use of input controls alone have contributed to the collapse of fish stocks.[12] They are also criticised for requiring too much government intervention.[13] This further increases the actual cost of fishing effort and may generate hostility from the fishing community.

Access licences suffer from the same deficiencies as other input controls. For example, if the fleet capacity is limited by the number of licences available, then effort may be channelled into larger vessels. If vessel size is limited, more effective fishing gear may be used, and so on. Indeed, if such licence restrictions are followed to their conclusion they may actually impede technological developments in the fishery.[14] The licence may constitute a property right to the extent that it can be used and is transferable. However, it is a low quality right, in the sense that the holder does not enjoy the full range of rights associated with ownership. Neither does it create property in the fish stocks *in situ*. It merely establishes a right of access and the fish stocks remain the common property of all licence holders. A race for fish still exists between the holders of the licence and further measures are necessary to prevent excess capacity and other inefficient practices.

Common to all input control regimes is the fact that fish in their natural state remain a common pool resource and the incentives to overexploit the resource remain. The tragedy of the commons continues. The emergence

Rowman and Littlefield Publishers, 2005) 1, 4–6. A recent study by confirms the earlier predictions: see T Kompas, TN Che and R Quentin Grafton, 'Technical efficiency effects of input controls: evidence from Australia's banana prawn fishery' (2004) 36 *Applied Economics* 1631.

[10] See generally, OECD, *Towards Sustainable Fisheries—Economic Aspects of the Management of Living Resources* (Paris, OECD, 1997).

[11] B Muse and K Schelle, *Individual Fishermen's Quotas: A Preliminary Review of Some Recent Programs (CFEC89–1)* (Juneau, Alaska Commercial Fisheries Entry Commission, 1989). *Cf* Sissenwine and Kirkley, n 7 above; M Hermman, JA Greenberg, and KR Criddle, 'Proposed pot limits for the Adak brown king crab fishery: A distinction between open access and common property' (1998) 5 *Alaska Fisheries Research Bulletin* 25.

[12] See 'Loaves and Fishes' *Economist* vol 246 (21 March 1998), 12; FT Christy, 'The death rattle of open access and the advent of property rights regimes in fisheries' (1996) 11 *Marine Resource Economics* 287; Pearse, n 1 above; P Copes 'A Critical Review of Individual Quotas as a Device in Fisheries Management' (1986) 62 *Land Economics* 278.

[13] Wesney, n 5 above, 164.

[14] See NRC, n 6 above, 118.

of property rights-based regimes is a direct reaction to the failure of these traditional mechanisms. Input controls may still form part of a fisheries management system. Indeed, many other natural resource systems structured around private property rights still utilise input controls to ensure that property rights are exercised in a manner consistent with other public interests.[15] This is particularly significant in fisheries, where only part of a resource system is 'privatised' and the holders of fishing rights may have no immediate interest in utilising their property rights over a fishery in a manner that has no adverse impact upon other components of the ecosystem. It is further important to recall that such constraints are long-established limits on the exercise of fishing rights or freedoms. This is also important because as part of an existing rule system, the values and interests which underpin such measures may form relevant considerations shaping the extent of private rights.

(b) Territorial Use Rights in Fisheries

TURFs are exclusive rights to participate in a fishery within a defined geographic area. An essential feature of TURFs is that economic value attaches to the use of a particular territory. For example, a beach seine might provide the basis for a TURF in that it catches pelagic stocks that migrate along the coast. Of course this value depends on a wide range of factors and, in particular, competing use for, or open access to, the stock at another location. Typically, TURFs are tied to locations such as beaches, lagoons and reefs, and apply to fisheries that are to an extent territorially limited, such as lobster.[16] TURFs may exist in any part of the water column in which the coastal State has exclusive authority. It may be generalised or localised. Thus, a zone like the EEZ forms a generalised TURF in that general fishery use rights can be controlled within the exclusive jurisdiction of the State. Localised TURFs arise, for example, in respect of an individual owner of an oyster bed. For present purposes it is this form of TURF with which we are concerned.

[15] See, eg, the various controls on production methods that constrain the right to recover offshore oil deposits. The Offshore Petroleum Production and Pipe-lines (Assessment of Environmental Effects) Regulations 1999, SI 1999/360.

[16] Christy includes a wide range of fisheries as potential TURFs: oyster and clam bottom; seaweed beds; raft culture; fish aggregation devices, both floating and fixed; beach seine rights; fish pens and cages; set net right; bottom fish traps such as lobster pots and octopus shelters; coral reefs; lagoons; and fish traps at stream mouths: FT Christy Jr, *Territorial Use Rights in Marine Fisheries. Definitions and Conditions* (Rome, FAO, 1982) 1. Ruddle notes that informal and customary TURFs have been adopted across Oceania as a means of regulating small-scale fisheries: K Ruddle, 'The Organisation of Traditional Inshore Fishery Management Systems in the Pacific' in Neher *et al*, n 5 above, 73.

In terms of a property right, a TURF can be viewed as a constellation of separate rights or incidents. For it to be effective as an economic right, certain incidents of property need to exist and be of sufficient quality.[17] First, a TURF must be exclusive, ie the holder of the TURF must have the right to limit or control access to the territory.[18] Secondly, the holder of the TURF must be able to determine the amount and kind of use of the territory.[19] Thirdly, the holder of the TURF must be able to enjoy the benefits from the use of the territory.[20] Finally, the holder should enjoy the right to future returns from the use of the territory.[21] This requires a degree of tenure that at the very least should allow the owner to capture a satisfactory return on any capital investments made. The legal counterparts to these rights, the exclusive right to possess, use, manage, and enjoy the income and capital of a thing need to be equally well-defined and protected for the economic right to be viable. However, limits on excludability, whether physical, legal or moral, may inhibit this and hence the effectiveness of the economic right. Thus, Christy suggests that the effectiveness of TURFs typically depend upon a number of factors, including the nature of the resource, the territorial boundary, fishing techniques, the existence of property institutional structures capable of supporting TURFs, and political acceptability.[22]

TURFs are only useful for resources that can be reared in a limited physical environment such as sedentary species.[23] For resources that cannot be confined spatially, TURFS are generally inappropriate. Thus Higgs notes that indigenous American people operate a *de facto* TURF over salmon on the Colombia River.[24] However, the introduction of marine capture entitlements and the outlawing of riparian fish traps eliminated such rights. As TURFs are spatially determined, the degree to which boundaries can be set and enforced will shape the effectiveness of the TURF. For example, small localised TURFs, such as coastal oyster beds may be more readily monitored and controlled than a TURF in distant offshore areas. For similar reasons, certain types of gear, such as fixed pot traps and long lines, permit the creation of TURFs. On the other hand, gear such as trawl nets does not allow for the creation of TURFs because they are only effective over large areas and so fall foul of the exclusivity requirement.

[17] Christy, *Ibid* 4.
[18] *Ibid*.
[19] *Ibid*.
[20] *Ibid*.
[21] *Ibid*.
[22] *Ibid*, s IV.
[23] Typically, this includes sedentary species and fish capable of being raised in a fish pen or cage.
[24] R Higgs, 'Legally Induced Technical Regress in the Washington Salmon Fishery' (1982) 7 *Research in Economic History* 55.

These factors show that the physical attributes of a resource determine the appropriateness of a property regime. Of course such factors can be overcome through legal means, in the same way that EEZs were an answer to the problem of physically excluding large areas of ocean space. However, this will only arise when it is reasonably practical to do so. This frequently requires a degree of homogeneity of users and a strong perception of the TURF's legitimacy.[25] Often this only occurs where legal institutions exist to support TURFs.[26] Finally, like other forms of private property it goes without saying that the State in question must be amenable to the acquisition of exclusive rights over the resources in question. This is closely connected to questions of wealth allocation, which although not strictly a matter concerning the effectiveness of the TURF is a vital question in deciding whether or not to introduce the TURF.

When considered from a purely legal perspective, TURFs take the form of a usufruct, and so must be distinguished from ownership.[27] First, the holder of the TURF enjoys a use right associated with a territory, not ownership of the territory.[28] In marine TURFs, ownership of the territory remains within in the hands of the State. Second, although the TURF may exist with respect to a particular resource, the right provides for exclusive access to the fruits of a fishery, rather than a fishery per se. The grantor of the use right (the State) enjoys incidents of residuarity and absence of term. Typically, they will also retain considerable management powers and reserve the right to income from the user. Although the holder of the TURF enjoys exclusive use of a site, this does not necessarily amount to exclusive use of the resource. In law, usufructs cannot be alienated.[29] Moreover, only when the resource is geographically limited to the site can the use of the resource be described as exclusive. Even then, this is only incidental to the TURF. As noted above, the holder does not necessarily enjoy the exclusive right to manage the resource. This depends first upon

[25] K Crean, 'The influence of boundaries on the management of fisheries resources in the European Union: case studies from the UK' (2000) 31 *Geoforum* 315, esp 325. K Ruddle, 'Back to first "design principles": the issue of clearly defined boundaries' (1996) 6 *Traditional Marine Resource Management and Knowledge* 4.

[26] *Ibid* 317.

[27] According to Jolowicz, 'usufruct is the right of using and taking the fruit of property belonging to another, *salva rerum substantia*, ie without the right of destroying or changing the character of the thing, and lasting only as long as the character remains unchanged.': H Jolowicz, *Historical Introduction to the Study of Roman Law*, 3rd edn (Cambridge, Cambridge University Press, 1972) 269; Also A Borkowski, *Textbook on Roman Law*, 2nd edn (Oxford, Oxford University Press, 1997) 174–8.

[28] As Christy notes, a TURF is not ownership of a resource, but merely ownership of a right to use: n 16 above, 4.

[29] Borkowski, n 27 above, 175. Of course TURFs do not have to follow this model. However, alienation by the holder of a use right would seem to interfere with and even defeat the full owner's right to determine alienation.

the nature of usufructory grant, and secondly, upon the extent of the resource. Only when the resource remains within the territory can exclusive rights to manage it arise. Finally, the extent of the use right might also be heavily constrained by the grantor of the right. As a result, the TURF forms a relatively weak form of private property right.

TURFs are consistent with States' authority in territorial waters, the continental shelf and EEZs. Of course, in all cases, such rights must be consistent with the States obligations under international law. In the case of the EEZ, particular conservation and management abilities also arise. However, unless exclusive authority to determine and secure an exclusive right exists beyond domestic jurisdiction, the TURF cannot exist in the high seas. Exclusivity is essential for the effectiveness of the TURF and it is this incident that connects the TURF to property rights discourse. To the extent that physical, legal and moral excludability are secured, TURFs provide a partial answer to the problem of open-access resources, by limiting access to the holder of the TURF and so taking the resource out of a common pool.[30] This only occurs when the TURF is sufficiently well defined and the value of the resource covered by the TURF is not diminished by use of the resource outside of the territory. The difficulty of securing a high degree of physical excludability seems to limit the scope of TURFs to certain species and types of fishery. Even when implemented, the legal structure of TURFs is only designed to secure a degree of property which is relatively weak. Despite this, TURFs can produce resource rents, which would otherwise be dissipated under conditions of open access, and so may result in a more efficient fishery.[31] As such they constitute effective, even if sub-optimal economic rights. Moreover, as Christy notes, if TURFs are held locally, then they may generate increased welfare for local communities, who in turn may invest more, socially, technologically and economically, in the fishery.[32] Arguably, this may result in better stewardship of the resource. However, it must be noted that this would be incidental rather than deliberate. In terms of moral excludability TURFs are no different to any other form of property in a fishery and the State must face up to the wealth allocation

[30] There are numerous discussions of the problem that commons conditions of access cause for marine resources. See H Scott Gordon, 'The economic theory of a common property resource: the fishery' (1954) 62 *Journal of Political Economy* 124; A Scott, 'The fishery: the objectives of sole ownership' (1955) 63 *Journal of Political Economy* 116; FT Christy and AD Scott, *The common wealth in ocean fisheries* (Baltimore, Johns Hopkins Press, 1965).

[31] For examples of successful TURF systems see: K Ruddle, 'Solving the common-property dilemma: Village fisheries rights in Japanese coastal waters' in F Berkes (ed) *Common Property Resources: Ecology and Community-based Sustainable Development* (London, Belhaven Press, 1989) 168; GBK Baines, 'Traditional resource management in the Melanesian South Pacific', *Ibid* 273.

[32] Above n 16, 9.

consequences of granting the right.[33] It is notable that Christy regards the wealth allocation function of the TURF as the most important factor at play, and that the decision to allocate a TURF should be made on grounds of equity rather than efficiency.[34]

(c) Individual Quotas

The concept of the individual catch quota in an official TAC was first suggested by Christy in 1973.[35] Individual catch quotas are in widespread use.[36] They also come in a variety of permutations, which generally denote the holder's identity and/or the nature of the right. These include: Individual Fishing Quotas (IFQs), Individual Transferable Quotas (ITQ),[37] Enterprise Quotas (EQ),[38] Individual Vessel Quotas (IVQ),[39] and Individual By-catch Quotas (IBQs) or Individual Vessel By-catch Quotas (IVBQs).[40] Despite the wide variety in the permutations, there are common core elements to all individual quotas. The present discussion shall

[33] As was noted in ch 2, allocation is by no means straightforward. Like other objects of private property, allocation raises acute political difficulties.

[34] Christy, n 16 above, 9.

[35] FT Christy Jr, *Fisherman Quotas: A Tentative Suggestion for Domestic Management* Occasional Paper No 19 (Kingston, Law of the Sea Institute, University of Rhode Island, 1973).

[36] A Hatcher *et al*, *Future Options for UK Fish Quota Management* (Portsmouth, University of Portsmouth, 2002) 54. They also note that such quotas tend to crystallise into transferable quotas over time.

[37] This is a form of IFQ that can be transferred. They are sometimes referred to as Individual Transferable Share Quotas (ITSQs) because invariably the quota is in the form of a share.

[38] Ie, a quota allocated to a business, such as a processing plant served by a number of vessels. A much older type of instrument, it has been used by the British Columbia salmon canning industry and in some Alaskan fisheries. On the British Columbia fishery, see generally HE Gregory and L Barnes, *North Pacific Fisheries* (San Francisco, American Council, Institute of Pacific Relations, 1939). On Alaskan fisheries, see generally R Hamlisch, *Economic Effects of Fishery Regulation* Report No 45 (FAO, 1962).

[39] They are similar to ITQs except they divide the TAC among vessels in a fleet rather than individuals. See NRC, n 6 above, 121–2; B Hersoug, P Holm and SA Rånes, 'The Missing T: Path-Dependency within an Individual Vessel Quota System—The case of the Norwegian Cod Fishery' in R Shotton (ed), *Use of property rights in fisheries management* (Rome, FAO, 2000). FAO Fisheries Technical Paper 404/2 (2000) 428. KE Casey, CM Dewees, BR Turris and JE Wilen, 'The Effects of Individual Vessel Quotas in the British Columbia Halibut Fishery' (1995) 10 *Marine Resource Economics* 211. In Norway the TAC is shared among vessels according to the vessel's type and size. Neither the TAC share nor the allocations tend to be transferable. For more details, see P Holm, SA Rånes and B Hersoug, 'Political Attributes of Rights Based Management Systems: The Case of the Individual Vessel Quotas in the Norwegian Coastal Cod Fishery', in D Symes (ed), *Property Rights and Regulatory Systems in Fisheries* (Oxford, Blackwell, 1998) 113. The IVQ was also used in the British Columbia halibut fishery. See KE Casey *et al*, n 39 above.

[40] See SL Diamond, 'Bycatch quotas in the Gulf of Mexico shrimp trawl fishery: can they work?' (2004) 14 *Reviews in Fish Biology and Fisheries* 207.

focus on ITQs as the paradigmatic property rights-based mechanism. An ITQ is a form of output control granting individual harvesting rights to a set amount of an overall quota of fish as set by a national fishing authority. The entitlement, which usually lasts for a number of years, gives the holder the right to catch a percentage of the TAC.[41]

Strictly speaking, property is in the ITQ rather than the actual fish that are the object of the ITQ. An ITQ, like a TURF is a usufruct. The ITQ holder merely enjoys the right to catch rather than ownership of any actual fish, at least until they are caught. Of course, this does not prevent the ITQ being examined in proprietary terms. A property right is, in essence, the right to exclusive control over a thing. As we have stressed, this exclusivity is contingent upon physical, legal and moral parameters. The difficulty of identifying the object of ownership, ie individual fish in the wild, renders the application of property structures to fisheries highly problematic.[42] As a consequence of this, legal mechanisms have tended to marginalise property discourse in respect of fisheries.[43] ITQs are an attempt to overcome the physical limitations and the absence of traditional legal structures capable of establishing pre-capture property rights in wild and unascertained resources. Indeed, the whole point of the ITQ is to provide fishermen with a pre-capture interest in the fishery in order to prevent a fishing derby. Thus if the object of the ITQ, ie a given quantity of fish, is absent, then the ITQ is rendered meaningless as an economic right, and ultimately as a legal right. Although most commentators and judicial pronouncements are clear that ITQs comprise harvesting rights rather than ownership of actual fish, this is perhaps misleading.[44] A right to harvest may be regarded as a mere privilege and it is clear that many ITQs amount to more than this. Rather, it is suggested that ITQs are a form of constructive possession of a fungible resource in their natural state. This constructive possession is then converted to full ownership upon capture. This more closely corresponds to the value of the right, ie a set quantity of fish.[45]

[41] Quota allocations in the form of volume of fish have been used in the past. However, these have proved to be unpractical as the fishery authority would have to buy back or sell some of this as the TAC changed from year to year. See the discussion about New Zealand's early quotas system in section 3(d) below.

[42] If fish could be identified in the same way as cattle or other livestock it is likely that property discourse would have advanced much further a considerable time ago.

[43] Under the common law and civil law, fish in their natural state have generally been considered to be incapable of private ownership. The majority of States have maintained a public right of fishery.

[44] AD Scott, 'The ITQ as a Property Right' Crowley (ed), n 58 above, 31, 34–5, 36–9.

[45] One must appreciate that there may be a significant difference between the right held in the form of the quota and the capacity of the holder to actualise that value of that right in terms of fish captured.

It is not uncommon for legal systems to engage in this kind of sophistry in order to ensure that real world needs are met by the law. For example, bills of lading are widely regarded as amounting to constructive possession of goods in transit in order that certain commercial needs are met.[46] Both a bill of lading and an ITQ are symbols of underlying proprietary interests.[47] Both have to be acted upon to realise the value of the underlying proprietary interests. Whereas the title function of a bill of lading is a legal construct necessary to facilitate international trade, the 'title' function of an ITQ is a legal construct necessary to overcome the physical impediment of allocating ownership to fish in the natural state.[48] Of course one must not take the analogy too far.[49] One clear difference between the two concepts is that bills relate to a determinate private interest, whereas ITQs are wholly dependent upon public determination for their value. Taking this point up, it might be argued that because ITQs are dependent on regulatory measures, they cannot amount to property rights. They remain mere regulatory entitlements. However, such legal contingency is a quality of all property rights. As Bentham pointed out,

> [p]roperty and law are born together and must die together. Before the laws there was no property: take away the laws, all property ceases.[50]

The key difference is that traditional property rights tend to derive from the common law and are regarded as opposable to the State. This difference may be important in determining the quality of the holding, but it does not render the holding non-proprietary per se. The legal source of a property right is not determinative of its status; it is the quality of incidents that the law bestows upon a right that is important. Thus, commentators are universally agreed that the stronger the degree of each

[46] As Mustill LJ explains: 'as to the status of the bill of lading as a "document of title". I put this expression in quotation marks, because although it is often used in relation to a bill of lading, it does not in this context bear its ordinary meaning. … It is a symbol of constructive possession of the goods which (unlike many such symbols) can transfer constructive possession by endorsement and transfer: it is a transferable "key to the warehouse"': *The Delphini* [1990] 1 Lloyd's Rep 252, 268. See also Bowen LJ in *Sanders v McLean* (1883) 11 QBD 327, 341.

[47] The analogy does extend to the fact that the title function of a bill is derivative of statute rather than the common law. In the UK this function has been provided by the Bills of Lading Act 1855 and Carriage of Goods by Sea Act 1992.

[48] This view of an ITQ is reinforced by the fact that ITQs and indeed lesser rights are often used as collateral for loans in the same way as bills of lading. From a commercial perspective this is important as it shows that banks and other lending agencies regard the rights as having greater economic value than a mere licence.

[49] Thus bills may have a value independent of the existence of any goods they purport to represent. They have an important receipt function, and may also dictate the legal relationship between the parties to the bill, as a matter of contract.

[50] J Bentham, *Theory of Legislation*, ed CK Ogden (London, Kegan Paul, 1931) 113.

incidence, the more effective the property right.[51] This has in turn led to calls to strengthen the property incidents of ITQs.[52]

Exclusive control of a fishery or a share of it in the form of an ITQ may be analysed in terms of the right to possess, use, manage, and enjoy the income and capital of a thing. It was noted in chapter 2 that the full extent of these incidents is not required for legal ownership; indeed these incidents usually exist in degrees.[53] A similar perspective pertains in economic analyses of property rights. Thus the quality of an ITQ as an economic right is measured in terms of its duration, flexibility, exclusivity, quality of title, transferability and divisibility.[54] In general, the holder of an ITQ obtains a right to fish that includes a significant degree of these incidents. The holder possesses the ITQ and may use the ITQ in order to fish.[55] By leasing out an ITQ the holder may enjoy income rights from the ITQ. The holder enjoys limited rights to the capital of an ITQ. Thus, as the review of state practice in the next section shows, ITQs are commonly divisible, leasable and transferable. Indeed, transferability is regarded as a defining attribute of ITQs.[56] Some ITQs may even be inherited, as is the case in the Alaskan ITQ system.[57] In general, the holder may consume, waste or destroy the ITQ in the sense that he may decide what to do with the harvest, or indeed decide not to harvest his quota at all. Recognising the quality of such rights has lead a number of commentators to conclude that the ITQ is a property right.[58] However, it must be pointed out that not all the incidents of ownership form part of the ITQ holder's entitlements.

A significant limitation to the armoury of property incidents of the ITQ arises in respect of the right to manage. In a limited sense the ITQ

[51] R Arnason, 'Property Rights as a means of Economic Organisation' in Shotton (ed), n 84 above, 14 *ff*.

[52] This is reflected in the general trend towards the consolidation of fisherman's rights over fisheries, from basic quotas to fully fledged ITQs. As Arnason notes, ITQs tend to become more permanent, restrictions on transferability are reduced, and the enforcement of quota rights improved: n 58 above, 142.

[53] See ch 2, s 2.

[54] These criteria are taken from Anthony Scott, a leading fisheries economist: AD Scott, 'Conceptual Origins of Rights Based Fishing' in Neher *et al*, n 5 above, 11, 14.

[55] This right of possession may be regarded as constructive possession, in much the same way that intellectual property rights are possessed symbolically through documents of title.

[56] See R O'Connor and B McNamara, 'Individual Transferable Quotas and Property Rights' in TS Grey, *The Politics of Fishing* (Basingstoke, Macmillan, 1998) 81, 84.

[57] See MK Orbach, 'Social and Cultural Aspects of Limited Entry', in Ritteg, n 58 above, 211, 220.

[58] See CL Koch, 'A Constitutional Analysis of Limited Entry' in RB Ritteg *et al* (eds), *Limited Entry as a Fishery Management Tool* (Seattle, University of Washington Press, 1978) 251, 265; JD Weiss, 'Note. A Taxing Issue: Are Limited Entry Fishing Permits Property?' (1992) 9 *Alaska LR* 93, 111–2; R Arnason, 'Property Rights as an Organisational Framework in Fisheries: The Cases of Six Fishing Nations' in BL Crowley (ed) *Taking Ownership. Property Rights and Fishery Management on the Atlantic Coast* (Halifax, Nova Scotia, Atlantic Institute for Market Studies, 1996) 104.

holder has the right to manage how he captures his quota by deciding when and how to fish. However, unless he is a stakeholder in the broader management regime he will have little say in how the fishery, of which he enjoys a share, is managed. For the most part, this management function is retained by the State that determines the TAC and other conservation and management measures applicable to the fishery.[59] This is significant because it suggests that stewardship responsibilities for fisheries subject to an ITQ are split between the State and the holder. The State must ensure that broad conservation objectives are established and quota holders must ensure that their particular harvesting activities do not breach the objectives so established.[60] As the analysis of practice in the next section reveals, it is also clear that the controlling interests of the State tend to limit another aspect of the ITQ—its duration or term. In practice, most ITQs are held for a limited period of time, although it is common for the term of holding to be renewed automatically. However, any uncertainty as to the duration of term seriously undermines the quality of a property right, especially its economic value.[61] In chapter 2, security of title and absence of term were regarded as mere adjuncts to the other incidents describing qualities rather than essential characteristics of holding, it is clear that the economic literature on property rights in fisheries places particular emphasis on these.[62] Short duration and tenuous security of holding prevent long-term interests emerging.[63] Ultimately this may result in other use rights being exercised without any view to their long-term consequences.

Where those incidents of ownership noted above are secured to the holder of the ITQ, then the ITQ provides for a reasonably strong property right. In the most basic of property terms, ITQs exhibit the

[59] A significant illustration of this may be the complete closure of a fishery for a period in order to allow stocks to recuperate.

[60] In this respect ITQs may cause problems because there is some evidence to suggest that ITQs may lead to high-grading of catches in order to ensure the best value return to the fisherman upon landing the catch. This is discussed further in respect of domestic management systems. See below section 3.

[61] DF Britton 'Privatization of the American Fishery: Limitations, Recognitions, and the Public Trust' (1997) 3 *Ocean and Coastal Law Journal* 217, 246.

[62] See A Scott, 'The ITQ as a Property Right' in Crowley (ed) n 58 above, 31, 39–40. By way of analogy he notes the position of a tenant who is granted a four-year lease over a piece of land. Such a period of interest is too short for the tenant to make any investment in improving the land, by way of putting in drainage or building on it. The costs incurred in so doing will take longer than four years to recoup and so there is no incentive to make improvements. Indeed, the tenant is more likely to deplete the land before he leaves.

[63] Townsend notes that the holder cannot defer harvests over a period of years in order to invest in the future of the resource. For example, such a deferment may increase the breeding stock, which in turn enlarges the future size of the fishery. However, an individual fisherman receives no return for such a sacrifice. RE Townsend, 'Bankable individual transferable quotas' (1992) 16 *Marine Policy* 345. He then goes on to note that regulatory measures that reward such decisions could be introduced: *Ibid* 346–8.

necessary requirements of excludability because a non-holder cannot participate in the ITQ fishery.[64] This renders ITQ holders *de facto* owners in common of the fishery.[65] Of course this is merely relative because ITQ holders, in the exercise of their rights, may have their rights restricted by the State. However, the same could be said of any property right and such limitations do not necessarily deny the existence of property rights per se.[66]

(d) Community Development Quotas

Community Development Quotas (CDQs) are assignments of quota shares to separate communities with the aim of enhancing the fishery and ensuring that the community receives a share of the fishery benefits.[67] Under a CDQ program a percentage of the TAC in a fishery is allocated to a community, which then manages the harvesting of the quota.[68] It is an individual fishing quota held by a community rather than an individual. In the United States, where CDQ programs have been piloted in certain Alaskan fisheries, the stated aim of the CDQ programme is to

> contribute to the development of local economies and markets, the social and economic well-being of participants through enhanced self-sufficiency, and improvements in local infrastructures.[69]

This is to be achieved through the allocation of a certain percentage of the fishing quota to fishing dependent communities. The beneficiary communities are very remote, mainly comprised of native Americans, and suffer from significant social problems. CDQs have been implemented in the Bering Sea pollock fishery by the United States as a means

[64] See Scott, n 54 above, 26–7.

[65] Scott, n 44 above, 46.

[66] As noted in ch 2, property is invariably a relative concept. See K Gray and SF Gray, 'Private and Public Property' in J McLean (ed) *Property and the Constitution* (Oxford, Hart, 1999) 11, 12.

[67] See E3 Consulting, *Economic Impacts of the 1992/3 Pollock Community Development Quota* (1994); LE Tryon, 'An Overview of the CDQ Fishery Program for Western Alaskan Native Communities' (1993) 21 *Coastal Management* 315. RE Townsend, *An Economic Assessment of Alaskan Community Development Quotas*. Maine/New Hampshire Sea Grant Program Project (1996).

[68] Presently, the US CDQ program applies to a percentage of the pollock, halibut and sablefish fisheries. Similar arrangements arise within New Zealand's ITQ system. Thus the Local Authority Trading Enterprise in the Chatham Islands holds a quota on behalf of the local community, to whom it leases fishing rights exclusively. Under the Treaty of Waitangi the Treaty of Waitangi Fisheries Commission holds around 40% of the New Zealand ITQ for the Maori people.

[69] United States Senate Report 104–276 (23 May 1996) 5. The beneficiary communities are very remote, mainly comprised of native Americans, and suffer from significant social problems. See E3 Consulting, n 67 above.

of stimulating the native economies in Alaska.[70] Under this program a portion of the annual quota is allocated to applicant CDQ groups.[71] Applications are made by submitting a community development plan (CDP) to the State of Alaska, which is recommended to the Governor for approval by a Regional Council.[72] Each plan specifies how revenues from the fishery are to be used to generate economic development, and is assessed according to the applicant's past compliance, past performance, need and future merit.[73] If the application is successful then the CDQ group will receive a devolved authority for the implementation of the CDQ. Like SURFs and TURFs, CDQ are a combination of management tools and broad policy programs. They are a recent development and as such the evaluation of their success can only be tentative.[74] The program has had a degree of success in achieving its economic and social objectives, with the stimulation of jobs, education and training, and the capacity to continue subsistence lifestyles.[75] However, the NRC has also pointed out that local management and cooperation have not been entirely successful.[76] There is lack of cooperation between CDQ groups and the communities they represent, and in particular an absence of mechanisms for communities to input into decision-making procedures.[77] There is also some debate about whether the CDQ program is designed to benefit only native Alaskans or the wider community.[78] In general, there are enforcement problems identical to those arising under ITQ programmes.[79]

[70] JJC Ginter, 'The Alaska community development quota fisheries management program' (1995) 28 *Ocean and Coastal Management* 147

[71] There are six groups, which are composed of coalitions of villages and fishing communities. After some initial success the program was extended to Pacific halibut, sablefish, crab and other ground fish. See North Pacific Fishery Management Council, *Environmental Assessment/ Regulatory Impact Review for Plan Amendment 45 for Continuation of the Pollock CDQ Program to the Bering Sea/Aleutian Islands Fishery Management Plan* (Anchorage, NPFMC, 1998).

[72] Amendments to the Magnuson Stevens Act authorise the use of CDQs. See 50 CFR §679.30 (1996), discussing the process for review and approval of CDQs.

[73] Townsend, n 67 above, 12. He notes that there have been adjustments of quota allocations to CDQ groups on this basis.

[74] This is compounded by the excessively broad confidentiality standards that have been adopted in relation to CDQ programs. See Townsend, *Ibid* 43.

[75] See generally, National Research Council, *The Community Development Quota Program in Alaska and Lessons for the Western Pacific* (Washington DC, National Academy Press, 1999).

[76] NRC, n 6 above, 126.

[77] *Ibid*. Townsend notes that there is a significant degree of informal communication between CDQ communities and the State. However this is difficult to quantify: n 67 above, 11.

[78] *Ibid*. For example, presently the pollock quota is restricted to communities that satisfy the following requirements: (a) it is within 50 miles of the Behring Sea, (b) it is an Alaskan Native Claims Community, (c) it has residents who conduct at least 50% of their commercial or subsistence fishing in the Behring Sea, (d) it does not already have a significant pollock fishery.

[79] CDQ groups have no incentive to improve monitoring as they get no extra return for it. Fishermen are encouraged to underreport landings as this generates a profit equal to the amount of quota saved. See Townsend, n 67 above, 35–6.

A CDQ does not entail any specific form of property right. Once the CDQ group receives its quota it may, subject to its CDP mandate, sub-allocate it at its discretion. This allocation may be in the form of an ITQ or otherwise. For example, in most Alaskan fisheries pollock quotas are typically leased out, whereas all CDQ groups allocate their halibut quota to local fishermen through local Olympic fisheries, ie a fishing derby.[80] Ironically, this latter approach creates a community common pool fishery within an otherwise limited entry fishery. The CDQ is a limited form of common property, which may converted into a private right, or a common pool resource. At the community level, the CDQ is not transferable because this would be incompatible with the socio-economic objectives of the program. This limits the proprietary nature of the CDQ. The inability to transfer quotas means that fishing activities may not be the most efficient and this may undermine the success of CDQs. However, this sacrifice is made in order to ensure that the community retains the benefits of the CDQ program. This focus on allocation rather than efficiency is an important development in fisheries management. Significantly, CDQ groups do not have a share in the overall management of the stock, which remains at the federal level.[81] Although they may exercise some management authority over the enforcement of CDQ allocations, through by-catch regulation and investment in harvesting capacity, most have failed to do so.[82] The principal aim of the CDQ program is economic development, rather than environmental stewardship.[83] Although the two are linked, it seems clear that the CDQ program does not provide CDQ groups with sufficient incentives to promote more sustainable practices.

(e) Stock Use Rights in Fisheries

SURFs provide exclusive access to a group of fishermen over a particular stock of fish.[84] Although Christy notes that this is devolution of a management authority rather than a management system per se, in that the user group may implement an ITQ or other instrument within the SURF, they are worth noting in passing.[85] Townsend suggests that transferable dynamic stock rights (TDSRs), a SURF built around a quota system,

[80] *Ibid* 22.
[81] *Ibid* 35.
[82] *Ibid* 40.
[83] Notably, it is economic development of the community rather than the fishery per se.
[84] FT Christy, 'Common Property Rights: An Alternative to ITQs' in R Shotton (ed), *Use of property rights in fisheries management. Proceedings of the FishRights99 Conference. Fremantle, Western Australia, 11–19 November 1999. Mini-course lectures and core conference presentations.* FAO Fisheries Technical Paper. No. 404/1. (Rome, FAO, 2000) 118.
[85] *Ibid*.

would provide a means of ensuring that fishermen have an incentive to protect the long-term sustainability of a fish stock.[86] TDSRs are a permanent harvesting right allocated to fishermen as a life cycle share of each year class that can be harvested.[87] Each year, as a new allocation is calculated to distribute new recruits to the stock, each fisherman receives an allocation in proportion to their share of the breeding stock. This annual calculation is based upon the growth of a stock less any mortality, catch and discards.[88] As the future allocation is based upon the fisherman's actions, the fisherman is provided with an incentive to conserve the fish stock in a way that contributes to its sustainability.

TDSRs share the same advantages and disadvantages as ITQs.[89] The right can be transferred in the same way as an ITQ, meaning that quotas may end up in the hands of the most efficient operators.[90] It can also be sufficiently well defined (secure and durable) so that it can be used as collateral.[91] If it can be used as collateral, then loans can be taken out in order to fund periods of inactivity, in the knowledge that higher future allocations provide a return on the investment. Where TDSRs differ from other quota-based systems is in their capacity to reinforce the holder's interest in the long-term conservation of the stock. However, there are difficulties with the practical application of SURFs. TDSR calculations require a high degree of data on the state of a stock, including its growth rates, mortality and impact of catches. However, Townsend notes that this data is largely the same as used to conduct ordinary stock assessments, and should not prove to be an obstacle.[92] The actual calculations remain complex, and would have to be accessible to ordinary fishermen. Moreover data would have to be available to them so that they could decide on their optimal fishing strategy. Such data are notoriously unreliable. As in the case of other mechanisms, the principal difficulty is the monitoring and enforcement of quotas. This is necessary to ensure against discards and high-grading, and to prevent illegal catches being landed. Townsend

[86] RE Townsend, 'Transferable dynamic stock rights' (1995) 19 *Marine Policy* 153.

[87] *Ibid* 154.

[88] A fish may live for 10 years and be harvestable from the age of three. Each year younger fish will enter the harvestable section of the stock. Each fisherman is allocated a share of the stock for each year of its harvestable life, which they are entitled to harvest as they wish. For example, if a fisherman holds a 50 ton allocation of a stock at the age of four. He fishes 10 tons of this quota, leaving a 40 ton allocation of breeding stock. This is used to calculate his subsequent allocation of newly recruited stocks to the age four year class. Scientific data will provide the growth rate of the stock, based upon catch, natural mortality and discards. If this is calculated to be at 25%, then the fisherman will be allocated 50 tons for the next year. If he fully exhausted his stock, then his allocation would be zero. If he harvested none of the stock his allocation would be at least 62.5 tonnes.

[89] This is discussed above. See section 2(c).

[90] Townsend, n 86 above, 156.

[91] *Ibid*.

[92] Above n 86, 157.

suggests that some form of onboard video monitoring or observers would be necessary.[93] These may prove expensive or objectionable to the fishermen, and so undermine the management regime.

In short, unless a long-term proprietary interest in a resource is secured to a fisherman, any investment in the quality of the stock, which is essential for its proper stewardship, is unlikely to arise. However, the mechanism for providing a long-term interest must be economically and politically viable.

(f) Summary

A number of mechanisms exist, which establish a degree of property in fisheries. Although a number of broad points can be drawn from an analysis of these, in practice, the fact that each system may be designed in quite different ways to achieve quite different objectives makes it difficult to draw strong general conclusions. As yet, no mechanism establishes full liberal ownership of a fish stock in its natural state. As a consequence of physical limits to the scope of ownership, the next best alternative has been to establish property rights in the form of access quotas. However, in the case of ITQs such an interest amounts to constructive possession of an unascertained good. Generally, it appears that the stronger the ownership interest in the resource in its pre-capture state, the more effective the mechanism. Failure to provide exclusivity of interest, duration and security of title critically undermine the effectiveness of the mechanism and, as a consequence, threaten the underlying resource. It remains to be seen how States have implemented property rights in fisheries, how regulators and domestic courts regard such property rights, and how effective these have been in achieving the predicted effects.

3. DOMESTIC IMPLEMENTATION OF PROPERTY RIGHTS-BASED MANAGEMENT SYSTEMS

A number of States have implemented, in varying degrees, rights-based fishing entitlements. These include Australia, Canada, Iceland, New Zealand, and the United States.[94] The domestic implementation and status of these measures is considered for each country in turn.

[93] *Ibid* 157–8.

[94] Chile, Namibia, Morocco, Netherlands, Nicaragua and South Africa have introduced weaker forms of ITQ systems. See R Arnason, *A Review of International Experiences with ITQs. Annex to Future Options for UK Fish Quota Management*. CEMARE Report No 58 (Portsmouth, University of Portsmouth, 2002) 18–23, 34–8. Also C Stewart, *Legislating for property rights in fisheries*. FAO Legislative Study No 83 (Rome, FAO, 2004) 64 *ff*. Estonia has also implemented

(a) Australia

Australia comprises six federal States (New South Wales, Queensland, South Australia, Tasmania, Victoria and Western Australia) as well as several internal and external territories. Each State possesses a separate legal system and constitution. The Australian Constitution sets out which powers are reserved to the Commonwealth, with the residue being exercised by the states.[95] In cases of inconsistency, the Commonwealth legislation takes priority.[96] Each federal State inherited the English common law. Although each has since developed a distinctive jurisprudence, decisions in each state are persuasive in other states, lending some coherence to the development of jurisprudence in property rights-based fishing. In addition to any obligations arising under customary international law, Australia is a party to both the Law of the Sea Convention and the Fish Stocks Agreement, and so bound by the relevant fisheries provisions. The Seas and Submerged Lands Act 1973 declares sovereignty over a territorial sea to 12nm, as well as sovereign rights over a continental shelf and EEZ.[97] The 1973 Act also confirms that sovereignty and sovereign rights over maritime spaces are vested in the Commonwealth rather than the individual States.[98] This was confirmed in *New South Wales v The Commonwealth,* which also held that the Commonwealth enjoyed jurisdiction over fisheries in both the territorial sea and continental shelf.[99] However, under the Commonwealth Coastal Waters (State Powers) Act 1990 and the Fisheries Management Act 1991, individual States now have jurisdiction and responsibility for fisheries management in 'state coastal waters' that extend to 3nm from the low water mark.[100] Commonwealth government has jurisdiction and responsibility in the remainder of Australia's EEZ.[101]

an ITQ system recently. See M Vetemaa, M Eero and R Hannesson, 'The Estonian fisheries: from the Soviet system to ITQs and quota auction' (2002) 26 *Marine Policy* 95. Fishing effort is currently regulated under the Fishing Act 2001. The Estonian system is novel in that the allocation of entitlements has been facilitated through the use of auctions, rather than on the basis of catch history. Norway has also implemented a limited quota system. See generally R Hannesson, 'Fishery Management in Norway' in E Loayza (ed), *Managing Fishery Resources*. World Bank Discussion Paper 217 (Washington DC, World Bank, 1994) 11.

[95] Commonwealth of Australia Constitution Act 1900 s 107.

[96] *Airlines of New South Wales v New South Wales (No 2)* (1965) 113 CLR 54, esp 80.

[97] See ss 6, 11 and 10A respectively.

[98] See also s 51(x) of the Constitution.

[99] (1976) 135 CLR 337.

[100] Exceptionally, States may reach agreement with the Commonwealth to legislate beyond the limits of State coastal waters.

[101] For stocks that straddle or migrate between in-shore and offshore fisheries Joint Authorities have been established to manage the stocks. However, Morris notes that these have been cumbersome and ineffective. P Morris, *Economic Aspects of Living Marine Resources: Australian Contribution. Fisheries Management Arrangements in Australia: An Overview* (Canberra, ABARE, 1994).

Commonwealth fisheries are regulated under the Fisheries Management Act 1991.[102] The objectives of the Act are stated to include implementing cost-effective and efficient fisheries management, ensuring the exploitation is compatible with principles of ecological sustainable development and the precautionary principle, as well as having regard to its impact on non target species and the wider marine environment, and maximising economic efficiency.[103] Further reference is made to conservation and management measures to ensure over-exploitation does not occur, achieving optimum utilization, and meeting Australia's commitments under international law.[104] These provisions provide an important means for testing the legitimacy of particular rules and decisions taken in respect of fishing rights. In litigation concerning the meaning of these objectives, Australian Courts have held economic efficiency to mean the economic condition of the industry as a whole, rather than the circumstances of individual fishermen.[105] They have also noted how the objectives operate together, although there are indications that biological sustainability may be a priority.[106]

Fishing rights under the Act are termed 'statutory fishing rights' (SFR).[107] Fishing may also take place under a permit.[108] The Act does not prescribe a particular form of right, but is wide enough to include extensive quota rights as well as the right to use certain fishing equipment. Actual formulation of particular entitlements and their allocation is carried out under plans of management to be drawn up by the AFMA. Section 48 is crucial in that it provides that subject to certain limitations, the holder of a SFR may deal with the right 'as its absolute owner'. In general SFR and permits may be subject to such conditions as the AFMA establishes in the plan of management.[109] Such conditions may be varied or new conditions imposed.[110] All SFRs must be registered, thereby providing

[102] Also the Fisheries Administration Act 1991, which set up the Australian Fisheries Management Authority (AFMA).

[103] Fisheries Management Act 1991 ss 3(1), 3A.

[104] S 3(2).

[105] *Bannister Quest Pty Ltd v Australian Fisheries Management Authority* (1997) 77 FCR 503, 520–21 (Drummond J). Also, *PW Adams Pty Ltd v Australian Fisheries Management Authority* (1998) 49 ALD 68, 76 (Branson J).

[106] See eg, *Ajka Pty Ltd v Australian Fisheries Management Authority* [2003] FCA 248, where the Federal Court refused an appeal against an AFMA decision not to grant new fishing permits on the basis of precautionary measures to protect the sustainability of tuna fishery, despite the adverse effects this may have had on the economic aspects of the fishery. Also *Dixon and Australian Fisheries Management Authority and Executive Director of Fisheries WA and Northern Territory of Australia* [2000] AATA 442.

[107] S 21.

[108] S 32.

[109] S 22(3)(a) and 33(5)(a). See also the logbook and recording provisions of s 42 and boarding requirements of s 42A.

[110] Ss 22(5), 32(8).

some security of title.[111] Permission to transfer an SFR or permit is limited and requires the permission of the AFMA.[112] The duration of a SFR may be specified.[113] If unspecified, it remains in force until cancelled, surrendered or otherwise ceases.[114] Permits may be granted for periods up to five years.[115] This provides some security of term. Although these seem limited in comparison to common law forms of property, we should recall that most forms of property are at risk of some regulatory taking. A further degree of permanence is afforded to SFR holders under sections 31A–31F. Upon revocation of a plan of management, each SFR holder obtains an option that entitles the holder to an equivalent SFR under the new plan. Holders of SFRs may grant an interest in their holding subject to notifying and registering the AFMA.[116] If the SFR is cancelled or ceases, then no compensation is payable to the holder.[117] However, if the operation of the Act results in the acquisition of property on other than just terms, then the Commonwealth must pay fair compensation.[118] Despite the limitations on the proprietary nature of SFR and permits, there is good evidence of a high market value attaching to these rights.[119] This suggests that the fishing rights meet a reasonably high degree of the incidents of property required to make an effective economic right.

At the State level, fisheries management regimes vary considerably in their detail. Although direct restrictions on fishing effort are the most common management tool, rights-based systems have been introduced in a number of fisheries.[120] Where ITQ or rights-based mechanisms have

[111] S 45.

[112] Ss 22(4)(a), 32(1).

[113] S 22(4)(b).

[114] S 22(4)(c). The rights may cease when the plan of management under which it is granted is revoked, or a joint fishery arrangement is terminated or its conditions of use are breached.

[115] S 32(6)(c). However, they are normally reissued every 12 months.

[116] S 31F.

[117] S 22(3)(e).

[118] S 167A.

[119] D Galeano, D Langenkamp, W Shafron and C Levantis, *Australian fisheries surveys Report 2003: economic performance of selected fisheries in 2000–01 and 2001–02. ABARE Report Prepared for the Fisheries Resources Research Fund* (2004); S Vieira, R Wood and D Galeano, *Australian Fisheries Survey Report 2006: Results for Selected Fisheries, 2003–04 and 2004–05, ABARE Report Prepared for the Fisheries Resources Research Fund* (2007); S Vieira and L Hohnen, *Australian Fisheries Surveys Report 2007: Results for Selected Fisheries, 2004–05 and 2005–06, ABARE Report Prepared for the Fisheries Resources Research Fund* (2007).

[120] Presently, ITQs have been introduced for at least 20 fisheries, representing around 34% of the Australian catch. These include the Commonwealth bluefin tuna fishery and the southeast trawl and non-trawl fishery, the inshore rock lobster fishery off New South Wales and South Australia and Tasmania, the abalone fisheries off New South Wales, Victoria, South Australia, Western Australia and Tasmania, the crab fisheries off Queensland, South Australia and Tasmania, and certain sectors of the pearl and oyster

been adopted the extent of such rights varies considerably, making it difficult to provide a single, complete account of Australian ITQs. However, all fishing rights are creatures of statute and as such they share certain common attributes. In part these are influenced by the Commonwealth Fisheries Management Act and constraints inherent in the common law, and in part by the exigencies of fishing practice. The most important common attributes are the objectives of each legislative regime and the general nature of the fishing rights, including entitlement, transferability, allocation, rent extraction, and enforcement.

The objectives of each State's fisheries legislation are broadly consistent with the Commonwealth Fisheries Act 1991.[121] In general, they aim to ensure the ecologically sustainable development of fisheries, although some go into considerable detail as to the extent of this. It is also notable that the economic objectives for fisheries are far less explicit, or absent in some cases.[122] The form of each holding varies, although most States provide scope for a mix of permits and licences.[123] With three important exceptions, State legislation is silent on the proprietary nature of fishing rights, suggesting that this is a matter for determination by the courts where appropriate. The Tasmanian Living Marine Resource Act 1995 provides that all living marine resources are owned by the State.[124] Moreover any fish specifically provided for under a licence are the property of the holder

fishery. On the Southern Bluefin Tuna see F Meany, 'The Introduction of Individual Transferable Quotas into the Australian Sector of the Southern Bluefin Tuna Fishery', in R Shotton (ed) *Case studies on the allocation of transferable quota rights in fisheries* (Rome, FAO, 2001) 212. On the Southeast trawl fishery see R Shotton, 'Initial Allocations of Quota Rights: the Australian Southeast Trawl Fishery' *Ibid* 187. On the inshore Rock Lobster fishery see GR Morgan 'Initial Allocation of Harvesting Rights in the Rock Lobster Fishery of Western Australia' in Shotton, *Ibid* 136; W Ford and D Nicol, 'Initial Allocation of Individual Transferable Quotas in the Tasmanian Rock Lobster and Abalone Fisheries' in Shotton, *Ibid* 171. On the abalone fishery see R Metzner *et al*, 'Initial Allocation of ITQs in the Western Australian Abalone Fishery', *Ibid* 144. See generally, Morris, n 101 above. Also B Kaufman *et al*, *Fish Futures. Individual Transferable Quotas in Fisheries* (Kiama, Fisheries Research and Development Corporation/Fisheries Economics, Research & Management, 1999).

[121] See Queensland Fisheries Act 1994 s 3(3); Northern Territories Fisheries Act 1988 (as amended up to 2005) s 3; New South Wales Fisheries Management Act 1994 s 3; Victoria Fisheries Act 1995 s 3; South Australia Fisheries Management Act 2007 s 7; Tasmania Living Marine Resources Act 1995 s 7; Western Australia Fish Resources Management Act 1994 s 4.

[122] For example, the Queensland Fisheries Act 1994 makes no reference to economic objectives.

[123] See Queensland Fisheries Act 1994 s 49; Northern Territories Fisheries Act 1988 (as amended up to 2005) ss 11, 17 and 17; New South Wales Fisheries Management Act 1994, Pt 4 (licences); Victoria Fisheries Act 1995 ss 38 (licence) and 49 (permit); South Australia Fisheries Management Act 2007 s 52; Tasmania Living Marine Resources Act 1995 s 60; Western Australia Fish Resources Management Act 1994 s 66.

[124] S 9(1).

of the licence.[125] Section 10 of the Victoria Fisheries Act 1995 provides that the State 'owns all wild fish and other fauna and flora found in Victorian waters'. Title then passes to holders of fishing rights when the fish are taken from such waters. This approach is echoed in the most recent legislative regime, the South Australian Fisheries Management Act 2007, which explicitly claims Crown ownership of all aquatic resources of the State.[126] Such rights of ownership in the aquatic resources of the State pass

> to the holder of a licence, permit or other authority granted under this Act when taken in accordance with that licence, permit or other authority

or

> to any other person when taken lawfully in circumstances in which no licence, permit or other authority is required under this Act for the taking.[127]

However, at no point is a pre-capture interest established for the holders of fishing rights. Ownership only arises upon capture, suggesting that rights remain in the form of usufructs. Further regard should also be had to the New South Wales legislation which establishes a 'share' in a share management fishery.[128] However, although the language of the entitlement parallels corporate terminology, the contingency of the share on a licence, its limited duration and the payment of period charges for the share weaken the analogy with ordinary corporate shares, which are accepted forms of property.

Initial allocation of fishing rights was primarily on the basis of catch history and the principle of equal distribution.[129] To ensure this, highly successful use has been made of independent advisory panels, whose role it is to recommend allocation formula.[130] In all cases, initial allocation of quotas was made without charge. As a matter of policy the Australian government has indicated its intention to extract rents from fisheries.[131] Although it has not done so, it has recovered the costs of implementing management programmes.[132] In all cases conditions may

[125] S 9(2).
[126] S 6(1).
[127] S 6(2)(a), (b).
[128] S 41A.
[129] Arnason, n 94 above, 4.
[130] *Ibid* 5.
[131] DPIE, *New Directions for Commonwealth Fisheries Management in the 1990s: A Government Policy Statement* (Canberra, Australian Government Publishing Service, 1989).
[132] This is usually through licence fees. More recently costs have increased in order to cover increased enforcement activities. See A Cox, 'Cost Recovery in Fisheries Management: The Australian Experience'. Paper presented at the IIFET Conference, Corvallis, 2000. Available at <http://oregonstate.edu/dept/IIFET/2000/papers/cox2.pdf> (accessed 20 October 2008).

attach to the fishing right.[133] Common restrictions include transfers being limited to holders of a fishing licence in the fishery, restrictions on the maximum and minimum size of holdings, and restrictions on foreign ownership.[134] The duration of the various fishing rights varies, although in all cases these are limited, or subject to revocation.[135] Fishing rights are generally transferable, both permanently, and for the duration of the season, unless explicitly prohibited.[136] However, given the limited number of participants in most Australian fisheries, transfers are uncommon. Again, in most instances, proprietary interests may be created over the fishing right.[137] Compensation for the loss or cessation of a fishing right broadly follows the approach at the Commonwealth level.[138] In general, compensation is payable when rights are terminated or acquired during the currency of the holding and duration of the limited entry fishery under the management plan. Where the limited entry scheme ends, no compensation is usually payable. This serves to protect the rights of individual fishermen from indiscriminate treatment, rather than protect a strong proprietary interest.

[133] See Queensland Fisheries Act 1994 ss 61–2; Northern Territories Fisheries Act 1988 (as amended up to 2005) ss 11(7), 16(3) and 17(1); New South Wales Fisheries Management Act 1994 s 221D; Victoria Fisheries Act 1995 s 39; South Australia Fisheries Management Act 2007 s 55; Tasmania Living Marine Resources Act 1995 s 62; Western Australia Fish Resources Management Act 1994 s 69.

[134] See generally, Kaufman *et al*, n 120 above.

[135] See Northern Territories Fisheries Act 1988 (as amended up to 2005) s 11(7); New South Wales Fisheries Management Act 1994 ss 73 and 104(4)(b); Victoria Fisheries Act 1995 ss 38 and 49; South Australia Fisheries Management Act 2007 s 56; Tasmania Living Marine Resources Act 1995 s 80; Western Australia Fish Resources Management Act 1994 s 67. *Cf* Queensland Fisheries Act 1994 s 53, which leaves the duration open; Also Northern Territories Fisheries Act ss 16(3) and 17(1)(a)(iii), which leave the term of permits open.

[136] See Queensland Fisheries Act 1994 s 65; Northern Territories Fisheries Act 1988 (as amended up to 2005) ss 12A–12B; New South Wales Fisheries Management Act 1994 s 79 (shares). Licences are not transferable—s 104(4)(d); Tasmania Living Marine Resources Act 1995 s 82; Western Australia Fish Resources Management Act 1994 ss 135 and 140. Under South Australia Fisheries Management Act 2007 s 57 and Victoria Fisheries Act 1995 s 50B, fishing rights are not transferable unless expressly permitted. As McIlgorm and Tsamenyi note, fishing rights as a form of property are transferable unless expressly restricted. M Tsamenyi and A McIlgorm, 'Enhancing Fisheries through Legislation—Australia's Experience', in Shotton, n 39 above.

[137] See Queensland Fisheries Act 1994 s 73(6); Northern Territories Fisheries Act 1988 (as amended up to 2005) s 9; New South Wales Fisheries Management Act 1994 s 71; Victoria Fisheries Act 1995 s 59; South Australia Fisheries Management Act 2007 s 116(5); Western Australia Fish Resources Management Act 1994 s 127.

[138] See Queensland Fisheries Act 1994 ss 42A–42C, 59(2), 63(7) and 68(7); New South Wales Fisheries Management Act 1994 ss 44(3) and 115; Victoria Fisheries Act 1995 ss 63 and 64C; South Australia Fisheries Management Act 2007 ss 42(3)(j), 58 and 128(2)(b) provide quite strong compensatory mechanisms, including reductions in rights; Tasmania Living Marine Resources Act 1995 s 300; Western Australia Fish Resources Management Act 1994 s 130. The Northern Territories Fisheries Act 1988 is silent on the matter.

As in all common law jurisdictions the basic position is that fishing constitutes a public right.[139] And whilst this may be restricted through legislation, it may not be abrogated through the creation of common law rights of property.[140] This is a powerful constraint on ownership. Thus in *Commonwealth v Yarmirr*, the High Court confirmed that the Crown does not enjoy full ownership of the territorial sea. More specifically

> [i]t would be inconsistent with the public rights to fish and to navigate that were recognised as qualifying those sovereign rights, for purposes of municipal law, to treat the right and title vested as absolute and unqualified ownership.[141]

This leads to a potential difficulty, for it is clear that the fisheries legislation in South Australia, Tasmania and Victoria designate the States as owners of marine living resources. A literal reading of the legislation suggests extensive ownership rights, although the extent of ownership may simply indicate a form of holding sufficient to enable the subsequent grant of proprietary interests to fishermen. It may also be taken to reinforce the fact that residual authority to exclusive use of resources is vested in the State. The creation of private property through fishing rights also runs counter to the position that there is no, or only very qualified, ownership of wild animals.[142] In *Re Vincenzo, Lucia and Rocco Musumeci and others* it was observed:

> Under the common law, with rare and notable exceptions, fish in their natural habitat belong to no one. … Commonwealth fisheries controls exist by reason of the powers of the Commonwealth in relation to fisheries in waters under its sovereignty. In waters under the control of the Commonwealth, the Commonwealth Parliament has legislated to establish controls upon the taking of certain fish as a form of resource management.[143]

Interestingly, this suggests a form of qualified holding or guardianship, which may be consistent with other vested interests in maritime spaces

[139] *Attorney General for British Columbia v A-G for Canada* [1914] AC 153, 168–71. The leading Australian case here is *Harper v Minister for Sea Fisheries* where the High Court noted that: 'the right of the owner of the soil over which the waters flow (whether the owner be the Crown or not) to enjoy the exclusive right of fishing in those waters or to grant such a right to another as a *profit à prendre* is qualified by the paramount right to fish vested in the public. … It was held that, after Magna Charta [*sic*], the Crown, in whom the title to the bed of tidal navigable rivers was vested, was precluded from granting a private right of fishery, the right of fishery being in the public.': (1989) 168 CLR 314, [10] (Brennan J).

[140] *Bienke v Minister for Primary Industries* [1996] FCA 1220, [54]; (1996) 135 ALR 128, [54]. It is generally accepted that a public right can be controlled through legislative powers, and it requires little consideration of the extent of the Crown's authority. See L Herschell in *Dominion of Canada v A-Gs for the Provinces of Ontario, Quebec, and Nova Scotia*, [1898] AC 700, 709.

[141] *Commonwealth v Yarmirr* [2001] HCA 56, [70]; (2001) 184 AJR 113, [70]; (2001) 208 CLR 1, [70].

[142] *Yanner v Eaton*, n 146 above, [24].

[143] [1989] AATA 252.

and resources. This is very much reflected in the cases on fishing rights, where the courts have been at pains to stress the essentially qualified property status of any fishing right. The Federal Court has reiterated how the right to amend any right was by virtue of 'the exercise of powers inherent at the time of its creation and integral to the property itself.'[144] This suggests an inbuilt capacity to modify property rights to ensure certain public interests, which is presumably delimited by the objectives of the relevant fisheries legislation.

In general, the Australian courts have taken a broad view of what constitutes property, recognising possession, managerial control, common law rights and privileges, and statutory rights and privileges as property.[145] This approach extends to fisheries entitlements. A review of these decisions indicates that courts have found it difficult to reconcile the new statutory forms of property with existing property structures. What is clear, however, is that such forms of property are inherently limited in order to facilitate certain public interests. In Australia, the courts' general approach to property is to categorise it as a legal relationship comprised of typical property type incidents.[146] This appears to have afforded the Australian courts scope to recognise a high degree of property in fishing rights. In *Harper*, the High Court considered whether a statutory right to exploit abalone was akin to a property right. In holding the right to be so, Brennan J stated that:

> When a natural resource is limited so that it is liable to damage, exhaustion or destruction by uncontrolled exploitation by the public, a statute which prohibits the public exercising a common law right to exploit the resource and confers statutory rights on the licensees to exploit the resource to a limited extent confers on those licensees a privilege analogous to a *profit à prendre* in or over the property of another. A fee paid to obtain such a privilege is analogous to the price of a *profit à prendre*; it is a charge for the acquisition of a right akin to property.[147]

He makes an important distinction between fishing licences, which give rise to property, and other licences, such as liquor licences, stating that only the former relate to access to a resource. Although the court considered the entitlement analogous to a *profit à prendre*, it went on to note,

[144] *Minister of Primary Industry and Energy v Albert Bruce Davey* [1993] FCA 574. [54] (2 December 1993); (1993) 119 ALR 108, [54]; (1993) 47 FCR 151, [54].

[145] A chose of action was held to be proprietary for the purposes of s 51(xxxi) in *Georgiadis v Australian & Overseas Telecommunications Commission* (1994) 179 CLR 297. Also *Minister of State for the Army v Dalziel* (1944) 68 CLR 261; *Bank of NSW v The Commonwealth* (1948) 76 CLR 1, 349; *The Commonwealth v Tasmania* (1983) 158 CLR 1. A statutory right to payment was held to be property in *Health Insurance Commission v Peverill* (1994) 179 CLR 226.

[146] See *Minister of State for the Army v Dalziel, Ibid* 285 (Rich J); *Yanner v Eaton* [1999] HCA 53, [27]; *R v Toohey; ex p Meneling Station Pty Ltd* (1982) 158 CLR 327, 342.

[147] As per Brennan J, at [19]: n 139 above.

explicitly, that it is 'an entitlement of a new kind' and that it arises as part of a system designed to conserve resources.[148] In *Pennington v McGovern*, the Supreme Court of South Australia had to decide whether an abalone licence issued under statute was a property right, and hence could be the subject of a trust.[149] King CJ held that the licence was a transferable right having value, and that:

> the right to hold it notwithstanding that its exercise is subject to the direction and instructions of another, are all, in my mind, indicia of rights of property and I have no difficulty in reaching the conclusion that the rights conferred by the licence are proprietary in character.[150]

Australian courts have been quite consistent in their treatment of fishing rights as proprietary in nature.[151] They have also have relied quite heavily upon the right to alienate fishing rights as evidence of their proprietary nature.[152] As the FAO Legislative Study 'Legislating for property rights in fisheries' indicates, the right to transfer tends to support the conclusion that something is property.[153] Thus, in *Austell v Commissioner of State Taxation*, the Western Australian Supreme Court held that a fishing licence under that State's legislation and the rights conferred by it were proprietary in nature and within the definition of 'property' under the Stamp Act.[154] This was so notwithstanding that the transfer was subject to consent. In *Kelly v Kelly*, the High Court held that a transferable authority to fish for abalone could constitute partnership property.[155] In *Pyke v Duncan*, the court found that a licence was not property available to a sheriff for seizure in satisfaction of a Writ of Fi Fa.[156] However, this approach seems to have been unduly influenced by the marked contrast between licences and other stronger forms of property, and in *Fitti*, O'Loughlin J described the decision in *Pyke* as being at variance with the decision of the High Court in *Harper* and the Supreme Court in *Pennington*.[157] In *Tasmanian Seafoods Pty Ltd v MacQueen* it was held

[148] *Ibid*.

[149] (1987) 45 SASR 27.

[150] *Ibid*, 31. This was approved by Olsen, J in *Edwards and Deep Sea Ark (Aust) PTY Ltd v AM Olsen and the State of South Australia* (1996) 67 SASR 266.

[151] See also *Tasmanian Seafoods P/L v Peters* [1999] QSC 144; *Gasparinatos v State of Tasmania* (1995) 5 Tas R 301;

[152] As Legoe J stated in *Pennington*, 'the fishing licence is proprietary in the sense that it is capable of being transferred *in accordance with the fiduciary obligations* which are placed upon the licence holder': n 149 above, 45.

[153] FAO Legislative Study, n 94 above, 169.

[154] (1989) 20 ATR 1139.

[155] (1990) 92 ALR 74, 78.

[156] (1989) VR 149.

[157] *Re Berardino Fitti; Albert Bruce Davey and Ian Bruce Davey v the Minister of Primary Industries and Energy and Australian Fisheries Management Authority* [1993] FCA 57; (1993) 40 FCR 286; (1993) 117 ALR 287.

that because a particular fishing authority was inalienable, it could not constitute trust property.[158]

One must be careful not to overstate the proprietary nature of these rights. Although the Court clearly stated that fishing licences were property in *Fitti*,[159] there are limits to the extent and quality of such rights. On appeal to the full Federal Court, it was held that 'the right to fish within territorial waters is an attribute of the Commonwealth's sovereignty, rather than a proprietary right available under private law'.[160] The court continued:

> In the instant case, the units may be transferred, leased, and otherwise dealt with as articles of commerce. Nevertheless, they confer only a defeasible interest, subject to valid amendments to the [Northern Prawn Fisheries Management] Plan under which they are issued.[161]

Similarly, in *Bienke*, the full Federal Court held that a fishing boat licence does not create an interest based upon antecedent property rights, but rather is a new species of statutory entitlement dependent on the terms of the statute.[162] These cases illustrate the difficulty in converting what was formerly a public right into a private right. We should also note that a number of cases evidence a determination to curtail the scope of section 51(xxxi) rights to just compensation for acquisitions of property.[163]

Legal excludability serves as a means of creating property in fungible, unascertained resources. The strongest such legal rights are in the form of quotas. Where quotas have been introduced, they possess a degree of term, security and transferability. It is notable that these incidents are manifest most strongly in respect of other private persons as a right to exclude them from a fishery. However, there remain significant limits on these incidents including a short or contingent duration, uncertain quality of title and qualified rights of alienation. It should also be pointed out that in most cases fishing rights may be cancelled for a breach of the conditions of use. The other important incident of ownership, the right to manage the thing, firmly resides with the States. A clear indicator of the limited property status of the statutory fishing

[158] [2005] TASSC 36, [42].
[159] Above n 157, [21].
[160] Above n 144, [23].
[161] *Ibid* [45]. The NPF Plan is the Northern Prawn Fisheries Management Plan.
[162] Above n 140, [54].
[163] Brennan labels this susceptibility of certain rights to statutory change without implicating compensation under the Constitution, the doctrine of inherently vulnerable rights. S Brennan, 'Native Title and the Acquisition of Property under the Australian Constitution' (2004) 28 *Melbourne University Law Review* 28, 53. See also Gummow J in *Commonwealth v WMC Resources Ltd* [1998] HCA 8; 194 CLR 1; 152 ALR 1, [196]–[203]; Brennan J in *Peverill*, n 145 above, 245.

rights is the fact that compensation is qualified in most cases. These factors indicate that a stringent form of property as against the State is for the time being unacceptable. Given their broad recognition as property rights, but their absolute contingency on statutory provisions, McIlgorm and Tsamenyi suggest the point is not so much whether fisheries entitlements constitute property, but the extent to which legislation enhances such rights.[164] Most of the cases noted above have arisen in respect of section 51(xxxi) of the Constitution, and concern expropriation of property on just terms. As such the underlying concern of the courts is not ultimately about the articulation of property rights, but the protection of persons from incursions by the State.[165] For this reason, section 51(xxxi) is often construed liberally with a tendency towards a wider definition of property.[166] This does not mean that all such rights are the same, and it seems clear that statutory fishing rights, in whatever form, fall someway short of common law rights of ownership in this context. Fishing rights are always dependant on statute and not antecedent property rights. As such it is essential to consider the terms of the statute to ascertain the quality of the property right. From the foregoing analysis it is clear that the statutory fishing rights are necessarily defined by reference to certain public interests.[167] Moreover, the careful circumscription of fishing rights clearly demonstrates the influence of how the existing framework of property rights and judicial appreciation of the legal implications of their decisions have limited the proprietary nature of fishing rights. In light of this, it seems unlikely that Australian fishing rights will meet the degree of 'propertyness' sought by fisheries economists as the best form of management tool. This is illustrated by the Australian Government's review of Commonwealth fisheries policy and, in particular, the cancellation

[164] Tsamenyi and McIlgorm, n 39 above, 95, citing Gummow J in *Yanner v Eaton*, n 146 above, [85]. Also, Kirby J has stated that 'it is necessary, in every case, to examine the legislation in question so as to determine whether the nature of the interests involved are inherently defeasible or, however "innominate and anomalous" so partake of the quality of "property" that the guarantee in s 51(xxxi) is attracted'. *Commonwealth v WMC Resources Ltd* n 163 above, [237].

[165] Section 51(xxxi) of the Constitution has two effects. First, it confers power to acquire property and it conditions the exercise of that power on the provision of just terms. Second, by implication of the requirement to make the condition of just terms effective, it requires that compensation be paid for the compulsory acquisition of property. See Brennan CJ in *Mutual Pools & Staff Pty Ltd v The Commonwealth* (1994) 179 CLR 155, 177.

[166] See *Bank of NSW v The Commonwealth* (1948) 76 CLR 1, 349–50; *Minister of State for the Army v Dalziel* (1944) 68 CLR 261, 290 (Starke J); *Attorney-General (Cth) v Schmidt* (1961) 105 CLR 361, 370–371; *Clunies-Ross v The Commonwealth* (1984) 155 CLR 193, 201–202; *Australian Tape Manufacturers Association Ltd v The Commonwealth* (1993) 176 CLR 480, 509.

[167] N 144 above and the accompanying text.

provisions in the Fisheries Management Act.[168] The Act permits the cancellation of fishing rights for the non-payment of fees and breach of licence provisions. The fishing industry in particular argued that removal of the cancellation provision would improve the security of the fishing rights, which would in turn encourage investment. Apart from the question of whether this is necessary and could be replaced by a system of increased penalties, this has raised some important questions about the extent to which the removal of such provisions would be consistent with Australia's international obligations to conserve and manage fisheries. It is notable that any proposed cancellation would not be implemented for high seas fisheries to ensure full compliance with Article III(8) of the FAO Compliance Agreement, which lists withdrawal of fishing rights as one of the sanctions for breach of the Agreement.[169] Although Australia is under no obligation to retain cancellation provisions for domestic fisheries, this would be inconsistent with the section 8.1.9 of the FAO Code of Conduct for Responsible Fisheries, which mirrors the Compliance Agreement. As Mason and Gullett observe, it would be inconsistent with Australia's strong stance against IUU fishing and result in an incongruous duopoly between high seas and coastal water fisheries.[170] This provides a clear illustration of how law constrains the scope of property rights in fisheries.

Despite the weak nature of the property rights, there is evidence that ITQs have improved the efficiency of fisheries.[171] There is also evidence that they have resulted in greater stewardship of the resource.[172] Some commentators note that cooperation with fishermen has improved and made the enforcement of regulations easier.[173] Others point out that fishermen have taken increased responsibility for the management of the fishery.[174] These factors continue to drive the calls for stronger private rights in fisheries.

[168] Department of Agriculture, Fisheries and Forestry—Australia. *Looking to the future: a review of commonwealth fisheries policy* (Canberra, Australia, Commonwealth Department of Agriculture, Fisheries and Forestry, 2003) esp 30.

[169] Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas 1993, (1994) 33 *ILM* 968.

[170] R Mason and W Gullett, 'Cancellation provisions in Australia's Commonwealth-managed fisheries' (2006) 30 *Marine Policy* 270, 277.

[171] See D Campbell, 'Change in Fleet Capacity and Ownership of Harvesting Rights in the Australian Southern Bluefin Tuna Fishery' in R Shotton (ed), *Case studies on the effects of transferable fishing rights on fleet capacity and concentration of quota ownership* (Rome, FAO, 2001).

[172] See A McIlgorm and A Goulstone 'Changes in Fishing Capacity and Ownership of Harvesting Rights in the New South Wales Abalone Fishery' in Shotton (ed), *Ibid*.

[173] PP Rogers and JP Penn, 'Shark Bay Prawn Fishery—A Synoptic History and the Importance of "Property Rights" in its Ongoing Management' in Shotton, n 39 above.

[174] PP Rogers. 'Toward a better future in Fisheries Management: Rights Based Fisheries Management in Western Australia' in Shotton, n 84 above, 172.

(b) Canada

In Canada, the federal government has constitutional authority for the regulation of sea coast and inland fisheries.[175] However, the 10 provinces have jurisdiction over property rights.[176] The matter is further complicated by the fact that indigenous peoples have certain constitutional rights to natural resources that limit federal control of fisheries. Canada is a party to the Law of the Sea Convention, the Fish Stocks Agreement and numerous regional and bilateral fisheries instruments. Historically, the regulation of fisheries in Canada has occurred without any formal national policy and has tended to be rather *ad hoc*.[177] Individual quotas have emerged as part of this process. However, fisheries regulation is increasingly coordinated by federal legislation, which sets the conservation and management objectives for the industry. The principal regulatory instrument is the Fisheries Act 1985, although this is to be replaced by a new Fisheries Act. Under the Fisheries Act 1985, the power to allocate licences and leases is assigned to the Minister of Fisheries and Oceans.[178] The Minister's duties under the Fisheries Act are to manage, conserve and develop the fishery on behalf of Canadians in the public interest.[179] The Act does not specify the precise nature of fishing entitlements. As such, fisheries entitlements have evolved according to need and circumstance. Given the heterogeneous nature of Canadian fisheries and the conservation focus of the Department of Fisheries and Oceans (DFO), fisheries management systems tend to be quite diverse within Canada, and ITQs have only been implemented when requested by a sufficient majority of participants in a fishery.[180] Currently, IQs are used in over 40 fisheries and account for over 50 per cent of the value of landings.[181] Analyses of catch and stock data suggest that ITQs have performed well according to economic and biological indicators.[182] Each system differs according to the needs of the fishery, meaning that

[175] Constitution Act 1867 s 91.

[176] S 92. Canada is also comprised of three territories which are mandated by the federal government to regulate fisheries.

[177] See DL Burke and GL Brander, 'Canadian Experience with Individual Transferable Quotas' in Shotton (ed) n 84 above, 151.

[178] Fisheries Act 1999 s 7.

[179] See *Radil Bros Fishing Co v Canada* (2000) 197 FTR 169, para 33.

[180] Burke and Brander, n 177 above, 152.

[181] *Ibid*.

[182] *Ibid*. Also BR Turris, 'A Comparison of British Columbia's ITQ Fisheries for Groundfish Trawl and Sablefish: Similar Results from Different Programmes with Different Objectives, Designs and Processes' in Shotton, n 39 above, 254; KE Casey *et al*, 'The Effects of Individual Vessel Quotas in the British Columbia Halibut Fishery' (1995) 10 *Marine Resource Economics* 211; RQ Grafton, 'Performance and Prospects for Rights Based Fisheries Management in Atlantic Canada' in Crowley (ed) n 58 above, 145; RQ Grafton, 'Individual transferable quotas: theory and practice' (1996) 6 *Reviews in Fish Biology and Fisheries* 5, 16–17.

issues of use, management and alienability vary according to local needs. Despite the wide variations in the instruments used, some general points can be made about the legal nature and effect of Canadian ITQs.

All fishing in Canada takes place under licences, which operate in parallel to quotas or other access limitations. Where a quota is used this usually takes the form of an ITSQ. Although there are no statutory limits on the term of the holding, neither are there any guarantees of its permanence. Arnason presumes that they last as long as licences, which, according to section 7(2), normally run for nine years, but may be granted for longer periods.[183] However, in practice they are automatically renewed, suggesting that, at least informally, the quota is in perpetuity.[184] Moreover, although licences and leases may be suspended under section 9 for breaches of their conditions, they are rarely revoked.[185] The Fisheries Bill 2007 indicates that future allocations will be made for periods of up to 15 years in order to provide stable access to resources.[186] Most quotas are transferable within the year, meaning that the holder retains the permanent share, but may transfer the year's catch, or a share of it, to another licence holder.[187] It should be noted that the DFO does not formally acknowledge such transfers, rather it views such transactions as involving the issue of a licence to replace one that is relinquished.[188] There were initial objections to transferability, for fear that it would lead to the consolidation of quotas in the hands of corporate interests.[189] However, this has become more relaxed and now more than half of all quotas are fully transferable.[190] Holders are restricted to Canadian persons or companies that hold fishing licences. Although there are restrictions on the maximum number of shares a person may hold, this is easy to circumvent and difficult to enforce in practice.[191] The Fisheries Act 1985 is silent as to whether fishing privileges can be the subject of property-type dealings. However, this is confirmed by case law, which indicates that such privileges can form the object of partnership property or trusts.[192] It should

[183] N 94 above, 14.

[184] Burke and Brander, n 177 above, 154.

[185] *Ibid* 151–2. *Cf Everett v Canada (Minister of Fisheries and Oceans)*, where the Federal Court of Appeal held that a Minister had not revoked a licence but rather refused to issue a licence in light of a breach of a cod catch quota. (1994) 169 NR 100.

[186] Cl 37.

[187] Burke and Brander, n 177 above, 153–4.

[188] See the comments of Handrigan J in *Green v Harnum* (2007) 27 BLR (4th) 322, [16]–[17].

[189] *Ibid* 153.

[190] In any case Burke and Brander note that even in fisheries where transfers were restricted, an ITQ could be transferred if the seller was also willing to give their general fishing licence. *Ibid* 154.

[191] Arnason, n 94 above, 15.

[192] See *Loder v Citifinancial Canada Inc*. (2007) 38 CBR (5th) 234; *Cabot v Hicks* (1999) 176 Nfld & PEIR 48; *Green v Harnum*, n 188 above.

be noted that courts are unwilling to allow such dealings where they are intended to circumvent licence holding requirements.[193] These factors indicate that quotas have many of the attributes of a property right in an economic sense.

The most important limit on the property right characteristics of the fishing privileges is the retention of management rights by the government. Section 43 of the 1985 Act sets out the competence to make regulations, including, inter alia, to manage and control fisheries, and conserve and protect fish. There is no indication of any priorities to such objectives. In contrast, the Fisheries Bill provides a clear structure to management objectives, with conservation being a priority. The Bill plans to enable Ministers to enter into Fishery Management Agreements.[194] These are legally binding arrangements with organizations representing licence holders intended to further the protection and conservation of fish or participation in management decisions. Such agreements could include matters such as harvesting rules and monitoring operations. Clearly such arrangements may invest the holders of fishing entitlements with some degree of management responsibility. However, it is important to note that they do not remove the residual responsibility for management from the hands of government, nor do they form a component of the fishing privilege. Rather they are a contractual option in management that may be extended to licence holders and other groups.

Initial allocation of ITQs evolved on the basis of historic catch records.[195] This was often adjusted by factors such as vessel size, capacity and value of investments made in fishing capital. In some fisheries, reference was made to equity and equality so as to establish more equal initial allocations.[196] Although this proved to be a difficult process, the heavy consultation process ensured a say by stakeholders in the fishery.[197] There were no charges for initial allocations which amounted to a windfall for recipient fishermen. Despite increased prosperity in some fisheries, no attempts have been made to capture any rents. In 1996 a licence fee set at five per cent of the average annual catch was established for all fisheries.[198] Although this is quite high in comparison to other fisheries around

[193] *Paul Loder v Citifinancial Canada Inc et al*, [2006] 256 Nfld & PEI R 262, [23]–[24]. See also *Philpott and Hopkins v Sullivan* [2007] 267 Nfld & PEI R 183. It should be noted that *Paul Loder* was overturned on appeal. The Court of Appeal noted that such arrangements were widespread and in the absence of any explicit statutory exclusion the matter was best left to the DFO to pursue. *Loder,* above n 192 [22]. The use of trust mechanisms to circumvent licence restrictions is now addressed in cl 31(b) of the Fisheries Bill 2007.

[194] Cls 43–6.

[195] Burke and Brander, n 177 above.

[196] *Ibid*.

[197] *Ibid*.

[198] At the time of writing the fee and fee level were under review.

the world, it is unlikely that it would even cover the costs of managing the current system.[199] As such quotas have not directly generated any wider social wealth.

Under the common law there exists a public right to fish in navigable waters.[200] This may only be abrogated by the enactment of competent legislation. This says nothing as to whether property rights can be implemented in maritime spaces. The legal nature of the ITQ is rather ambiguous from a statutory perspective. Section 3(1) provides that

> [n]othing in this Act shall be taken to authorise the granting of fishery leases that confer an exclusive right to fish in property belonging to a province.

Whilst this rules out grants that may infringe the property rights of the provinces, it leaves the quality of the grant open to interpretation. That said, it is notable that fishing authorities are scrupulous about using the term 'fishing privilege' in official documents.[201] This is clearly intended to distinguish them from property rights in full. This is in line with the common law position that licences are to be regarded as privileges.[202] The absence of proprietary rights in fishing privileges has been reaffirmed in a number of cases.[203]

As an entitlement derived from statute, the fishing licence depends upon the provisions of the legislation granting the entitlement. Courts have acknowledged that the grant is discretionary and is to be determined by the relevant minister. In *Joliffe v The Queen*, the Supreme Court held that there is no vested right in a licence beyond the terms granted for the duration of the licence.[204] Thus the plaintiff could not enjoy the entitlement beyond the original duration of the licence, despite an assurance by the minister that the licence would be re-issued.[205] Similarly, in *Radil Bros Fishing Co v Canada*[206] it was held that:

[199] R Arnason *et al*, 'Costs of fisheries management: The cases of Iceland, Norway and Newfoundland' (2000) 24 *Marine Policy* 233.

[200] *R v Gladstone* [1996] 2 SCR 723, [184]; [1996] 9 WWR 149, [184]. See also *Alford v Canada* (1997) 31 BCLR (3d) 228, [16]–[21].

[201] See Burke and Brander, n 177 above, 151.

[202] In *National Trust Co v Bouckhuyt et al*, the court held that: '[a] dispensation or licence properly passes no interest, but only makes an action lawful which without it had been unlawful.': (1987) 61 OR (2d) 640, citing *Heap v Hartley* (1889) 42 Ch D 461. *Cf Sanders v British Columbia (Milk Board)*, where a milk quota was held to be property for the purpose of the Family Law Act (2005) 14 RFL (6th) 175.

[203] *Chiasson v Canada (A-G)* 2008 FC 616, [23].

[204] [1986] 1 FC 511 (Strayer J). Approved by Major J in *Comeau's Sea Foods Ltd v Canada (Minister of Fisheries and Oceans)*, [1997] 1 SCR 12, 24.

[205] However, where a licence is cancelled for breach of a condition attached to the licence, the minister would have to act fairly. See *Lapointe v Min of Fisheries & Oceans* (1984) 9 Admin LR 1.

[206] Above n 179.

> a fishing licence is merely a privilege to participate in a fishery for the duration of the licence. A grant of a fishing licence vests no interest or property in the grantee. There is no automatic right of renewal of a fishing licence.[207]

This was reaffirmed in *Area Twenty Three Snow Crab Fisher's Association v Canada* (Attorney General), where the Federal Court held that possession of a licence was a mere privilege, possession of which did not require a Minister to consult before reducing the TAC.[208]

However, there are other decisions which suggest that licences constitute a form of property. Thus, according to the Federal Court of Appeal a licence is to be considered the 'property of the Crown'.[209] A frequently quoted dictum regarding the 'property' like nature of a fishing licence is that of Joyal J. in *Johnson v Ramsay Fishing Co Ltd et al*.[210]

> 'These findings, however, are only with respect to the determination, as between the plaintiff and the company and no one else, as to which one can claim a beneficial interest in the licence. These findings relate solely to that issue assuming, of course, that ownership and beneficial interest are equated. It is true that by the nature of the licence, it constitutes an asset which wastes away from year to year, the Crown reserving at all times its unfettered discretion to issue or to refuse to issue a licence. The evidence before me, however, is that a roe herring licence is an asset on which the cost of acquisition may be depreciated or which may be rented out from time to time for gainful sums. There is also evidence that since 1975 and to the present day, roe herring licences have in fact been issued for all applicants who were licencees at the terminal date of 1974 or 1977, as the case may be, and who otherwise continued to comply with the conditions of issuance from time to time. In my mind, such a licence becomes something pretty close to a chose in action, as is a patent right, a bank note, a share in a company. *In more vernacular language, it is property*.'

In *British Columbia Packers Ltd v Sparrow*,[211] the court upheld a trust arrangement over a fishing licence, and in *Re Bennet*, for the purposes of a bankruptcy, a fishing licence was held to be property until it expired at the end of the year.[212] However, these cases do not conclusively establish the licence as a private property right. Although licences may have private law attributes and they may be the object of property-type dealings,

[207] At [36], confirming the decisions in *Joys v Minister of National Revenue* (1995) 128 DLR (4th) 385 (FCA) 394, 399 and *Re Bennett and Bennett* (1988), 24 BCLR (2d) 346 (SC), 350–351.

[208] (2005) 279 FTR 137, [44]–[45].

[209] *Joys v Minister of National Revenue* (1995) 128 DLR 385, 394. The case concerned the seizure and judicial sale of a vessel involved in smuggling. It arose for consideration whether the fishing licence attaching to the vessel formed part of the sale. According to the original trial judges this was to be the case. However, this was overturned on appeal.

[210] (1987) 47 DLR 544, 588.

[211] (1989) 35 BCLR 334.

[212] Above n 207.

they remain public entitlements. As such the security of such privileges is entirely dependent upon the political support of the DFO.[213] This conclusion is consistent with the well-established principle that fisheries are a common property resource belonging to all Canadian people.[214] In order to clarify this point, the proposed Fisheries Bill 2007 provides in its preamble that fisheries are a common property resource and makes it clear that a licence does not confer any right of property.[215]

One consequence of this status is that the relationship between the public regulation of fishing entitlements and the holder's private interests is very much governed by principles of public law, or principles of legal reasoning, as they were more fundamentally portrayed in chapter 4. In *Comeau's Sea Foods Ltd v Canada*, the Supreme Court was faced with the issue of whether or a Minister had the authority to revoke a licence after it had been granted.[216] In reaching its decision, the court paid particular attention to the scope of discretion, noting that in the absence of specific provision in the Fisheries Act, the discretion was only limited by natural justice. 'The Minister is bound to base his or her decision on relevant considerations, avoid arbitrariness and act in good faith'.[217] Of particular note is the Court's characterisation of the duty as one that is in the public interest: 'it is the Minister's duty to manage, conserve and develop the fishery on behalf of Canadians in the public interest.'[218] The court then went on to place particular emphasis on the consequences of the decision. As such the Minister's appreciation of the 'immediate policy concerns affecting the fishing industry' were ultimately decisive.[219]

Canadian fisheries have shown some success in resource stewardship.[220] Fishing methods have become less damaging,[221] and pressure to raise the TAC has lessened.[222] Burke and Brander note that quota fishermen are more willing and able to participate in the management

[213] A consequence of this characterisation of the quotas system is to subject it to public law constraints and not private law considerations. Thus, in *Jada Fishing Co v Canada (Minister of Fisheries and Oceans)*, the review process against the award of quotas was subject to the standard of reasonableness. [2002] FCA 103, paras 40–41.

[214] *Comeau's Sea Foods Ltd v Canada (Minister of Fisheries and Oceans)* [1997] 1 SCR 12, para 36.

[215] Clause 30(1).

[216] Above n 214.

[217] *Ibid*, para 35.

[218] *Ibid*, para 36.

[219] *Ibid*, paras 45–6.

[220] It is interesting to note, however, that the Canadian courts have also focused on the fact that economic efficiency is not the principal goal of Canadian fisheries policy. Thus the powers of the Minister 'do not include a trust or statutory or fiduciary duty to assure one particular fisher be allowed to fish the largest possible amount of fish to make the most personal economic gain'. See Radil n 179 above, para 33. Also *Carpenter Fishing Corp. v Canada*, [1998] 2 FC 548 (CA) at paras 34–7.

[221] Burke and Brander, n 177 above.

[222] See Turris, n 182 above, section 5.1.

of the fishery and pay for management activities such as research and monitoring.[223] However, there is also evidence that ITQs have a built in incentive to increase discards of lower value fish. Although this may be addressed through better monitoring and enforcement, it is still a significant problem. Conservation and management authority is still in the hands of regulators, and improvements in this respect tend to be incidental to the aims of reducing fleet capacity and improving the efficiency of the fishery. It is notable that the Fisheries Bill makes it clear that conservation and protection of fish and their habitat is the principal object of a Minister's licensing powers.[224] Other matters including the economic viability of the fishery are additional considerations. It would appear that ITQs simply make any such regulatory restrictions easier to swallow for ITQ holders who know that the value of their interest will be protected through market forces.[225]

(c) Iceland[226]

Iceland is a constitutional republic. Although its legal system has similarities with continental legal systems, it is most influenced by the Nordic family and, in particular, Denmark, from whom it gained independence in 1874. The economy is heavily dependent upon fishing and related industries, although this is less important than was historically the case. Along with New Zealand, Iceland has pioneered rights-based fishing. Icelandic fisheries have been subject to rights-based management since 1975, when individual quotas were introduced into the herring fishery.[227] In 1990 the Fisheries Management Act placed all commercial fisheries under a complete system of ITQs.[228] This Act was re-issued as the Act on Fisheries Management 2006, which is a consolidated version

[223] Above n 177.

[224] Clause 25.

[225] If TACs are limited or catches restricted, then this is likely to drive up fish prices and the value of quotas. Of course this depends on how fishing effort is controlled and whether increased efforts are directed at non quota stocks.

[226] See HH Gissurarson, *Overfishing: The Icelandic Solution* (London, The Institute of Economic Affairs, 2000); R Arnason, 'Property Rights as a means of Economic Organisation' in Shotton (ed), n 84 above, 14; B Runolfsson and R Arnason, *Evolution and Performance of the Icelandic ITQ System* (1996). Online paper. Available at http://www.hi.is/~bthru/iceitq1.html; HH Gissurarson. 'The Politics of Enclosures with Special Reference to the Icelandic ITQ System,' in Shotton, (ed) n 39 above, 1.

[227] R Arnason, 'Property Rights as an Organizational Framework' in Crowley (ed), n 58 above, 115.

[228] Fisheries Management Act, No. 38, 15th May 1990. There are minor exemptions for recreational and line fishing subject to certain limits—see Arts 5–6.

of fisheries legislation since 1990.[229] Most of Iceland's major commercial species are regulated through the quota system, accounting for more than 97 percent of the commercial value of fisheries. The basic position is that all exploitable marine fish stocks to the limit of Iceland's 200nm exclusive fishing zone are the common property of the Icelandic nation.[230] Iceland is a party to the Law of the Sea Convention, the Fish Stocks Agreement, as well as a number of regional and bilateral fisheries instruments.

Under the 2006 Act, no commercial fishing may take place in Icelandic waters without a fishing permit.[231] Permits are only available in respect of registered vessels that possess certificates of seaworthiness, and are subject to certain limitations in respect of foreign ownership and adherence to conditions of use.[232] The management of fishing effort operates under a system of TACs and catch quotas. The Ministry of Fisheries determines the TAC on an annual basis for the most important species in the fishery on the basis of recommendations from the Marine Research Institute.[233] Harvesting rights for species subject to a TAC are then allocated to individual vessels according to their quota share to produce an annual catch quota (this is also known as an annual catch entitlement or ACE). The initial quota allocations were made freely, upon the basis of catch histories. In effect these allocations are ITQs with some limits on holdings and transfers. Although quota shares are nominally attached to vessels, they can be held by individuals, for example, if a vessel is lost. Vessels and quotas can be transferred independently of each other.[234] The quota share remains unchanged from one year to the next,[235] whereas the annual catch quota varies in accordance with the TAC. Quota shares are held indefinitely.[236] That said, the 2006 Act makes it clear that the allocation of harvesting rights constitutes neither ownership nor irrevocable control over harvesting rights.[237] It is not clear the extent to which quota shares can be subject to other property dealings, although Article 12 makes it clear that a quota cannot be transferred without the prior approval of a person

[229] Act 116 of 10 August 2006.

[230] Art 1. It is notable that the ITQ system appears to apply outside Iceland's EEZ. Iceland negotiates with other countries that exploit straddling or shared stocks to establish a TAC for that stock. Iceland's share of this TAC is then subject to the ITQ system. See Gissurarson, 'Politics', n 226 above, 8–9.

[231] Art 4.

[232] Art 5.

[233] Art 3.

[234] Art 12.

[235] Art 8.

[236] They are better described as indefinite, as they are not strictly permanent in the sense that they can be revoked at any time by legislation. See SF Edwards, 'Ownership of Renewable Ocean Resources' (1994) 9 *Marine Resource Economics* 253, 273.

[237] Art 1.

holding a contractual lien over a vessel to which it attaches. This suggests that the quota share forms an important part of the assets to which liens may attach. Both quotas shares and annual catch quotas are divisible and transferable.[238] This is subject to certain limits on the accumulation of quota shares by a single person, either natural or legal.[239] Any transfer of a quota share requires confirmation from the Directorate of Fisheries before it becomes effective. In the past, the transfer of annual catch quotas was subject to restrictions so as to protect local employment in the short run and prevent speculation in quota shares.[240] These limits are no longer found in the 2006 Act.

Discussion of the Icelandic quota system has focused on two issues, the allocation of rights, and the quality and effectiveness of quotas in terms of ensuring the future of the fishing industry. As in other countries, allocation has been particularly problematic. Gissurason notes that the introduction of quotas in Iceland was not straightforward, despite general agreement that measures were necessary to conserve fish stocks.[241] The system could only be implemented by convincing those participating in the fishery that they would be better off under the new system.[242] This was made easier by the collapse of the herring fishery in the late 1960s.[243] The fact that the pelagic fishing industry was relatively homogenous made the introduction of ITQs easier.[244] As most fishermen were bargaining for rights from a similar starting point and with a common objective, the impact of ITQs would be the same across the board. This can be contrasted with the difficulties in the heterogeneous demersal fishing industry.[245] Most significant in resolving conflicts was the allocation of quotas on a catch history basis. This effectively maintained the status quo of private interests at the expense of other values such as efficiency, utility, fairness and equality.[246] Arguably, it would also seem to correspond to some idea of propriety, in that fishermen who have fished a resource are in a better position to

[238] Arts 12 and 15 respectively.

[239] Art 13 of the 1990 Act.

[240] See Art 2 of the 1990 Act. Arnason notes that only a few interregional transfers have been blocked by the ministry. Arnason, n 227 above, 117.

[241] Gissurarson, '*Overfishing*', n 226 above, 26.

[242] Gissurarson notes that a 'commons like the fish stocks in Icelandic waters will only be enclosed if the private interests of those utilising the commons can be made to coincide with the public interest.' *Ibid* 27.

[243] *Ibid*.

[244] Libecap argues that the lack of common goals and risks in heterogeneous fisheries produces obstacles to institutional change. GD Libecap, *Contracting for Property Rights* (Cambridge, Cambridge University Press, 1989) 22–3.

[245] This fishery includes cod and other deep water fish. Gissurarson, '*Overfishing*', n 226 above, 13.

[246] An allocation of quotas through an auction system was proposed initially. Although this would have raised more capital for the State and put the quota in the hands of the most efficient producer, this was rejected. Gissurarson, *Ibid* 34.

continue to engage in that activity, and are in the best position to monitor and maintain that fishery.

Allocation issues have resurfaced with calls for the introduction of some form of fishing tax.[247] This tax would be distributive and not corrective in the sense that it would internalise any perceived externalities as, for example, a carbon or pollution tax would. The justification for a tax is that any rent derived from a fishery is created by limiting the supply of a resource, rather than the efforts of those utilising the resource. Fishermen allocated an initial quota received a windfall profit without improving their fishing practices. However, as Gissurarson points out, this was necessary to secure their political approval and participation.[248] Moreover, it is difficult to see who else would be more deserving of the allocation.[249] Provision is now made under the 2006 Act for a fishing fee.

A related problem is the subsequent consolidation of fishing entitlements into fewer hands.[250] Large public companies have consolidated control over quotas. It remains open to debate whether the consolidation of control of ITQs is beneficial or not. One the one hand it provides for the distribution of wealth amongst a wide group of shareholders—the dispersion of shareholding being quite diluted in Iceland.[251] However, as with any such form of holding this may raise questions of corporate accountability, and whether the interests of the company and its shareholders are commensurate with the public interest in the fishing industry.

In recent years the Icelandic ITQ system has been the subject of litigation, firstly attacking the unconstitutional nature of the system, and secondly in relation to the legal consequences of holding an ITQ. Underlying the former disputes were disagreements about the allocation of valuable entitlements. In 1998, opponents of ITQs challenged the legislation, claiming that the restriction of fishing entitlements to those who owned fishing vessels during the first years of the ITQ system was unconstitutional.[252] The Supreme Court held this to be the case, noting that such a

[247] T Gyfalson, 'Stjorm fiskveidaer ekki einkamal utgerdarmmana' T Helgason and O Jonsson (eds), *Hagsaeld I hufi* (1990), cited in Gissurarson *Ibid* 61. See also RN Johnson, 'Rents and Taxes in and ITQ Fishery' in R Arnason and HH Gissurarson, *Individual Transferable Quotas in Practice* (University of Iceland Press, 1999) 205.

[248] Gissurarson, *Overfishing*', n 226 above, 62–63. In this respect one can recall the points raised by Acheson in respect of lobster fishing and the strength of different interest groups in the political process. Those with a coherent, immediate and personally significant interest in a decision are more likely to make themselves heard during the decision-making process than those with an undefined or watered down interest in a decision. See, eg, the position of fishermen in contrast to the general tax payer.

[249] *Ibid*.

[250] G Pálsson and A Helgason, 'Figuring fish and measuring men. The individual transferable quota system in the Icelandic cod fishery' (1995) 28 *Ocean and Coastal Management* 117, 132. Also Gissurarson, '*Overfishing*', n 226 above, 52–5.

[251] Gissurarson, *Ibid* 54.

[252] Gissurarson, *Ibid* 25.

restriction violated constitutional guarantees of economic freedom and equal treatment.[253] As a result of this case, the Icelandic government removed the restriction on allocation. Significantly, in early 2000, a district judge ruled that the initial allocation of ITQs on the basis of catch histories was unconstitutional in that it violated the aforementioned guarantees. According to the judge, it discriminated between quota recipients and other Icelanders.[254] However, this decision was overruled by the Supreme Court, who held that the allocation was neither arbitrary nor discriminatory. The Supreme Court stated that it was fair to treat differently those with a vested interest in fishing activities and those with no such discernable interest.[255] In any case, because entitlements were transferable they were not strictly confined to a narrow group of people. Finally, the Court stated that the ITQ system did not violate the principle of economic freedom since the restriction was necessary in the face of collapsing stocks and an uneconomic fishing industry.

In 1993, the Supreme Court held that a transfer of an ITQ should be taxed as a transfer of property, whereas the transfer of the ACE is to be taxed as income for the seller.[256] In 1996, a district judge held that ITQs could not be considered as collateral for loans because the fish stocks that are the object of the right remained the common property of the Icelandic nation.[257] However, two Supreme Court decisions in 1999 recognised the ITQ as indirect collateral of the fishing vessels to which they were attached.[258] It has also been held that ITQ should be treated as property for the purposes of divorce proceedings and that inheritance tax is payable on the market value on an ITQ.[259]

A number of points should be taken from these decisions. First, the Supreme Court has adhered to the policy that protection of stocks takes precedence over other factors such as economic freedom. Secondly, once persons acquire a property interest in a thing, then it is clear that it may start to take on a character of its own, independent of the statutory provision. Thus quotas are commonly used as security and others may obtain a vested interest in them. This is important because if the government purports to modify such a right then it will interfere, not just with an individual holder's private interests, but also the commercial interests of banks and other lending agencies in the marketplace. The Government may be unwilling to retract rights once granted so as to

[253] *Ibid*.
[254] *Ibid*.
[255] *Ibid*.
[256] *Ibid* 5.
[257] *Ibid* 24.
[258] *Ibid*.
[259] *Ibid*. Gissurarson notes that this is not a legal decision. Presumably it is an administrative decision.

avoid unintended and significant commercial repercussions. That said, successive pieces of fisheries legislation have refrained from characterising quotas as property. This seems to be deliberate. Under Article 72 of the Icelandic Constitution, the right of property is deemed to be inviolate. Moreover, no person 'may be obliged to surrender his property unless required by public interests. Such a measure shall be provided for by law, and full compensation shall be paid.' To characterise quotas as property in full could place an important restriction on the capacity of the government to manage fish stocks. The result is a rather awkward, bifurcated classification of quotas as property for practical commercial purposes, but not as a general right.

Although Icelandic ITQs are more sophisticated property rights than those in most other fisheries, they remain imperfect property rights.[260] Marine living resources remain the common property of the Icelandic nation and the State maintains important management rights and residual authority to determine allocations and use of quotas. Strictly speaking, ITQs are harvesting rights rather than property in the fish stock. In this sense there is no ownership of the fish in their natural state. However, the ITQ system amounts to a *de facto* right over fish in their natural state, since the rights established are exclusive. A number of writers regard ITQs as property rights because they exhibit the incidents of exclusivity, divisibility, transferability, and permanency.[261] They are as near to a property right as the physical nature of the resource permits.[262] Thus, Icelandic fisheries have been reduced to a fungible or unascertained resource, in which ITQ holders enjoy a distinct, transferable, and exclusive share. The Icelandic ITQ remains a weak form of property, and fisheries experts have argued for the private property elements of ITQs to be further consolidated.[263] There have been calls to deregulate the transfer of ITQs so as to achieve the most efficient allocation of quota holdings.[264] The main problem is perceived to be ITQs' lack of permanence and security.[265] As the right is

[260] For example, Arnason suggests that the right is about 70% of a full property right. Arnason, n 226 above. Gissurarson calls the rights, rights of extraction similar to the right to fell timber in a forest or to hunt deer. Gissurarson, '*Overfishing*', n 226 above, 36.

[261] See those authors cited in foot n 226.

[262] Gissurarson, '*Overfishing*', n 226 above, 40.

[263] See Prof. Arnason and Prof. Hannesson's statements to the Icelandic Parliament prior to the revision of the Fisheries Management Act 1990. Noted in Gissurarson, *Ibid* 20.

[264] Gissurarson argues that there should be fewer conditions on their use. More speculation would facilitate transfers and so reduce the size of the fishing fleet and enable quota holder to be more flexible in their operations. Gissurarson, *Ibid* 40.

[265] At present the duration of the ITQ is indefinite. See Arnason, n 94 above, 26. This is to be distinguished from permanence. Arnason notes that it is likely that ITQs will in future be limited to 25 years or subject to a steady reduction in the annual allocation in order to facilitate a State resale scheme. Clearly, this is likely to ensure that some of the economic gain is captured by the State.

impermanent, holders have no long-term interest in the productivity and conservation of the resource.

In terms of resource stewardship, the Icelandic experiment has been relatively successful, although commentators remain tentative in their conclusions.[266] TACs are generally adhered to and there are indications that the fishing industry is prepared to accept stringent conservation and management regulations by the State in order to help rebuild stocks.[267] There is also increased participation by the fishing industry in the regulation of fishing in order to improve enforcement.[268] In simple economic terms ITQs appear to be a success.[269] Fishing effort in Iceland is becoming more efficient and stocks are improving.[270] The over-capacity of the fishing fleet and fishing effort have been reduced, whilst maintaining the value of the fishery. All commentators agree that the actual economic return on the fishery is substantial.[271] However, the problems of by-catches and high grading still exists and are estimated to be at the same level as before the introduction of ITQs.[272] By-catch has been tackled in part by allowing an easy transfer of quotas in one species for another.[273] High-grading, the discarding of lower value catches, such as juvenile fish of the same species, remains a problem.[274]

(d) New Zealand

The legal system is derived from the English common law, with a distinctive element dealing with the rights of the Maori peoples. As in other common law legal systems there is no ownership of fish in their natural state and a public right of fishing. New Zealand has no single written

[266] Arnason, n 94 above, 32. Also, E Eythórsson, 'A decade of ITQ-management in Icelandic fisheries: consolidation without consensus' (2000) 24 *Marine Policy* 483.

[267] Arnason, *Ibid*.

[268] *Ibid*.

[269] See generally, B Runolfsson, 'ITQs in Iceland: Their Nature and Performance' in R Arnason and H Gissurarson (eds) *Individual Transferable Quotas in Theory and Practice* (University of Iceland Press, 1999). Gissurarson notes that pelagic fisheries have generally improved, although demersal fishing remains uncertain: n 226 above, 44–8.

[270] Gissurarson, *Ibid* 11–12. Arnason, n 227 above, 119–126 Arnason does note (at pp 122–126) that stocks of demersal species have not improved since the introduction of the ITQ system, although this appears to be the result of the TAC being set too high and other environmental factors.

[271] See R Arnason, *The Icelandic Fisheries: Evolution and Management of a Fishing Industry* (Oxford, Fishing News Books, 1995) and 'Property Rights as a Means of Economic Organisation' n 226 above; S Agnarsson, 'Fisheries Management in Iceland' in Committee on Natural Resources, *Committee on Natural Resources: Report with Appendices* (2000), cited in Arnason, n 94 above, 32.

[272] Arnason, n 94 above, 32.

[273] Gissurarson, '*Overfishing*', n 226 above, 34.

[274] *Ibid* 56.

constitutional document. Rather it is located in a range of statutes, judicial decisions and constitutional conventions. Unlike Australia, property rights receive no special constitutional protection.[275] In addition to any obligations under customary international law, New Zealand is party to the Law of the Sea Convention 1982, the Fish Stocks Agreement, and three regional fisheries management organisations.[276]

Marine fisheries within New Zealand's EEZ are usually regarded as common property over which the State holds management rights. Until New Zealand claimed an EEZ in 1978, the domestic fisheries industry was relatively small. Within territorial waters, inshore fishing was regulated under the Fisheries Act 1938, which provided for a restrictive licensing system, gear restrictions and obligations on fishing boats to use certain ports, and then by the Fisheries Act 1963, which provided for a system of open entry. Deepwater fisheries were exploited almost exclusively by Japanese, Korean and Soviet fishermen. However, increased pressure on fisheries in the late seventies brought the industry to a critical point and necessitated a paradigmatic shift in approach. In 1983, the Fisheries Act established a system of ITQ's in newly available deepwater fisheries, and in 1986 this was further extended to other commercially exploited species both inshore and deepwater.[277] Since then New Zealand has pursued a strong policy of property rights-based fisheries management. In other jurisdictions, the potential disenfranchisement of fishermen from free access to a resource has resulted in some fierce political opposition to property rights-based fisheries management. In New Zealand this was mitigated by the exclusion of foreign fishing effort and the expansion of domestic fishing capacity at the same time that rights were being allocated. This allowed for an easier and more successful transition to property rights-based fishing.

The principal regulatory instrument is the Fisheries Act 1996, subject to amendments in the Fisheries Act 1996 Amendment Act 1999.[278] The

[275] There is no specific protection of property rights in New Zealand's Bill of Rights. However, there is general protection against infringements of certain individual freedoms and liberties. See *Baigents* case [1994] 3 NZLR 667.

[276] The Commission for the Conservation of Antarctic Marine Living Resources, the Commission for the Conservation of Southern Bluefin Tuna, and the Western and Central Pacific Fisheries Commission.

[277] The New Zealand ITQ system has been extensively considered by a number of authors. See RO Boyd and C Dewees, 'Putting Theory into Practice: Individual Transferable Quotas in New Zealand' (1992) 5 *Society and Natural Resources* 179; IN Clark, PC Major and N Mollet, 'The Development and Implementation of New Zealand's ITQ Management System' in Neher *et al*, n 25 above, 117; C Dewees, 'Fishing for profits: New Zealand fishing industry changes for 'Pakeha' and Maori with individual transferable quotas' in G Pálsson and G Petersdottir (eds), *Social Implications of Quota Systems in Fisheries* (Nordic Council of Ministers, 1997) 91; R Connor, 'Initial Allocation of Individual Transferable Quota in New Zealand Fisheries' in R Shotton, (ed) n 120 above, 222.

[278] The Fisheries Act 1986 remains partly in force, and is the principal legislation in respect of the day to day operation of the fisheries management system. The 1996 Act deals with issues of allocation.

main purpose of this Act is to 'provide for the utilisation of fisheries resources while ensuring sustainability'.[279] To this end section 9 establishes three environmental principles to be adhered to: species must be maintained above a level that ensures their long-term viability, biological diversity of the aquatic environment should be maintained, and habitats of particular significance for fisheries management should be protected. Section 10 incorporates the best available information and precautionary principles. The Act also places particular emphasis on consultation with consideration of the rights of quota holders.[280] ITSQs are the dominant form of management system and the Government has made it policy to bring all future commercial fisheries into this Quota Management System (QMS).[281] As with other quota systems, the QMS was introduced to address overfishing and overcapitalisation in the fishing industry and in terms of improving the economic condition of New Zealand fisheries the QMS is generally regarded as a success.[282] Over exploitation has been reduced and the stock size of most species has increased or stabilised.[283] The fishing industry is highly profitable and strongly supportive of the quota system.

In property terms, the right is an ITSQ which represents a share of the Total Allowable Commercial Catch (TACC).[284] Under the 1996 Act, this was allocated in perpetuity.[285] It is also fully transferable.[286] However, shares of an ITSQ cannot be transferred.[287] It is also subject to a limitation on foreign investment in quota holdings and a range of quota aggregation restrictions.[288] Transfers must be registered. Indeed, any transfer is deemed ineffective until registered.[289] This serves to reinforce the holder's security as a certified hard copy of the certificate of registry is deemed to be a guarantee of ownership.[290] Each ITQ generates an

[279] Section 8.

[280] See, eg, s 21 on the setting of the TAC and s 25 on the alteration of quota management areas.

[281] It currently applies to 97 species groups, accounting for the majority of commercial species within New Zealand's EEZ. Under Sections 18–23, the Minister is empowered to bring new stocks within the QMS.

[282] See CM Dewees, 'Assessment of the Implementation of Individual Transferable Quotas in New Zealand Inshore Fishery' (1989) 9 *North American Journal Fisheries Management* 131; CJ Batstone and BMH. Sharp, 'New Zealand's quota management system: The first ten years' (1999) 23 *Marine Policy* 177, 189.

[283] Batstone and Sharp, *Ibid*.

[284] It should also be noted that catch history forms a proprietary interest. The catch history, which is used to determine the extent of a quota holding, can also be transferred for value. See Section 37 of the Fisheries Act 1996.

[285] Section 27 of the 1996 Act which defined the characteristics of ITQ was repealed by the 1999 Act. However, quota entitlements retain the same basic characteristics.

[286] Section 132.

[287] Section 132(2).

[288] Sections 57–8 and 59–61 respectively.

[289] Section 155.

[290] Section 168.

annual catch entitlement (ACE), which specifies the amount of the fish stock that can be caught in a given catch period.[291] The ACE is also fully transferable on a yearly basis and must also be registered.[292] The value of the quota is dependent upon the quantum and value of fish available under the TACC, which may be increased or reduced, even to zero.[293] Some degree of stability is established under sections 20–3. Where there is a reduction in the TACC, and the Crown owns any unallocated shares for a stock, then these shall be allocated to each quota holder in proportion to their share of stock.[294] No deductions are made to a quota holding where the TACC is reduced and no unallocated shares are held by the Crown. Where the TACC is increased, the Crown may make a proportionate deduction to each person's quota share and make such new quota shares available to other eligible persons thereby establishing a new quota holder.[295] Quotas may also be affected by changes to the quota management area, which may result in changes to the apportionment of quotas. It is also important to emphasise that the commission of an offence under the 1996 Act may result in the forfeiture of a quota and associated holdings.[296]

Although quotas are not subject to conditions other than those mentioned above, no taking of fish or other aquatic life or seaweed, by whatever method, may take place without a permit. Such permits may be subject to a range of conditions relating to areas, methods, vessels, types and amounts of gear, taking and handling of fish aquatic life, landing places, and fishing times. Such conditions may be added, revoked or amended from time to time.[297] The only real limit is that permits for the same stock should have substantially the same conditions.

Other property-type dealings with quotas and ACEs are limited by the Act to mortgages, the conditions for which are set out in sections 136–46, and caveats in sections 147–52. Originally reductions in quotas were compensated.[298] However, such measures are no longer appropriate in light of the proportionate adjustments of quotas noted above. These and the above attributes establish a permanent property right to harvest fish, not the fish themselves.[299] However, as we shall see below, this right appears

[291] The ACE is distinct from the ITQ from which it is derived. It is generated at the start of each fishing year and forms the basis for fishing effort. As such the ITQ becomes a tradable perpetual harvesting right in a particular fishery, which generates an annual right to an ACE.

[292] Section 133.

[293] Section 20.

[294] Section 22.

[295] Section 23.

[296] Section 255.

[297] Section 92.

[298] Section 50G was repealed by Section 11 of the Fisheries Amendment Act 2000.

[299] Connor, n 277 above, 231.

to attract a minimal level of constitutional protection, as with other property rights under New Zealand law.

Under the common law, the presumption is that the Crown owned the fish in New Zealand waters, and was empowered to create an exclusive right of access. However, this was challenged in the mid-1980s by the Maori, who claimed that the allocation contravened the Treaty of Waitangi and the Fisheries Act 1983. Two injunctions were granted in 1987, and the matter was only resolved in 1992, when the government reached a settlement.[300] This provided for the allocation of almost 20 per cent of New Zealand fisheries to the Maori peoples.[301] The primary reason for introducing property rights into New Zealand fisheries was to ensure economic efficiency. Just as other beneficial effects of the QMS are incidental to this, so too the settlement of indigenous claims was a consequence of the QMS, rather than an end in itself.[302] This shows how, at least indirectly, the QMS can be used to meet wider social policies.

The courts in New Zealand have paid a high degree of deference to the clear Parliamentary intent to establish property rights in fisheries. In the early case of *Jenssen*, the Court of Appeal noted that quotas were a valuable asset.[303] In *Cooper v AG*, the High Court regarded quotas as a form of property. However, in the absence of any constitutional protection akin to the US Constitution's Fifth Amendment, Parliament was entitled to take the right away without compensation when this was in the public interest.[304] This approach was followed in *New Zealand Fishing Industry Association (Inc) v Minister of Fisheries.* In a joined appeal, concerning judicial review of the Minister's decision to reduce the TACC without compensation, the Court of Appeal stated that:

> 'While quota are undoubtedly a species of property and a valuable one at that, the rights inherent in that property are not absolute. They are subject to the provisions of the legislation establishing them. That legislation contains the capacity for quota to be reduced. If such reduction is otherwise lawfully made, the fact that quota are a "property right", to use the appellants' expression, cannot save them from reduction. That would be to deny an incident integral to the

[300] Indeed the Fisheries Act ignited the conflict and resulted in a series of claims against the government, on the grounds that the Act infringed customary fishing rights. See *Te Weehi v Regional Fisheries Officer* [1986] 1 NZLR 680, where the court held that s 88(3) of the Act effectively preserved Maori fishing rights.

[301] This was achieved by a government purchase of fishing rights, and shares in fishing companies on behalf of the Maori. See J Munro, 'The Treaty of Waitangi and the Sealord Deal' (1994) 24 *UWLR* 389. Also M Hooper and T Lynch, 'Recognition of and provision for indigenous and coastal community rights using property rights instruments' in Shotton (ed), n 39 above, 199.

[302] Hooper and Lynch, *Ibid*, section 3.1.

[303] *Jenssen v Director General of Agriculture and Fisheries*, CA 313/91.

[304] [1996] 3 NZLR 480.

> property concerned. There is no doctrine of which we are aware which says you can have the benefit of the advantages inherent in a species of property but do not have to accept the disadvantages similarly inherent.'[305]

These and later decisions which imply the property nature of quotas has led the FAO to conclude that the property nature of quotas is well-settled in New Zealand.[306] It is notable, however, that the although the court referred to property rights in *New Zealand Fishing Industry Association (Inc) v Minister of Fisheries*, the matter was not decided on this basis. Although this renders this aspect of the judgment obiter, it was in no way controversial for the court to find that quotas were a form of qualified property, with the scope of the qualification being determined by the relevant statute. Interestingly, the case turned on whether the decision to cut the TACC was unreasonable, or more specifically, irrational. Here the court held that the decision to impose immediate and significant economic hardship in order to ensure fisheries were at the MSY required the Minister to have regard to the cost-benefits, and thus alternatives to the decision were unreasonable. This reduction of the dispute between a private right and public interest to one of reasonableness indicates how the parameters of legal reasoning play a key role in delimiting the scope of property rights.

Perhaps the most difficult issue faced by New Zealand has been the question of allocation. Initial quota allocations in deep sea fisheries were based on participation in the fishery, actual catch volume during the determinant year and on vessel capacity.[307] For the inshore fishery, allocation was based upon active participation in the fishery and catch history during the period 1982–4.[308] The underlying policy objective was to ensure that allocations were 'equitably based on fishermen's commitment to the industry at that time'.[309] Non-commercial fishermen were summarily excluded from the QMS fisheries.[310] For fishermen that believed they had been treated unfairly, a right of appeal was provided to the Quota Appeals

[305] *New Zealand Fishing Industry Association (Inc), New Zealand Federation of Commercial Fishermen (Inc.) and Simunovich Fisheries Limited, North Harbour Nominees Limited and Moana Pacific Fisheries v Minister of Fisheries and The Chief Executive of the Ministry of Fisheries*, CA82/97; *Treaty of Waitangi Fisheries Commission v Minister of Fisheries and Chief Executive of the Ministry of Fisheries*, CA 83/97; *Area 1 Maori Fishing Consortium and Ngapuhi Fisheries Limited v Minister of Fisheries and Chief Executive of the Ministry of Fisheries*, CA 96/97.

[306] See also, *Matiriki Ltd v Deadman & Lees* (Unreported CA15/99, 2 September 1999), *Kareltrust v Wallace and Cooper Engineering (Lyttelton) Limited* (Unreported, CA192/99, CA211/99, 17 December 1999). FAO Legislative Study, n 94 above, 159.

[307] Connor, n 277 above, 232.

[308] *Ibid*.

[309] *Ibid*.

[310] Arnason, n 94 above, 46. This effectively excluded all part-time fishermen, including many Maori.

Authority.[311] Given the high value of these entitlements, most litigation has focused on allocation of fishing entitlements, rather than their nature per se. Section 28E(3) of the 1983 Act provides that allocations made should be with regard to the commitment to and dependence on the taking of fish within the QMS. It was soon realised that this provision would provide wider grounds for claiming a quota entitlement than originally intended and the QAA was soon swamped by claims, some of which ended up in court.[312] Initially, the courts took a cautious approach to reviewing QAA decisions,[313] but eventually moved to a wide interpretation of those provisions.[314] The most significant claim was made in *Gunn v AG*, where the exclusion of part-time fishermen on the basis of the Director General's determination of 'commercial fishing' was challenged.[315] The court held that a requirement of substantiality that was used to narrowly define commercial fishing was repugnant to the definition of commercial fishermen under s 2 of the 1983 Act and overturned the initial award.[316]

The intervention of the courts resulted in legislative amendments that further restricted qualifications for a quota allocation.[317] Amendments restricting the allocation of quotas to those already holding permits for the species under the ITQ system and introducing a time bar on appeals, were soon challenged. In *Cooper v AG* it was claimed that they deprived the applicants of access to the courts, that they were entitled to retain quotas originally allocated, and that Parliament lacked power to deprive courts of their authority to hear a citizen's claim to have a legal right enforced.[318] The High Court held that the effect of s 28ZGA was to reverse the effect of *Jensen* and overrule the decisions in *Montgomery* and *Gunn*. Significantly, the court found that it did not have to respond to the claim that Parliament had no power to remove the plaintiffs' substantive rights. As the plaintiffs provided no authority in support of such a proposition their pleadings were struck out. In *Allan Guard v Seafood Consortium Ltd*, the Court of Appeal held that a fishing quota can lawfully be defined according to method as well as amount.[319] As the Minister may define

[311] Section 28 of the 1983 Act.

[312] See IP Clark, P Major and N Mollet, n 277 above, 128.

[313] See the High Court decision in *Jenssen v Director General of Agriculture and Fisheries* CP 1035/90.

[314] In *Montgomery v AG*, the High Court held that an allocation could not be refused just because catch returns were furnished in another person's name. CP 1445/80. See also *Esperance Fishing Co v Quota Appeal Authority*, M 714/90; *Wylie v Director General Agriculture and Fisheries*, CP 892/90; The Court of Appeal in *Jenssen v Director General of Agriculture and Fisheries*, CA 313/91.

[315] [1993] NZLR 108.

[316] *Ibid*, 112.

[317] Section 28I(4) and 28ZGA.

[318] Above n 304.

[319] [2001] NZCA 291, paras 16–20.

the TAC according to method, it follows that a quota may also be limited in the same way.[320] These decisions reaffirm the courts' close attention to the legislative provisions in determining the scope of (or entitlement to) property. Moreover, the statutory basis of such entitlement renders them particularly susceptible to interpretation in terms reasonableness.[321]

Initially it was intended to extract a resource rent from fisheries, and a resource rental was charged until 1994. However, the return was low, so this system was replaced by the Cost Recovery Act 1994, under which all fisheries management costs, including research and enforcement costs, are recoverable. In 2007–08, approximately NZ$31m or 33 per cent of the Ministry of Fisheries' costs are to be recovered. There appears to be a high degree of resource stewardship in New Zealand fisheries. This is supported by the data on the economic condition of the fishery. The ownership of quotas has tended to consolidate and limit the scope for new entrants.[322] The level of TACC has remained quite constant over much of the period covered by the Fisheries Act.[323] There is also anecdotal evidence that despite the TACC being effectively a negotiated settlement between industry and government, industry pressure to maintain high TACC has reduced.[324] This should not be overstated. In September 2007, the Minister of Fisheries made a significant reduction of the TACC for snapper using a precautionary approach based upon the high level of uncertainty and vulnerability of the stock, rather than any estimate of yield. Indeed, there was no assessment of the biological maximum sustainable yield, such being considered impossible to formulate. This resulted in legal challenge from industry.[325] In the judicial review proceedings, Miller, J. quashed the Minster's decision thereby reinstating an earlier, higher TACC. Miller, J. further indicated that the Minister was obliged to comply with section 13 of the Fisheries Act, which requires some assessment of stock levels and the use of the best available information, rather than too readily discount its possibility.[326] In light of this decision, the government has introduced an amendment to the Fisheries Act entitling it to continue to set the TACC on the same basis that it was entitled to prior to the challenge. Arnason points to the high degree of self-management by the industry, which

[320] Section 28C(2) of the Fisheries Act 1983.

[321] In the context of setting the TACC, this is emphasised by the Court of Appeal in *Sandford Limited v Minister of Fisheries*, CA 163/07, [2008] NZLR 160, paras 50 *ff*.

[322] JM Stewart and PD Callagher, 'New Zealand fisheries management: changes in property rights structure and implications for sustainability' (2003) 11 *Sustainable Development* 69.

[323] *Ibid*.

[324] S Kerr, R Newell and J Sanchirro, *Evaluating the New Zealand Individual Transferable Quota Market for Fisheries Management*. Motu Working Paper # 2003–02 (EconWPA, 2003) 15–6.

[325] *Antons Trawling Co v The Minister of Fisheries*, HC WN CIV 2007-485-2199 22 February 2008.

[326] *Ibid* [56], [61].

carries out scientific research and consults with the Ministry of Fisheries in the setting of the TACC.[327] Indeed, the QMS has increased the level of co-management with stakeholders (ITQ holders).[328] Although government maintains responsibility for setting standards and enforcement and auditing stakeholder activities, stakeholders are authorised to carry out important management functions, such as research, monitoring of stocks, setting harvest and sale rules, and, to a limited extent, enforcing rules through a system of penalties.[329] However, Yandle observes that there are some problems with external accountability of stakeholder groups and facilitating the involvement of small fishing groups and non-fisheries interests. These problems may result in changes to their operation.[330] There are also other problems with the system. Thus Annala notes that inshore fishermen have been known to discard non-target fish rather than purchase the corresponding quota.[331] In off-shore fisheries, vessels with observers onboard have returned a higher proportion of non-target species than vessels with no observers, indicating a practice of discarding.[332] It is difficult to assess the level of discards by way of comparisons because most fisheries were developed under the QMS. However, Boyd and Dewees suggest that improved enforcement and increased industry pressure have resulted in lower levels of discards.[333]

(e) United States

The US is not party to the Law of the Sea Convention, although the relevant provisions concerning fisheries regulation are applicable as a

[327] Above n 94, 51. Also, S Crothers, 'Administration of Enforcement Mechanisms for Rights Based Fisheries Management Systems' in Shotton (ed), n 84 above, 89; M Arbuckle and K Drummond, 'Evolution of Self-Governance by Individual Transferable Quotas' in Shotton (ed) n 39 above; M Harte, 'Fisher Participation in Rights-Based Management: The New Zealand Experience', n 84 above, s 2.

[328] This is permitted under Section 196B of the Fisheries Act 1996, which gives a statutory basis to stakeholder groups, or 'approved service delivery organisations' as they are referred to in the Act. See generally, R Bess and M Harte, 'The role of property rights in the development of New Zealand's seafood industry' (2000) 24 *Marine Policy* 331; KFD Hughey, R Cullen R and GN Kerr, 'Stakeholder groups in fisheries management' (2000) 24 *Marine Policy* 119; T Yandle, 'The challenge of building successful stakeholder organizations: New Zealand's experience in developing a fisheries co-management regime' (2003) 27 *Marine Policy* 179.

[329] See T Yandle, 'The promise and perils of building a co-management regime: An institutional assessment of New Zealand fisheries management between 1999 and 2005' (2008) 32 *Marine Policy* 132, 135.

[330] *Ibid* 140.

[331] JH Annala, 'New Zealand's ITQ System: Have the First Eight Years Been a Success or a Failure?' (1996) 6 *Reviews in Fish Biology and Fisheries* 43, 54.

[332] *Ibid*.

[333] RM Boyd and CM Dewees, above note 277.

matter of customary international law.[334] It is, however, a party to the Fish Stocks Agreement as well as numerous bilateral and regional fisheries instruments.[335] The United States has claimed an exclusive economic zone, within which approximately 90 per cent of commercial fishing takes place. The United States legal system is derived from the English common law system.[336] The common law provides for a public right of fishing and holds to the non-ownership of fish in the wild, as in other common law systems. As a federal State, the US is comprised of 50 States, with their own constitutions and legal systems, and the Federal Government. It should be noted that the US Constitution grants property rights strong protection from interference by the State. As we will see, this has placed an important limitation on the use of rights-based fishing instruments in the US. Fisheries regulation is shared between the States and Federal Government. States regulate marine fisheries up to three nautical miles from the shore.[337] Federal fisheries extend from 3nm to 200nm. The principal federal regulatory instrument is the Magnuson-Stevens Act 1996.[338] This was reauthorised in 2007, introducing new conservation objectives and providing increased scope for market based limited access programmes—or rights-based fishing.[339]

Federal fisheries are primarily the responsibility of Regional Fisheries Management Councils (Councils).[340] These Councils are charged with the responsibility for making basic fisheries policy.[341] In particular, each Council is to develop a Fishery Management Plan (FMP) for each fishery in its region.[342] Each FMP shall contain conservation and management measures necessary to 'prevent overfishing and rebuild overfished stocks, and to protect, restore, and promote the long-term health and stability of

[334] Professor Churchill indicates that the broad discretion afforded to coastal States in the Law of the Sea Convention make it difficult to assess what is custom. RR Churchill, The Impact of State Practice on the Jurisdictional Framework Contained in the LOS Convention' in AG Oude Elferink (ed), *Stability and Change in the Law of the Sea: The Role of the LOS Convention* (Leiden, Nijhoff, 2005) 91, 128. However, US fisheries legislation was intended to be compatible with the Law of the Sea Convention. Moreover, acceptance of the fisheries provisions of the Convention is implicit in the US ratification of the Fish Stocks Agreement.

[335] See NOAA, *International Agreements Concerning Living Marine Resources of Interest to NOAA Fisheries* (Silver Spring, Maryland, NOAA, 2008).

[336] The English common law was received into all States with the exception of Louisiana, which draws heavily upon French legal traditions. Louisiana still provides for a public right of fishing under s 452 of its Civil Code. See also *State v Barras*, 615 So 2d 285. However, the extent of this right appears somewhat uncertain as a result of the decision in *Parm v Shumate* (unreported): see 2006 WL 2513856.

[337] 43 USC § 1312.

[338] 16 USC §§ 1801–1884.

[339] Magnuson-Stevens Fishery Conservation and Management Reauthorization Act (Public Law 109–479).

[340] § 1852.

[341] § 1852(h).

[342] § 1853.

the fishery'.[343] They must further detail, inter alia, any relevant fisheries data, specific and measurable targets for fisheries, any necessary input controls and catch levels, monitoring systems and an impact assessment of environmental and socio economic factors relating to the fishery.[344] FMPs must also be consistent with 10 national standards on conservation and management.[345] At the heart of the FMP is the maximum sustainable yield (MSY) determination.[346] For each fishery, both the present and probable future conditions and MSY must be specified. The optimum yield, which is to be achieved, is defined as the amount of fish 'which will provide the greatest overall benefit to the Nation, with particular reference to food production and recreational opportunities', and

> which is prescribed as such on the basis of the maximum sustainable yield from such fishery, as modified by any relevant economic, social, or ecological factor.[347]

The FMP allocates domestic fishing harvests according to the MSY, with any remainder given to foreign vessels.[348] In the past, only nominal amounts have been left for foreign vessels.[349]

Originally, the Magnuson Act was passed due to fears that 'overfishing would cause irreversible environmental and economic damage before effective international fisheries agreements could be negotiated and implemented.'[350] It provided a number of mechanisms for the regulation of fisheries, including technology restrictions, licences, permits and subsidies.[351] However, these failed to reverse the decline in US fisheries. Initially,

[343] § 1853(a)(1)(A).

[344] § 1853(a)(1)(B) and (2)–(15).

[345] § 1851(a). Fishery and conservation measures must: (1) prevent overfishing while achieving the optimum yield from the fishery; (2) be based on the best scientific information available; (3) manage fish as a unit to the extent practicable; (4) not discriminate between residents of different states and if it is necessary to allocate fish among fishermen the allocation is to be fair and equitable, promote conservation, and carried out so that no person acquires an excessive share; (5) consider efficient utilization where practicable; (6) take into account variations and contingencies in the fishery; (7) minimise costs and avoid unnecessary duplication where practicable; (8) take into account the importance of fishery resources to fishing communities; (9) minimise bycatch to the extent practicable; and (10) promote the safety of human life at sea to the extent practicable. The Act requires that all FMPs be consistent with these national standards, as well as with other provisions of the Act and applicable law. See § 1854(a) and (b)(1). Guidelines based on the national standards have been produced and are available at 61 Fed Reg 32, 538–32, 554 (1996).

[346] § 1853(a)(3).

[347] § 1802(33).

[348] § 1853(a)(4)(A) and (B).

[349] RJ McManus, 'America's Saltwater Fisheries: So Few Fish, So Many Fishermen' (1995) 13 *Natural Resources and Environment* 13, 15.

[350] DM Ancona, 'Managing United States Marine Fisheries' (1990) 4 *Natural Resources and Environment* 23, 23.

[351] FT Litz, 'Harnessing Market Forces in Natural Resources Management: Lessons From the Surf Clam Fishery' (1994) 21 *Environmental Affairs* 335, 340; R Davies, 'Individually Transferable Quotas and the Magnuson Act: Creating Economic Efficiency in our Nation's Fisheries' (1996) *Dickinson Journal of Environmental Law and Policy* 267, 298–305.

overfishing was blamed on the excessive catches of foreign vessels.[352] However, once foreign vessels were excluded through the extension of a 200 mile exclusive economic zone, domestic fishermen expanded their efforts to fill the void. Moreover, the common pool problem remained.[353] This continued to result in overcapitalisation and over utilisation.[354] A further factor stimulating the introduction of IFQs was safety.[355] The US Coast Guard and the Department of Labor rated fishing as the second most dangerous occupation in the US,[356] the reason for this being the substantial risks vessels would take to capture as much as possible during the intense fishing derbies. Despite invective debates about rights-based mechanisms, they have been implemented in some fisheries. The mechanism of choice is the IFQ, which is defined as 'a Federal permit under a licence access system to harvest a quantity of fish, expressed by a unit or units representing a percentage of the total allowable catch of a fishery that may be received or held for exclusive use by a person.'[357] An ITQ has been officially designated as a transferable IFQ.[358]

The first fishery to introduce an IFQ was the surf clam and ocean quahog fishery. This system is illustrative of other systems.[359] These species are molluscs living on the ocean floor, and their physical nature makes them susceptible to a quota system. Under this system, the Council calculates the MSY and then distributes IFQs in a quantity equal to this total harvest.

[352] Commentators generally agree that this was the principal policy imperative. See WG Magnuson, 'The Fishery Conservation and Management Act of 1976: First Step Toward Improved Management of Marine Fisheries' (1977) 52 *Wash LR* 427, 432; WR Rogalski, 'The Unique Federalism of the Regional Councils under the Fishery Conservation and Management Act of 1976' (1980) 9 *Environmental Affairs* 163, 169; R Arnason, 'Theoretical and Practical Fishery Management', in EA Loayza (ed), n 94 above, 3; J Winn, '*Alaska v FN Baranof*: State Regulation Beyond the Territorial Sea After the Magnuson Act' (1986) 13 *Environmental Affairs* 282; Davies, n 351 above, 283–5.

[353] JE Wilen, 'US Fishery Regulation Policy: Lessons for Peru', in E Loayza (ed) n 94 above, 39, 42.

[354] S Macinko, 'Public or Private? United States Commercial Fisheries Management and the Public Trust Doctrine' (1993) 33 *Natural Resources Journal* 919, 922.

[355] See NRC, n 6 above, 36.

[356] Rieser, 'Prescription' n 1 above, 413.

[357] § 1802(23). The IFQ does not have to exhaust the TAC. In the Alaska halibut and sablefish fisheries the IFQ is only a part of the TAC. The rest of the TAC is allocated to CDQs and catches by other gear. As such it is unclear whether the IFQ will remain constant. Quotas must be associated with a vessel upon which the quota is actually caught. NRC, n 6 above, 73. In the ocean quahog/surf clam and wreckfish fisheries, quotas are not restricted in these ways: *Ibid* 63, 68. Accordingly, the quality of the property right in the former is somewhat less than in the other IFQ fisheries.

[358] See the Senate Report on the Sustainable Fisheries Act. Senate Report No 104–276 (1996) 10.

[359] This was provided for by Amendment Eight to the Atlantic Surf Clam Fishery and Ocean Quahog Fishery. See Litz, n 351 above, 340. Restrictions in the form of limiting the time a vessel could fish in a single trip and creating fishing seasons proved to be ineffective to deal with overcapitalisation. Thus, in 1978, the NMFS estimated fishermen possessed the capacity to fish 247m lbs of surf clams, although they only landed only 40million lbs that

Each IFQ entitles the holder to catch a specific percentage of the MSY. Allocation of the IFQ is made on the basis of past catch history and vessel capacity. They are fully transferable by sale and lease between fishermen.[360] Within two years of the implementation of the IFQ system the fishing fleet reduced by 54 per cent in size and vessel capacity utilisation and productivity rose to record levels.[361] There was decline in the number of IFQ holders by half within two years of the introduction of IFQs.[362] In terms of the efficiency of the fishery, there is little doubt about its success.[363]

Although the Magnuson Act requires consideration of economic efficiency as a factor in determining fisheries policy, this cannot be regarded as the sole objective of a management measure.[364] Moreover, it also requires consideration of the importance of fishing to fishing communities, and the distribution of economic benefits from fisheries.[365] This has resulted in a tension between economic objectives and distributional considerations. As a compromise, a moratorium was introduced preventing the creation of IFQs in any new fisheries until 1 October 2001.[366] However, this was lifted under the Magnuson-Stevens Reauthorisation Act 2006 as a means of permitting the use of limited access privileges to tackle the continuing problem of overfishing.[367]

A limited access privilege (LAP) is defined as a permit to

> harvest a quantity of fish expressed by a unit or units representing a portion of the total allowable catch of the fishery that may be received or held for exclusive use by a person.[368]

year. See Litz, *Ibid*, 349. IFQs have been implemented in other fisheries: the Northern Pacific Sablefish and Halibut, and the South Atlantic Wreckfish. Arnason, n 94 above, 53. Such systems are broadly the same as those systems described in s IV(d) above.

[360] § 1802(21) defines an IFQ as 'a Federal permit under a limited access system to harvest a quantity of fish, expressed by a unit or units representing a percentage of the total allowable catch of a fishery that may be received or held for exclusive use by a person.'

[361] SD Wang and VH Tang, *The Performance of US Atlantic Surf Clam and Ocean Quahog Fisheries under Limited Entry and Individual Transferable Quotas Systems* (Gloucester Mass., National Marine Fisheries Service, 1994). According to Doug Hopkins, a senior attorney for the Environmental Defence Fund in New York, in most fisheries where ITQs are implemented, marginal fishermen tend to sell out soon after their implementation, rendering the fishery more efficient. See S B Carpenter & L Busch, 'Not Enough Fish in the Stormy Sea', *US News & World Reports* (15 August 1994) 55, cited in Tipton, n 1 above, 399.

[362] Litz, n 351 above, 359.

[363] DJ Dudek *et al*, 'Environmental Policy for Eastern Europe: Technology-Based Versus Market-Based Approaches' (1992) 17 *Columbia Journal of Environmental Law* 1, 44.

[364] 16 USC § 1851(a)(5)

[365] § 1851(a)(8).

[366] § 1853(d)(1). The moratorium was to continue until the effects of IFQ and various other management options were fully considered. This study was entrusted to the NRC, which submitted its report in 1999: n 6 above.

[367] It is US policy to double the number of dedicated (limited) access privileges by 2010. See the Commission on Ocean Policy, *US Ocean Action Plan Implementation Update* (January 2007) 22.

[368] § 1802(26).

This includes an IFQ, but not a CDQ. Initial allocations are to be made upon a fair and equitable basis, with regard to historic and current harvesting levels, employment, past investments, and participation in the fishery concerned.[369] The limited property status of the LAP is confirmed by the express provision that an LAP 'shall not create, or be construed to create, any right, title, or interest in or to any fish before the fish is harvested by the holder'.[370] It is merely a permission to engage in fishing activities subject to limited access. Moreover, the LAP may be revoked at any time if the limited access system is found to jeopardise the sustainability of a stock or the safety of fishermen.[371] The privilege confers no right to compensation if it is revoked, limited or modified.[372] Despite such clear limits on their status as a legal right, they may possess the limited attributes of a property right for economic purposes. Although LAPs are transferable and can be leased, they may only be held by certain persons.[373] Although this includes a wide range of legal persons (ie individuals and corporate bodies), fishing communities and regional fisheries associations may only participate in limited access programmes if they are located within the same fishery management area to which the LAP pertains. They must also meet certain eligibility criteria, which include a wide range of factors, such as traditional fishing practices, social and cultural ties and economic needs.[374] Foreign holdings are prohibited.[375] There are also limits on the accumulation of LAPs to prevent holders acquiring excessive quantities of the total number of LAPs.[376] The duration of any LAP is limited to 10 years.[377] It is clear that the management aspect of each entitlement is retained by government. For example, LAPs are to be designed so as to promote safety, conservation and management, and social and economic benefits.[378] Conditions may be attached to the issue of any LAP. The commission of an unlawful act, which includes breaches of permit conditions and violations of any fisheries regulations under domestic law or any international agreement to which the US is party, may result in the revocation of the privilege.

Although US courts have not yet had the opportunity to rule on the property status of LAPs, there is considerable jurisprudence on property rights in maritime spaces and resources, as well as earlier property

[369] § 1853a(c)(5).
[370] § 1853a(b)(4).
[371] § 1853a(b)(2).
[372] § 1853a(b)(3).
[373] § 1853a(c)(7).
[374] § 1853a(c)(3)(A) and (B) and § 1853a(c)(4)(a) and (b) respectively.
[375] § 1853a(c)(1)(D).
[376] § 1853a(c)(5)(D).
[377] § 1853a(f).
[378] § 1853a(c)(1)(C).

rights-based entitlement such as IFQs. The US courts have been quite unequivocal in declaring that neither States, nor the Federal Government, 'own' the fish in the sea.[379] Their approach is based upon the common law doctrines of *res communes* and *ferae naturae*: that the seas are common to all and property is only obtained in wild animals upon capture.[380] Neither State nor Federal Government has any title to fish until they are reduced into possession by capture.[381] This limitation may be significant given that pre-capture proprietary interests are central to economic claims about inculcating an interest in stocks in the wild. Despite this seemingly intractable stance against pre-capture property rights, one leading commentator, Mackinko, has argued that the right to fish clearly bears independent property characteristics.[382] However, it is clear that the proprietary interest is in the right to harvest rather than the fish per se.

As a bundle of property-type rights, IFQs have been protected under US domestic law in a number of important ways. First, it was held *Carbone v Ursich* that fishermen could recover for losses arising from damage caused to fisheries, particularly from pollution.[383] This is significant because traditionally the recovery of economic losses must be linked to a proprietary interest in the damaged thing.[384] Thus Britton argues that liability payments for oil spills are further indirect evidence of the proprietary nature of fishermen's interest in the resource.[385] However, the right of recovery in the pollution cases predated the present crystallisation of a proprietary interest in fisheries and the idea that such an interest amounts to constructive ownership has been rejected.[386] It is generally regarded as

[379] In *Douglas v Seacoast Products*, the Supreme Court stated that 'it is pure fantasy to talk of "owning" wild fish, birds, or animals. Neither the States nor the Federal Government, any more than a hopeful fisherman or hunter, has title to these creatures until they are reduced to capture.' *Douglas v Seacoast Products,* 431 US 265 (1977) 284. See also *Baldwin v Fish and Game Commission of Montana*, 436 US 371 (1978); *Toomer v Witsell*, 334 US 385 (1948); *Missouri v Holland*, 252 US 416 (1920).

[380] On this approach generally, see Scott, n 54 above. Also Pearse, n 1 above, 72.

[381] *Douglas v Seacoast Products*, n 379 above, 282.

[382] Macinko n 354 above, 923. *Cf* Koch, who claims that claim that there is a property right in the right to fish is groundless as an abstract proposition' CL Koch, n 58 above, 251 and 265.

[383] 209 F 2d 178 (9th Cir 1953). This was reaffirmed in *Union Oil Co v Oppen* 501 F 2d 558 (9th Cir 1974).

[384] See *Robins Dry Dock & Repair Co. v Flint*, 275 US 303 (1927). See generally, JW Shephard, 'The Murky Waters of Robins Dry Dock Company: A Comparative Analysis of Economic Loss in Maritime Law (1986) 60 *Tulane L Rev*. 995. Also CH Totten, 'Recovery for Economic Loss Under Robins Dry Dock and the Oil Pollution Act of 1990: *Secko Energy, Inc v M/V Margaret Chouset*' (1993) 18 *Tulane MLJ* 167.

[385] DF Britton, above note 61, 230–4.

[386] See *Douglas v Seacoast Product*, n 379 above, 284. Spyridon and LeBlanc reject the idea that fishermen have a cause of action based upon property interests in marine life. GL Spyridon and SA LeBlanc III, 'The Overriding Public Interest in Privately Owned Natural Resources: Fashioning a Cause of Action' (1993) 6 *Tulane Environmental Law Journal* 287, 295.

an exception to the general rule for policy reasons, rather than confirming the existence of a proprietary interest in a fishery.[387]

A second area in which fishing rights appear to be afforded proprietary status is constitutional takings. Under the Fifth Amendment:

> No person shall … be deprived of life, liberty, or property, without due process of law; nor shall private property be taken for public use, without just compensation.

Traditionally, and there is a considerable body of authority on this point, fisheries have fallen outside the protection of the Fifth Amendment.[388] However, this is not conclusive and a number of decisions indicate that an IFQ is property, or at least has proprietary elements that merit protection. Thus, in *Foss v National Marine Fisheries Service*, the District Court held that Foss had a protectable property interest in receiving an IFQ permit and so was covered by the due process clause of the US Constitution.[389] As the court stated:

> There can be no doubt that the IFQ permit is property. It is subject to sale, transfer, lease, inheritance, and division as marital property in a dissolution.[390]

The court continued to state that the property right in obtaining the permit is distinguishable from a claim to actual ownership of the fish, noting that the Supreme Court has explicitly rejected this as 'pure fantasy'.[391] In addition, licences have been regarded as proprietary in nature for the purposes of the application of the due process clause.[392] This position is

[387] TW Kinnane, 'Recovery for Economic Losses by the Commercial Fishing Industry: Rules, Exceptions, and Rationales' (1994) 4 *University of Baltimore Journal of Environmental Law* 86, 99. This is confirmed by the approach taken in the Oil Pollution Act 1990, which provides for the statutory recovery of losses occasioned by oil pollution. It provides that damages for 'injury to, or economic losses resulting from destruction of, real or personal property' shall be recoverable by a claimant who owns or leases that property. See 33 USC § 2702(b)(2)(B) (1994). Separate provision is made outside the ambit of proprietary claims, for 'loss of subsistence use of natural resources, which shall be recoverable by any claimant who so uses natural resources which have been injured, destroyed, or lost, without regard to the ownership or management of the resources': *Ibid* § 2702(b)(2)(C). This echoes the argument of McThenia and Ulrich that deterrence is the principle rationale for the fishermen's exemption from general principles of recovery in tort. See AW McThenia and JE Ulrich, 'A Return to Principles of Corrective Justice in Deciding Economic Loss Cases' (1983) 69 *Virginia Law Review* 1517, 1526.

[388] *Burns Harbor Fish Co Inc v Ralston*, 800 F Supp 722 (SD 1992); *Organized Fishermen of Florida v Watt*, 590 F Supp 805 (SD Fla 1984); *Bigelow v Michigan Department of Natural Resources*, 727 F 346 (WD Mich 1989). See generally, Koch, n 382 above, 265.

[389] 161 F 3d 584 (9th Cir 1988). This was cited with approval in *Dell v Department of Commerce*, 191 F 3d 460. Another exceptional case in this respect is *Jackson v US*, 103 F Supp 1019 (Ct Cl 1952).

[390] *Foss*, *Ibid* 588.

[391] *Ibid*.

[392] *Burns Harbor Fishing Co, Inc. v Ralston,* n 388 above, at 730; *Le Bauve v Louisiana Wildlife and Fisheries Commission*, 444 F Supp 1376, 1379.

echoed elsewhere, where the courts have been willing to acknowledge the proprietary nature of fishing leases.[393] However, one should be cautious about reading too much into these decisions. Such protection is not based upon any common law right of private property, but a lesser interest in the form of a use right. Moreover, such an interest as is created by a licence is protected as an economic right, or more particularly, as a right to livelihood.[394] In *Sea Watch International et al v Mosbacher,* the plaintiff claimed that the implementation of an ITQ system amounted to the privatisation of a fishery, and that this was beyond the scope of the Magnuson Act.[395] Rejecting this argument the court held:

> The new quotas do not become the permanent possession of those who hold them, any more than landing rights at slot-constrained airports become the property of airlines, or radio frequencies become the property of broadcasters. These interests remain subject to the control of the federal government which, in the exercise of its regulatory authority, can alter and revise such schemes, just as the Council and the Secretary have done in this instance.[396]

Rieser notes that by defining the IFQ as a revocable permit, the Act distinguishes the IFQ from a proprietary interest.[397] The reason for this is to prevent IFQ holders from developing investment backed expectations, which would give rise to rights of compensation if such a right was eliminated.[398] This approach is continued under the 2007 Act, which explicitly limits rights of compensation for revocation, limitation or modification of LAPs. Although IFQs have attracted a limited degree of judicial protection and are sometimes treated as property rights in a very loose sense, the more significant judicial approach is to limit their proprietary characteristics so as to ensure the spectre of regulatory takings is not raised.

A further obstacle to recognition of the property nature of ITQs is the public trust doctrine.[399] According to this doctrine, ocean resources within US jurisdiction are public resources held in trust for the public by the State. This reinforces arguments against privatisation of fisheries, and emphasises the conservation and management responsibilities of the State. Public trust has its origins in the case of *Arnold v Mundy*, concerning the validity

[393] *Lewis Blue Point Oyster Cultivation Co v Briggs*, 229 US 82, 87 (1913); Also *Blake v US* 181 F Supp 584 (ED Va 1960).

[394] Koch, n 58 above, 254–9.

[395] 762 F Supp 370 (DDC 1991).

[396] *Ibid* 376.

[397] Rieser, 'Prescription', n 1 above, 411.

[398] Citing *Penn Central Transport Co. v City of New York*, 438 US 104, 124 (1978), Rieser notes that 'when a government regulatory action is challenged as a taking, the Supreme Court has held that the regulation's economic impact and the extent to which it interferes with reasonable investment-backed expectations are relevant to the inquiry': *Ibid* 412.

[399] Noting that the doctrine is not generally well-known, Mackinko terms the concept 'publicly obscure doctrine': n 354 above, 943–4.

of a title to a private oyster bed.[400] As subsequently articulated, it has two important traits. First, the public trust is inalienable, meaning that private rights of property cannot be granted in resources subject to the public trust.[401] Thus private property in fish can only arise upon capture.[402] Secondly, the State has a continuing responsibility for the supervision and control of the trust resource.[403] The applicability of the public trust doctrine, so articulated, to fishing, has been confirmed in the case of *Geer v Connecticut.*[404] However, it should be noted that the public trust has not been explicitly applied to areas beyond State waters, ie beyond 3nm.[405]

Although IFQs are not viewed as property rights in law, they still retain a number of important proprietary characteristics or incidents.[406] They are exclusive, durable, divisible, transferable, and inheritable. And even if such bundles of rights are not vested in the traditional sense, they do receive a degree of protection against the State. This has generated the misconception that IFQs amount to the introduction of private property rights in what was a public resource. In turn this has given rise to acute controversy in matters of allocation.[407] Indeed, a review of American jurisprudence reveals that it is not so much the nature of the right that is the object of litigation, but rather the implications that this has in terms of allocation. Thus in *Sea Watch International v Mossbacher*, the plaintiffs unsuccessfully claimed that surf clam and ocean quahog IFQs amounted to an unlawful privatisation of a public resource. Moreover, a system of allocation based on catch history was unfair in that it tended to reward those who had done the most to harm the industry by overcapitalisation and overexploitation.[408] Initial allocations of IFQs were all based upon catch history.[409] This has been criticised as a giveaway of natural resources.[410] Unlike other natural resources, there are no charges for

[400] 6 NJL 1 (1821). The formative role of this case is acknowledged in the leading public trust cases of *Illinois Central Railroad v Illinois* 146 US 387, 456 (1892), and *Shively v Bowlby* 152 US 1, 16 (1894).

[401] *Illinois Central Railroad v Illinois*, *Ibid*, 453–4.

[402] *Pierson v Post* 3 Cal TR 177 (NY Sup Ct 1805).

[403] *Sierra Club v Department of the Interior,* 376 F Supp 90 (ND Cal 1974); *Re Steuart Transportation co,* 495 F Supp 38, 40 (ED Va 1980); *National Audubon Society v Superior Court* 658 P 2d 709 (Cal 1983); *California Trout Inc v State Water Resources Control Board*, 207 Cal App 3d 585 (1989).

[404] 161 US 519, 529 (1896).

[405] For a strong case in favour of such an approach see, C Jarman, 'The Public Trust Doctrine in the Exclusive Economic Zone' (1986) 65 *Oregon Law Review* 1.

[406] See section 2(c) above.

[407] See Tipton, n 1 above, 405.

[408] N 395 above, 375–81.

[409] NRC, n 6 above, 63, 68 and 73.

[410] 'If IFQ/ ITQs were allowed … and the allocations were based on catch history, which they always are, it would generate a tremendous windfall profit for the largest operators who have caused the most damage. Why would we choose to consider IFQ/ITQs now,

initial allocations. Indeed, charging participants for the right to harvest is contrary to the Magnuson Act, which prohibits charges in excess of any administration costs.[411] A second criticism is that ITQs result in an unfair distribution of rights among fishermen. Some fear that they will be barred from a fishery because of a lack of allocation of quotas, and others fear that they will be forced out of the industry by more efficient rivals or large corporate fishing interests.[412] There was some sympathy to this line of argument in *Alliance against IFQs v Brown*, where it was claimed that the allocation of IFQs to vessel owners was unfair to crew members.[413] Ultimately, however, the court paid deference to the regulator's decisions based upon a cost-benefit analysis. It is notable that the 2007 Act appears more sympathetic to some of these the allocation concerns and permits Councils to use auctions and other mechanisms to determine the initial allocations of LAPs.[414] Moreover, it introduces referenda as a prerequisite for the introduction of LAPs in certain areas.[415]

More so than in other jurisdictions, there has been considerable focus in US literature on the compatibility of IFQs with conservation concerns and, in particular, ecosystem management.[416] The efficiency gains from a quota system are generally accepted. However, the nature of the right granted is usufructory, the right to enjoy the fruits of some else's property, and this may not be enough of an incentive to address Hardin's

when allocation would reward those individuals whom [*sic*] had contributed most to our fisheries crisis. This tremendous windfall profit would then place today's fisherman, who is waiting for the fish to recover, in the untenable position of having to sell their permit to these newly created millionaires. If this is allowed to happen, our fishery will no longer include thousands of independent operators, it will be one of tenant farmers to a handful of large corporations. IFQ/ITQs, if allowed, will do to New England fishing communities what agribusiness did to the family farmers in the 1960s and 1970s.': testimony of Paul Parker, Commercial Hook and Line Fisherman Executive Dir, Cape Cod Commercial Hook Fishermen's Association, Member of the Board, Marine Conservation Network. Hearing on Magnuson-Stevens Reauthorization. Reproduced in MC Laurence, 'A Call to Action: Saving America's Commercial Fishermen' (2002) 26 *William and Mary Environmental Law and Policy Review* 825, 849.

411 *Ibid* 405–6.

412 Tipton, n 1 above, 406. Rieser describes fishermen as share-croppers for quota owners. 'Prescription', n 1 above, 415.

413 84 F 3d 343, 345 (9th Cir 1996). Thus Black notes that, although the court recognised the truth of the plaintiff's claim, it was not prepared to weigh up the costs and benefits of a regulatory decision. It deferred to the regulatory agency in this respect: n 1 above, 742–3.

414 § 1853a(d).

415 § 1853a(c)(6).

416 Rieser locates the current fisheries debate within the broader challenge of ensuring proper management of the ecosystem. 'Prescription', n 1 above, 403–6. In setting out this ecosystem approach she draws upon writers who have advocated resource stewardship. See eg, LP Breckenridge, 'Reweaving the Landscape: The Institutional Challenges of Ecosystem Management for Lands in Private Ownership' (1995) 19 *Vanderbilt Law Review* 363. Also C Payne, 'The Ecosystem Approach: New Departures for Land and Water, Foreword' (1997) 24 *Ecology Law Quarterly* 619.

tragedy of the commons. As Copes notes, if IFQ holders do not believe they will gain the future benefits from the quota because the right is not secure, then they are more likely to engage in quota busting.[417] Holders are also likely to engage in rent seeking activities, such as pushing for higher TACs and reduced catch limits, if they do not bear the long-term costs of such actions.[418] Indeed, these activities may be encouraged by the Magnuson Stevens Act which expressly limits the duration of the right. Although the ecosystem approach does not prescribe a particular form of management system, any such system should ensure the health of the larger ecosystem of which the fish stock is a part. This approach recognises that ecosystems have valuable components beyond those which are subject to market mechanisms. Indeed, if such resources have no direct market value, then they are likely to be discounted by regulators. Environmentalists are often critical of rights-based approaches because they elevate the importance of a resource at the expense of other components of the ecosystem, or the ecosystem as a whole.[419] This leads Rieser to note that:

> ITQs alone do not create an institutional framework within which fishermen must work with other groups and individuals who depend upon and are concerned with a healthy, functioning marine ecosystem.[420]

An ecosystem approach now forms a central part of fisheries management under the Magnuson Stevens Act. Thus the calculation of optimum yields must take into account the protection of ecosystems.[421] Stock rebuilding measures should take account of the interaction of overfished stock within the marine ecosystem.[422] Most importantly, perhaps, the Sustainable Fisheries Act 1996 requires the establishment of a research panel of experts 'to develop recommendations to expand the application of ecosystem principles in fishery conservation and management activities'.[423] This approach is enhanced by the 2007 Act, which requires the Secretary, in consultation with the Councils, to

> undertake and complete a study on the state of the science for advancing the concepts and integration of ecosystem considerations in regional fishery management.[424]

[417] Copes, n 12 above, 281–2.
[418] See E Brubaker, 'The Ecological Implications of Establishing Property Rights in Atlantic Fisheries', in Crowley, n 58 above, 221, 244.
[419] CM Rose, 'The Several Futures of Property: Of Cyberspace and Folk Tales, Emission Trades and Ecosystems' (1998) 83 *Minnesota Law Review* 129, 173–77.
[420] Rieser, 'Prescription', n 1 above, 417.
[421] § 1802(33).
[422] § 1854(e)(4).
[423] § 1882(a).
[424] § 1882(f).

In addition to environmental concerns, the legislation is sensitive to distributional equity.[425] It is notable then that quota holdings have become more concentrated and employment in the industry has declined.[426] The relationship between these elements is complex, although suggestions are that environmental concerns take priority over distributional concerns.[427]

Despite such concerns about the environmental and social impact of IFQs, there is some evidence of increased resource stewardship in IFQ fisheries. In general, calls for higher TACs have decreased.[428] Cooperation and compliance with IFQ systems is reported to be good.[429] More specifically, in the ocean quahog/surf clam fisheries, TACs have been respected.[430] Fishing effort has become more focused, and discards reduced.[431] Fleet size has been reduced and efficiency increased.[432] In the wreckfish fishery, the biological condition of the fishery appears to have stabilised, although total landings have dropped.[433] This has led to suggestions that the fishery is not being fully exploited and IFQ holders are unfairly excluding others from responsible harvesting.[434] The NRC have reported that between 1994 and 1995 the Alaskan halibut fishery mortality from lost and abandoned gear has reduced from 554.1 tons to 125.9 tons and discards have dropped from 860 tons to 150 tons.[435] However, there have been no significant changes in high-grading.[436] Critics of IFQs point out that economic efficiency is not the only or most important goal of fisheries management. The National Research Council notes that evidence as to the economic and social outcomes of the IFQ are often anecdotal and cannot be fully appreciated at present.[437] In light of these uncertain outcomes, Rieser concludes that although property rights might be an answer to the tragedy of the commons, they must also be fashioned in a way that reflects new conceptions of property.[438] The rights must be informed by social justice, and 'acknowledge the

[425] § 1851(a)(4) and (8).
[426] NRC, n 6 above, 65.
[427] S Macinko, n 354 above, 919.
[428] See J Gauvin *et al*, 'Description and Evaluation of the Wreckfish Fishery under Individual Transferable Quotas' (1994) 9 *Marine Resource Economics* 99.
[429] See EH Buck, *Individual Transferable Quotas in Fishery Management* (Washington DC, Committee for the National Institute for the Environment, 1995); NMFS, *2000 Report to the IFQ Fleet* (Alaska, National Marine Fisheries Service, 2000).
[430] NRC, n 6 above, 64.
[431] *Ibid* 64–5.
[432] *Ibid* 65.
[433] *Ibid* 69.
[434] *Ibid* 70.
[435] *Ibid* 74.
[436] *Ibid*.
[437] *Ibid* 75–6.
[438] Rieser, 'Prescription', n 1 above, 421.

importance of the distribution of benefits as well as endangered species, endangered cultures, and all groups dependent upon and affected by the condition of the natural environment.'[439] In particular, this could be ensured by allocating such rights to communities, which are more likely to embrace a wider range of values and which can incorporate ecosystem values.[440]

4. AN APPRAISAL OF RIGHTS-BASED MEASURES

In light of domestic experiences of property rights-based instruments it is appropriate to remark upon the success of quota systems to date. Quotas systems have attracted critical comment in three broad areas: economic success, conservation and management effectiveness, and allocational concerns. At this point it is worth emphasising that because legal reasoning is consequence sensitive, these factors have a role to play in the law-making process. These are considered in turn, before some final remarks are made on how the legal construction of property rights more generally has influenced the development and operation of rights-based fishing measures.

(a) Economic Consequences of Rights-based Measures

Experience of ITQs in practice supports the claim that they are achieving some degree of economic success.[441] Although they may not amount to full property rights, they have sufficient property characteristics to generate economic benefits.[442] Quota systems are exclusive and limit access to designated fisheries. Quota holders usually possess the rights to transfer, divide and lease their holding, as well as treat it as property for lending

[439] *Ibid* 419.

[440] *Ibid* 405–6.

[441] See E Brubaker, *Making the oceans safe for fish: how property rights can reverse the destruction of the Atlantic fisheries* (Halifax, Nova Scotia, Atlantic Institute for Market Studies, 1995); FT Christie 'The death rattle for open access and the advent of property rights regimes in fisheries' (1996) 11 *Marine Resource Economics* 287; RQ Grafton *et al*, 'Private property rights and crises in world fisheries: Turning the tide?' (1996) 14 *Contemporary Economic Policy* 90.

[442] According to a leading fisheries economist, the standard economic definitions of property comprise duration, exclusivity of use, security of title, and transferability. See AD Scott, 'The ITQ as a Property Right: Where It Came From, How It Works, and Where It Is Going.' in Crowley (ed), n 58 above, 32–96. Also A Scott, 'Property Rights and Property Wrongs' (1983) 16 *Canadian Journal of Economics 555*; Scott, n 54 above, 37–8. Most discussions of rights-based fishing entitlements adopt this standard analytical framework. See R Arnason, 'Property rights as an Organizational Framework', n 227 above, 103.

and other commercial purposes. Although the duration of the holding is limited, there is still sufficient security of holding to create a valuable economic right. In general, these factors strengthen the holder's interest in maintaining the right and the condition of the fishery to which it pertains. Rights-based entitlements, in one form or another, have been used in many fisheries around the world and there is evidence to suggest that they are successful in protecting stocks and making fishing effort more efficient.[443] The ITQ program in New Zealand is the longest running and has resulted in increased profitability, improved product quality and reduced fishing effort.[444] The quota system in Canadian sable fish and halibut fisheries has also led to increased profitability.[445] This has been accompanied by a reduction in fishing capacity.[446] In the US, there have been positive reports on the IFQ systems adopted for the Atlantic surf clam and ocean quahog,[447] the Alaskan halibut and sablefish fisheries.[448] Although there was a moratorium on quota programmes in the US, the reauthorised Magnuson Stevens Act has lifted this and limited access programmes are being strongly encouraged. In each case, the evidence is that property-rights-based instruments have improved the efficiency of fishing effort. This has not been the case with weaker rights-based entitlements or input controls.[449] Hannesson nicely summarises these economic benefits:

> Dividing the TAC among all vessels participating in a fishery prevents a self-defeating race for the largest possible share of the total catch. And making the vessel quotas transferable makes it possible to minimise the costs of

[443] See generally, Christy, n 12 above; E Brubaker, n 441 above; RQ Grafton, D Squires and JE Kirkley, 'Private property rights and crises in world fisheries: Turning the tide?' (1996) 14 *Contemporary Economic Policy* 90.

[444] See CM Dewees, 'Assessment of the implementation of individual transferable quotas in New Zealand's inshore fishery' (1989) 9 *North American Journal of Fisheries Management* 131; Pearse, n 1 above. R Connor, 'Trends in Fishing Capacity and Aggregation of Fishing Rights in New Zealand Under Individual Transferable Quota' in Shotton (ed) n 39 above, 267; M Harte and R Bess, 'The Role of Property Rights in the Development of New Zealand's Marine Farming Industry' in Shotton (ed), n 39 above, 331; J Annala, n 331 above; Batstone and Sharp, n 282 above; Clark *et al*, n 277 above; BMH. Sharp, 'From regulated access to transferable harvesting rights: policy insights from New Zealand' (1997) 21 *Marine Policy* 510.

[445] RW Crowley and H Palsson, 'Rights based fisheries management in Canada' (1992) 7 *Marine Resource Economics* 1.

[446] RQ Grafton, 'Rent capture in a rights based fishery' (1995) 28 *Journal of Environmental Economics and Management* 48.

[447] The NRC has reported that, although efficiency has increased and capacity has reduced, the physical state of the fishery is still uncertain: n 6 above, 64–5.

[448] *Ibid* 74–6. It should be noted that much the NRC's finding is based upon recent data over a relatively short period, making it difficult to be conclusive about the outcomes of the rights-based systems in place.

[449] Arnason, n 94 above, 141.

> taking a given catch. In the short-term, transferability ensures that the least efficient fishing vessels will not be used, as their quotas can be bought by the owners of the efficient vessels at a price that benefits buyer and seller. In the long term transferability means that the owners of fishing vessels can adjust their fishing capacity to the amount they may expect to be able to take, or vice versa.'[450]

This comment emphasises the economic benefits of rights-based instruments, but says little about broader conservation and management issues.[451] Notably, the NRC conclude that individual quotas may be successful only if certain conditions are met: the total allowable catch can be specified with reasonable confidence, economic efficiency is prioritised, broad stakeholder participation is present, the fishery can support cost-effective monitoring and enforcement, adequate scientific data are available, and the spillover of fishing activities into other fisheries is recognised and mitigated. This suggests that strong rights-based instruments are a necessary, but insufficient means of regulating fisheries alone.

One area in which there has been undoubted success is the reduction of excess capacity. Quota systems have been successful in eliminating fishing derbies, which has in turn reduced direct fishing effort for quota species. This has helped to stabilise stocks and decrease the potential for TAC overruns. By spreading fishing effort, fishermen may now have more time to seek out better fishing grounds, which have lower incidents of by-catches and higher value target species. There also seems to be little evidence of quota busting, although this varies from fishery to fishery.[452] The NRC also indicate that it may be incentivised if the fishery becomes more valuable or quota allocations are regarded as inequitable.[453] In some fisheries there is actually evidence of under-fishing.[454] This seems to be a result of punitive measures for exceeding quotas, and the limiting effect of possessing sufficient quotas for by-catches in mixed fisheries. For example, in the wreckfish program there is substantial under-fishing, suggesting that fishermen are profiting from limiting the supply of catches.[455] Although this may be contributing to a quicker rebuilding of fish stocks, it may run counter to the long-term objective of optimising fish catches under the MSY.

[450] R Hannesson, 'Trends in Fishery Management' in EA Loayza (ed), n 94 above, 91, 92. This general position is widely accepted. See, eg, Hatcher *et al*, n 36 above, 12–15; D Squires *et al* 'Individual transferable quotas as a fisheries management tool' (1995) 3 *Reviews in Fisheries Science* 141; RQ Grafton, n 182 above; D Squires *et al*, 'Individual transferable quotas in multi-species fisheries' (1998) 22 *Marine Policy* 135.

[451] Above n 6, 192–3.

[452] NRC, n 6 above, 107, 193.

[453] *Ibid* 216.

[454] *Ibid* 110

[455] *Ibid*.

(b) Conservation and Management Consequences of Rights-based Measures

Under international law, there are a number of clear obligations imposed upon States, and States having adopted quota systems are bound by these requirements. In the EEZ, coastal States' exclusive fishing rights are intimately bound up with conservation and management responsibilities.[456] These responsibilities include the broad duty to conserve and manage fisheries, the obligation of optimum utilisation, the obligation to cooperate with other States regarding transboundary resources, and the duty to take account of limited redistributive goals in favour of other States. As States can only grant such rights over fisheries that are within their defined sphere of competence under international law, this means that rights-based systems need to be compatible with these responsibilities. Of course, given the generality of conservation and management obligations, it would be difficult to conclude that rights-based measures were inconsistent with international law. In any event, the review of domestic measures in the previous section revealed such duties to be located within domestic law, with the exception of the last one.[457] It is also clear that quota-based systems do little to facilitate the sharing of fishery resources. Indeed, States commonly seek to exclude foreign fishing fleets from coastal waters as a means of protecting domestic fishing industries.[458]

Since the adoption of the Law of the Sea Convention, international law has developed more detailed guidelines on fisheries conservation and management. For the most part, these are facultative rather than prescriptive. The most significant developments have been the consolidation of an ecosystem based approach to fisheries management, the development of the precautionary principle, and the conservation and protection of biodiversity. These principles reaffirm the importance of holistic management measures based upon sound science. These obligations have been taken onboard by States, making it difficult for them to regulate fisheries in a sectoral manner, or to devolve management responsibility in such a way that inhibits their capacity to manage the marine environment.[459] For example, the ecosystem approach requires States to take account of

[456] Although there are no conservation and management obligations pertaining to the territorial sea, States do not generally distinguish the territorial sea from the EEZ in terms of fisheries conservation and management.

[457] In the domestic fisheries legislation considered above sustainable fishing is typically the overarching goal of all the domestic fisheries management regimes.

[458] See, eg, New Zealand and the US.

[459] See: New Zealand Fisheries Act 1996 ss 8–9; Magnuson Stevens Act s 3(33) 16 USC § 1802(33); Australia Fisheries Management Act 1991 s 3A. Although an ecosystem approach does not form an objective of Icelandic fisheries legislation, it is a core component of their management system. See the Statement on Responsible Fisheries in Iceland, 7 August 2007.

fishing effort on not just the target stock, but on related or interdependent species and marine habitats. This means that commercial fishing cannot be treated in isolation from the regulation of the marine environment more generally. Again, all domestic systems utilise a scientific basis for conservation and management measures, through the setting of a TAC and MSY objectives. This in combination with the precautionary principle, which shapes the use of scientific information in conditions of uncertainty, ensures that management measures are responsive to the physical conditions of fisheries. As indicated in chapter 6, biodiversity may require further cooperation in the use of particular resources to ensure that the use of the components of biodiversity do not endanger biodiversity interests. Inevitably these principles require States to place use restrictions on individual fishing rights and retain some degree of management responsibility for fisheries. This in turn limits the extent to which use and management incidents of property can be transferred into the holders of fishing rights.

In theory, individual quotas vest fishermen with an interest in the health of a stock and encourage more selective fishing practices.[460] Simply put, the better the condition of the stock, the more valuable the individual quota holder's stake in the resource.[461] However, this is contingent on fishermen having an exclusive, permanent and secure interest in the stock.[462] For this reason, quota holders generally desire stronger and more durable rights than are adopted in practice. A further qualification regarding the conservation benefits of individual quotas should be added at this stage. Fishermen will only be concerned about the detrimental effects of fishing activities on the resource in which they have a proprietary interest. As this interest only usually extends to the target stock, there is little incentive to take account of the impacts of fishing on (through the use of destructive gear) non-target species, habitats and ecosystems. There is also little chance of recovering the cost of measures necessary to conserve these goods from fishermen.[463] This means that other valuable components of the marine environment must be protected through external restrictions on quota holders' rights. Of course any conditions on the use of a quota may reduce its economic value and this is likely to be resisted. Moreover, such restrictions may be more difficult to implement. Quota holders constitute a relatively homogenous group with narrowly focused goals who are able to exert

[460] Hatcher *et al*, n 36 above, 62.

[461] See Hsu and Wilen, n 1 above, 807.

[462] See Scott, n 54 above, 47–8; Tipton, n 1 above, 397–8; Hatcher *et al*, n 36 above, 63.

[463] M Brady and S Waldo, 'Fixing Problems in Fisheries—integrating ITQs, CBM and MPAs in management' (2009) 33 *Marine Policy* 258. It is notable that cost recovery measures in quota systems remain quite limited.

considerable political pressure on fisheries managers.[464] As the case studies above indicate, quota holders have been quite prepared to litigate to defend the value of their entitlements from reductions in TAC and other management restrictions.

There is evidence that fisheries utilising rights-based systems have increased the biomass of some fish stocks.[465] However, this is not a universal benefit in all rights-based fisheries, and it has been countered that rights-based measures may lead to excess effort being relocated into non-quota fisheries, resulting in their depletion.[466] Furthermore, individual quotas are known to generate additional incentives for discarding because fishermen want to land the highest value catch.[467] Most commentators agree that in multi-species fisheries these management problems are exacerbated. Yet, this is a problem facing any system that effectively limits the amount of fish to be landed. The NRC argues that individual quotas may generate incentives to change such wasteful fishing practices because discarding only arises where the expected price covers the cost of the quota plus the lost revenue from the discard, and the cost of catching fish a second time.[468] Therefore it is in the fishermen's interests to catch only the correct fish first time round.

The success of individual quotas is heavily dependent on effective monitoring and enforcement.[469] In theory, the interest of quota holders in protecting the value of their stake by not overfishing and by making sure that non-quota-holders do not 'steal' their fish should increase levels of self-policing within the fishing industry. However, in practice, monitoring and enforcement are largely dependent on contextual factors, such as individual conscience, culture, the scale and location of the fishery, the number of participants and marketing opportunities for the catch, rather than the quality of the substantive rights.[470] In light of this, Copes suggests that ITQ systems may actually create incentives for under reporting catch and falsifying reports.[471] The chance to cheat the system without being caught may provide fishermen within a closed access system with an advantage over law-abiding fishermen. The use of individual quotas

[464] See RE Kearney, 'Fisheries property rights and recreational/commercial conflict: the implications of policy development in Australia and New Zealand' (2001) 25 *Marine Policy* 49.

[465] Hatcher, *Ibid* 62.

[466] *Ibid*.

[467] R Arnason, 'On Catch Discarding in Fisheries' (1994) 9 *Marine Resource Economics* 189.

[468] See NRC, n 6 above, 108–9. They note that highgrading actually costs fishermen money, although this will depend on the particularities of each fishery. Data is taken from the North Pacific Fishery Management Council, *IFQs off the port bow* (1992).

[469] Copes emphasises that compliance with any system is influenced by the likelihood of being caught: n 12 above.

[470] *Ibid* 281.

[471] *Ibid* 282.

removes the need to engage in a fishing derby and concentrate fishing effort at the start of a fishing season. Spreading fishing effort through the year is beneficial to individual fishermen, but it has increased the difficulty and cost of monitoring and enforcement, which must also be spread through the year.[472] As noted above, the problem of individual quota systems is high-grading. Unless observers are present, or other equally effective mechanisms are in place, there appears to be little that can be done about this problem.[473] It should be noted that problems of compliance and enforcement are endemic across the fishing industry.

In addition to international conservation and management objectives, it is common for States to pursue domestic social objectives through national fishing policies. These include enhancing the welfare of fishing communities, increasing safety within the fishing industry, protecting the interests of indigenous peoples, and involving communities as stakeholders in the fishery to improve cooperation, monitoring and enforcement of management objectives. There is evidence to show that some of these goals have been achieved. However, there are also some negative criticisms of rights-based management systems. Some commentators regard private property systems as undermining traditional ways of life. Thus Carpenter and Busch claim they result in the displacement of workers, cause stress in coastal communities, and often lead to a concentration of industrial fishing and the loss of small operators.[474] However, such problems are not peculiar to rights-based systems, and are endemic in traditional fisheries management regimes. It is also claimed that rights-based systems do not give recognition to the special position of indigenous peoples as regards fisheries. New Zealand has addressed such concerns by giving large commercial concessions to Maori peoples, who are now major operators in the commercial fishing industry. Some related criticisms come from advocates of community based management systems. They argue that fisheries can best be protected by introducing co-management structures that involve local communities in the decision-making process, instead of relying on top-down systems, with policies being dictated by distant experts.[475] Others call for systems that prioritise the environment and the

[472] As Grafton *et al* note, self-monitoring and enforcement depend upon opportunities for observation, which are generally limited: n 441 above.

[473] LG Anderson, 'An economic analysis of highgrading in ITQ fisheries' (1994) 9 *Marine Resource Economics* 209; R Arnason, n 467 above.

[474] See B Carpenter and L Busch, 'Not enough fish in the stormy sea: Lawmakers consider property rights for fishers to protect the nations dwindling stocks' (1994) 117 *US News and World Report* 55; J Stewart, K Walshe and B Moodie, 'The demise of the small fisher? A profile of exiters from the New Zealand fishery' (2006) 30 *Marine Policy* 32.

[475] Scheiber concedes that such claims do point to the need to have greater consideration of coastal communities' interests in law and policy. HN Scheiber, 'Ocean Governance and the Marine Fisheries Crisis. Two Decades of Innovation—and Frustration' (2001) 20 *Virginia Environmental Law Journal* 119, 137.

fishery, rather than the economic policy of the State.[476] Advocates point to the success of such systems in practice.[477] Yet such schemes have only been used in small scale fisheries and it may be difficult to introduce community based mechanisms into large-scale industrial fisheries.[478] It should be noted that quotas are not irreconcilable with community-based management systems. Much depends on how allocations of quota are made and protected.

To summarise, at present there is no conclusive evidence to show that quota based systems alone result in successful fisheries management. Indeed, what evidence there is points to the need to maintain strong management control in addition to quota systems in order to provide for stock recovery and adherence to other conservation measures.[479] In practice, all of the above domestic conservation and management systems are a combination of TACs, rights-based entitlements and other management measures. This means that the overall effectiveness of quotas cannot easily be evaluated in isolation from the whole conservation and management system.

(c) Allocational Consequences of Rights-based Measures

Finally, property rights-based fisheries have been subject to intense criticism because of their perceived failure to address the allocational consequences of 'privatising' a public resource. If fishing is a public right and fisheries are a public resource, then the introduction of exclusive harvesting quotas amounts to the *de facto* privatisation of a public resource. Initially, this has raised largely unanswered calls for the compensation of the loss of a freedom to fish. One way of achieving this is through the use of an auction, whereby fishermen pay for the quota. Thus, any windfall is captured by the State and may be regarded as a form of compensation for the loss of public fishing rights in the fishery. As yet none of the major fishing States have charged for initial quota allocations for political reasons, although the new system of LAPs in the United States reserves this option. Neither has any State sought to capture any rents

[476] After reviewing the variables shaping the Maine lobster industry, Acheson and Steneck argue that the primary goal of management should be to protect the environmental factors and life cycle processes that are necessary to maintain a healthy stock, and that fishing effort should be de-emphasised. JM Acheson and RS Steneck, 'The role of management in the renewal of the Maine lobster industry' in Pálsson and Pétursdóttir, n 277 above, 9, 23.

[477] See Townsend, n 67 above, 32.

[478] S Jentoft and B McCay, 'User Participation in Fisheries Management—Lessons Drawn from International Experience' (1995) 19 *Marine Policy* 227, 234.

[479] JR Beddington, DJ Agnew and CW Clark, 'Current Problems in the Management of Marine Fisheries' (2007) 316 *Science* 1713.

in subsequent years. Although such measures may be justified in return for the exclusive use of a public resource, the returns are not likely to be significant and this may deter governments from raising them.[480] At present, States have limited themselves to cost recovery schemes that recoup the costs of managing the quota schemes, suggesting that the political costs of full rent recovery are too high.

Subsequent criticisms focus on the method and consequences of quota allocations. Most quota allocations have been given to vessel owners, even though others participate in the industry (crew, processors, buyers and consumers). As such, recipients of the allocation of the value created by the limited access schemes has been a relatively limited group of persons. A related criticism is that allocations to this group have usually been made on the basis of historical catch records.[481] This has been seen to reward those who have over fished and contributed to the depleted state of commercial fisheries. Moreover, the use of catch history tends to exacerbate over fishing in the run up to the allocation of quota shares as fishermen seek to maximise their quota entitlement. Despite these criticisms the methods of allocation adopted have been necessary to secure the cooperation of fishing interests with new rights-based systems.

A closer analysis of the allocations indicates that they do accord with some of the typical justifications for private property outlined in chapter 2. This shows how moral factors may influence the operation of rights-based systems. According to the desert-labour approach, property is justified when socially worthwhile effort is applied to a thing, and a person is rewarded by receiving an exclusive right to that thing. This approach explains the creation of property upon capture, but it fails to explain an exclusive right to fish at a time when no effort has been expended. To consider the effort expended by historic participation in a fishery simply distorts the whole labour-desert theory too far. The only plausible explanation based upon labour/desert is to recognise the investment that fishermen have made in their fishing capital. However, given that over-capitalisation is regarded as unproductive labour, this does not provide a convincing basis for allocations. Individual quotas give exclusive access rights to a limited number of holders, which has led to the claim that they are removing pre-existing freedoms. In this sense they run counter to liberty justifications of property. However, in a common pool resource the liberty to fish is a destructive liberty, which if unrestrained will ultimately deplete or destroy the resource base. The introduction of property rights to provide fishermen with exclusive access to a fishery may be regarded as an attempt to protect existing liberties through a system of property

[480] See NRC, n 6 above, 162.
[481] *Cf* Estonia, n 94 above.

rights. Indeed, the use of historic entitlements is indicative of a Nozickean approach which avoids redistribution of wealth. A similar defence of allocations may be made according to utility. Utility is concerned with promoting a security of expectation, and if one assumes that fishermen have an expectation of a continued right to fish as they have done, and non-fishermen are not concerned at all with fishing (otherwise they would be participating in a fishery) then any allocation of fishing rights contrary to the *status quo* will result in a disutility. Arguments from propriety may also support allocations to fishermen according to existing interests in a fishery. As existing stakeholders in the industry and they have the greatest interest in ensuring the sustainability and productivity of the fishery. It is also clear that securing the compliance of existing fishing interests and making the quota systems work in practice was an overarching consideration in the allocation process.

The fact that quotas are transferable was intended to enable quotas to be acquired by the most efficient operators.[482] Yet this assumes that the most efficient operator will be able to acquire the quotas and mistakenly this conflates ability and willingness to pay with efficient business operation. As seen in the preceding section, transferability tends to consolidate the ownership of individual fishing quotas in the hands of a smaller number of wealthy fishing interests and this tends to run counter to most States fisheries management objectives. To prevent this, limits on accumulation are adopted in most systems. However, such limits are frequently objected to by industry. They can inhibit the transferability of quotas and may promote sub-optimal quota holdings. Ultimately, whether or not such limits are adopted depends upon a cost benefit analysis of how the benefits of concentrated ownership weigh against the social costs. Arguably having a wider range of stakeholders in a fishery will permit a broader range of social considerations to be taken into account thereby enhancing the legitimacy of rights-based instruments. It is also likely to deter efforts to undermine or circumvent the quota system by marginalised fishing interests.

5. LEGAL ASPECTS OF RIGHTS-BASED FISHERIES

The foregoing review shows that no property rights have been granted over marine fish in their natural state. In part, this is a consequence of the fact that it is impractical or impossible to establish physical excludability over wild fish. In part, it is a consequence of the fact that most legal systems preclude the grant of private property rights over marine living

[482] Hannesson, n 450 above.

resources (animals *ferae naturae*). However, this does not preclude legal excludability over fisheries by other means. Many States have developed exclusive harvesting rights as a means of limiting access to a common pool natural resource. These rights display varying degrees of the incidents of property. In the examples of State practice considered above, such rights are typically exclusive, transferable, possess a degree of security and duration of term. Although they may not amount to a strong legal form of property, they constitute economic rights of high potential value. It is also worth noting that such rights have gradually consolidated over time, which suggests the potential for future strengthening of such rights. It is important to note that in all cases, the State retains ultimate responsibility for the management of fisheries. Thus States may dictate the broad terms as to how such holding may be used, although some micro-management of holdings is invariably left to individual fishermen who may chose how and when to exercise their limited rights.

Clearly, the retention of control of the management of fisheries is essential for the purpose of meeting domestic political objectives.[483] It is also necessary to ensure that States can comply with their international obligations. As indicated in chapter 7, States enjoy exclusive rights to the natural resources of the EEZ, subject to certain responsibilities. This complex framework of obligations establishes a form of stewardship, ie a holding subject to overarching public duties. These obligations constrain the exclusive rights of States, which in turn constrain the extent to which States can introduce exclusive fishing entitlements under domestic law. International obligations are not just limited to fisheries conservation and management; they are also shaped by a wider range of environmental norms as outlined in chapter 6. These form part of the legal framework for the regulation of natural resources. Some of these are explicitly part of domestic fisheries legislation. Others have an indirect influence through their incorporation into other domestic instruments that impact upon fisheries management.[484] These general restrictions on the sovereignty of States are particularly important because they establish a wider public interest in the conservation and management of natural resources, either by requiring regulation in a manner sensitive to ecological context or by vesting the wider international community with a legal interest in the biodiversity attributes of natural resources. Together, these place important limits on how States regulate natural resources, and require them to adopt increasingly complex management structures that allocate the

[483] The FAO Legislative Study indicates how the quality of rights is driven by geographic, political, social and economic consideration. Thus South Africa and Namibia have prioritised localising the fishing industry as a means of assisting the dismantlement of apartheid. This has required strong government control and limited transferability: n 94 above, 88.

[484] See, eg, Australian Environment Protection and Biodiversity Conservation Act 1999 s 6.

responsibility for the various incidents of ownership to different agencies, rather than locating them solely in the hands of either public bodies or individual persons. This is reflected in the complex management structures that have evolved in respect of fisheries under domestic law.

In effect, management measures operate to restrict the exercise of private rights or entitlements to fish in the public interest. Typically these include limits on transferability of rights, limits on the duration of most holdings and the imposition of use restrictions in the form of licence, permit or quota conditions. New Zealand is somewhat exceptional in its desire to expand the scope for the involvement of commercial stake holder organisations in the management of fish stocks, in effect transferring some aspects of the incident of management into the right holders' domain and strengthening the private property qualities of the holding. In part this reflects the particular successes of the New Zealand QMS, but it is also a consequence of the strong political influence now held by the fishing industry. However, even in New Zealand any delegated management rights are subject to careful scrutiny and control. The retention of such control provides States with the means of ensuring that fisheries are regulated according to certain public interests. Such interests are invariably set forth in the implementing legislation, and include ensuring the sustainable use of resources, ensuring that fishing activities do not have adverse impacts on the environment, and ensuring that certain socio-economic objectives are facilitated by management systems. By stating the objectives for the fishery management systems thus, these objectives become part of the operative rule structure. They also invest the resultant statutory fishing rights with inherently public purposes. It is worth noting that precedence is generally afforded to preserving the sustainability of the resource base, reflecting the priority of first order public interests. No State either prioritises economic objectives or permits such to be the single reason for the adoption a management instrument.

In general, Iceland and New Zealand have found it easier to introduce rights-based systems with much stronger forms of holding. This is in part a product of the domestic legal system, which appears to be more conducive to these new forms of property, and, in part, a product of the political will to establish strong forms of property rights-based fishing instruments. Arguably, their unitary status and capacity to manage a majority of their domestic fisheries without complex internal governance arrangements or international cooperation has facilitated the design and implementation of rights-based fisheries. In contrast, Australia, Canada and the United States have had to contend with complex federal and State allocations of jurisdiction. In complex federal arrangements, a number of distinct plenary legal communities exist. The public interests of such communities are not necessarily identical and this may result in conflicting public interests at State and federal levels. Transactions between such

communities may be determined according to reciprocity, thereby producing quite unique regulatory compromises. In such federal States, the possibility of overlaps or uncertainty in allocations of competence may arise, rendering regulation of matters such as fisheries more difficult. And even where these matters are settled in law, the practical regulation of fisheries, which do not always conform to neat political or legal boundaries, may require considerable cooperation in the prescription and enforcement of fishing laws. This indicates how the general contours of a legal system and factors such as jurisdiction and reciprocity may influence the form of property rights.

The influence of legal institutions on the extent and form of property-rights-based fisheries instruments is reaffirmed when we look at domestic jurisprudence. In domestic courts, these exclusive use or harvesting rights have been characterised as new forms of property or statutory entitlements. This suggests that traditional property structures: private property, collective property and common property are ill-suited to account for the structure of the holdings. The fishing rights might be regarded as a *profit a prendre*. However, this fails acknowledge the regulatory basis of the rights. It also fails to capture the extent to which the holdings are regulated according to public purposes. It is suggested that the treatment of these rights is in effect a form of stewardship, as outlined in chapter 4. Stewardship is characterised as a form of individual holding subject to overarching public duties. As the (self-regarding) interests of the holder are not always aligned to the public interest demands that generate legal responsibilities, this generally requires a more complex form of holding with use and management incidents spilt between the right holder and the State. It also requires various cooperative mechanisms to ensure that the interests of each agency feed into the practical operation of the right. In essence, this type of arrangement is characterised by a sophisticated disaggregation of excludability between the State and the right holder. This captures the legal relationships considered in the above case studies.

The precise character of these new rights varies from State to State, but whatever this is, it is quite clear that it cannot be considered in isolation from existing property rules and institutions.[485] Legal instruments do not exist in a vacuum but must fit with existing legal rules and structures. At this point it is useful to recall that the design and operation of any legal measure must adhere to the fundamental principles that constrain legal reasoning and rule-making generally.[486] These principles require

[485] Indeed, they cannot be regarded in isolation from more general legal principles; thus Icelandic courts have upheld a challenge to the quota system on the grounds that it ran counter to economic freedom and equality before the law.

[486] See further, ch 4, s 3(b).

legal rules to be universalisable, consequence sensitive, coherent and reasonable. The influence of these principles is manifest in the sometimes inconsistent treatment of fishing rights as property for some purposes but not for others. This is suggestive of some difficulty in trying to accommodate these new types of rights within existing legal structures. As a general rule it appears that domestic courts are more willing to consider fishing rights as property in purely commercial or private contexts, but not when a right is being opposed against the State. This reflects the inherent public purposes vested in these new rights.

Legal rules are universalisable. Judges are aware that in reaching a decision they must be prepared to commit themselves to the consequences of their decision in future similar cases. As such, judges must consider the wider legal consequences of any ruling. The consequence of a decision may be quite difficult to ascertain. It is notable that judges are careful not to substitute their decisions for administrative decisions by fisheries managers that have been reached legitimately.[487] However, it is clear that many judges are sensitive to the legal and behavioural consequence of their decisions in respect of fisheries regulation. This is particularly evident in the context of constitutional implications of rights-based fisheries instruments. For example, Australian courts have guarded against the gradual consolidation of statutory fishing rights into common law property, despite admitting their importance as property rights for some purposes. In *Antons Trawling Co*, the New Zealand High Court held that it was necessary to ensure that some scientific basis was provide for the setting of the TACC.[488] Implicit in this seems to be a desire to ensure that statutory obligations are not shaded through a technocratic process, which could ultimately result in the arbitrary setting of a TACC on the basis of flimsy evidence or mere suppositions of risk. In *Comeau's Sea Foods*, the Canadian Supreme Court was much more explicit about adopting a consequentialist approach to decision-making, focusing on the Minister's appreciation of the immediate policy concerns within the fishing industry.[489] Whilst the court did not explicitly engage in an evaluation of such matters, these properly being a matter for the executive, it is clear that in a public law based fishing regime courts will increasingly have regard to the basis of executive decisions in determining the validity of regulatory decisions.[490] This may open the door to consideration of the general effectiveness of fisheries management regimes, to the extent that it already has in respect of some domestic jurisprudence on quota allocations.

[487] See, eg, *Sandford Ltd*, n 321 above, [73].
[488] Above n 325.
[489] Above n 204.
[490] See, eg, *Sandford Ltd*, n 321 above.

The influence of the principle of coherence is most apparent when one considers the constitutional position of property rights in each State and the debates concerning the impact of private fishing rights on the public right to fish. All forms of rights-based entitlement are subject to residual regulatory control by government, who may diminish or even extinguish the entitlement. The need to retain such control is vital to fisheries management where output controls need to be supplemented by more calibrated input controls concerning the use of particular gear, fishing times and other conditions of use. If harvesting rights were to be regarded as private property, then any diminution or extinction of a right might constitute a compensatable taking by the State. In order to avoid such consequences, which would render public regulation of fishing impossible, most States have explicitly reserved the property status of fishing entitlements. This is particularly the case in States with strong constitutional guarantees for private property, such as Australia and the United States. In contrast, New Zealand has been more willing and able to embrace rights-based measures in the absence of a strong constitutional protection for private property.

The public right to fish has exerted a lesser influence on the development of rights-based instruments. It has been described as a 'paramount right' and is frequently used to object to the introduction of private fishing rights.[491] Crucially, the right cannot be abrogated by a grant of private fishing. However, there is nothing to prevent a public right from being adjusted by legislation. This is important because the gradual extension of commercial fisheries through statute has redefined the scope of the public right to fish. Whilst it retains a core meaning, it is clearly not an unfettered right and cannot be regarded as a complete bar to exclusive fishing rights. As creatures of statute the nature and scope of these fishing rights will be settled by reference to the legislation creating the right, rather than the common law. A consequence of this is that the balance between the right holders' interests and the public interests of the State are primarily determined by rules of public law and by techniques of legal reasoning. This is quite evident in the domestic jurisprudence on fisheries.

In summary, these principles show how legal rules, both domestic and international, and the process of legal reasoning fundamentally shape the extent and form of property rights-based fisheries. This has resulted in forms of property that are dedicated to certain public interests. Although there are strong economic arguments for extending and enhancing the quality of private property rights in fisheries, there are considerable legal obstacles to this. Legal institutions are infused with a plurality of values, of which economic goals comprise only certain

[491] *Harper v Minister for Sea Fisheries* (1969) 168 CLR 314, 329 (Brennan J).

elements. This is evident in the priority afforded to sustainable fisheries under domestic and international law. The fact that property institutions are inherently responsive to the physical attributes of the *res*, and instrumentally fashioned both by limitations inherent in the justifications of private property and first order public interests, provides good reason for believing that full ownership rights are unlikely to arise in respect of fisheries.

9

Conclusion

In response to the current fisheries crisis, a number of States have experimented with property-rights-based fisheries management systems. These moves have been strongly driven by economic arguments, which posit that the introduction of private property rights into a common pool resource will prevent a destructive race to capture the resource and result in more efficient resource use. In most marine fisheries, the introduction of rights-based instruments has resulted in the improved economic performance. Excess capacity has been reduced. Fisheries are maintaining or producing higher economic returns. There have even been reported improvements in the physical condition of the stocks, although it is still too early to predict the longer term impact of rights-based mechanisms on stock sustainability, non-target species and marine ecosystems. There is also evidence of right-holders being more willing to participate in the management of stocks, which can make the design of management systems more inclusive of the interests of key stakeholders. However, rights-based systems are not a panacea. By-catch levels remain high. High-grading of catches and discarding remain a problem. Whilst quota systems can be effective for single species fisheries, they are more difficult to implement in complex multi-species fisheries. Such difficulties are compounded by the growth of legal obligations to take account of the impact of fishing activities on the marine environment more generally. Although many communities may benefit indirectly from more efficient fisheries, rights-based systems have resulted in some adverse social consequences. For example, rights-based systems may disenfranchise individual fishermen and result in fishing rights being aggregated by larger fishing organisations or commercial bodies. Also although stakeholder participation is regarded as a public good, it can have some adverse effects, particularly when powerful stakeholders seek to exert pressure on the political process that determines management measures.

Although property rights-based fisheries management systems may provide an opportunity to improve the operation of fisheries in theory, the economically optimum form of property right may not necessarily be available in practice. This is because property rights are fundamentally shaped by the legal system that proscribes, regulates and enforces property rights in practice.

In chapter 2, we saw how property rights come in a variety of legal forms, but in all cases they turn on the idea of excludability. Thus different property relations are characterised by the varying degrees of excludability to which a thing may be subject and by who determines this. Excludability is determined according to the physical characteristics of a thing, the capacity of law to facilitate excludability, and whether or not and how much excludability is morally desirable. We also saw how property in general is fundamentally shaped by a plurality of values, which in turn influence particular and specific forms of property. These general justificatory theories lend some support to private property rights and utilitarian/economic based calls for preference maximisation. However, this is not always an overarching consideration in the design over property rights. It is clear that certain core functions of property are common to all property justifications: the ordering function of property and ensuring that the acquisition or accumulation of property does not undermine certain basic needs or individual autonomy.

In chapter 3, it was suggested that the public function of property is frequently ignored or undervalued. This is surprising because property is a social institution and, as such, fundamentally shaped by social processes. Even in justifications of private property, this core ordering function of property is admitted. In an effort to redress this imbalance in property analysis, an account of the public function of property was provided. This firmly located the public function of property in the values and structures of the plenary legal community within which property institutions are located. It was then noted that the different values and structures of different communities result in distinct public functions for property. That said, some general attributes of the public function of property can be divined from certain features that are common to all plenary legal communities. Thus, first order public interests require property institutions to meet certain basic needs or levels of subsistence. This extends to meeting the needs of current populations and maintaining the opportunities necessary to ensure vital needs can be provided for future generations. Second order public interests require property institutions to conform to the structural requirements of a legal system. These include: protecting agency, thereby reaffirming first order interests; respecting allocations of jurisdiction; and conforming to the requirements of reciprocity, which demand a degree of direct or diffuse equivalence in legal transactions. Other important social objectives (third order public interests), such as fundamental religious or ideological tenets, may further dictate the shape and extent of property rules. These three orders of public interest are found in operative legal rules, and frequently in higher order norms such as domestic constitutions and jus cogens norms of international law. Apart from noting how these rules constrain the operation of property, it was observed how environmental norms were emerging as a powerful

constraint on the operation of property systems. Many such norms are concerned with the protection of first order interests and ensuring the conditions for meeting vital needs. International law in particular was concerned with how natural resources should be subject to certain public interest limitations, a point that is taken up in chapters 6 and 7.

As property possesses a dual function, facilitating both private and public interests, it is essential to understand the relationship between these facets of property. They may pull in different directions or place limits on the specific and particular property rights. This was considered in chapter 4. Whilst the existence of such interests may have extra-legal origins, once such interests are reduced to legal norms or subject to legal processes, then it is the function of law to determine the relationship between these interests in particular cases. In part the relationship between various interests may be determined by the physical qualities of a resource. However, given that legal excludability can frequently overcome the limits of physical excludability, it is crucial to understand how legal excludability operates. In many cases this is simply a matter of looking to the relevant operative rules of law. However, at a more fundamental level the way in which law operates shapes the relationship between public and private interests. To this end it was shown how the reason dependency of law in a pluralist context commits us to a determinable relationship between private and public interests. That is to say one where there are no absolute priorities between private or public interests. This does not mean that strong private rights are always permissible. Law as a form of practical reason operates by certain rules, rules that determine the weight to be given to particular claims and arguments. The rules of practical reason (universabilty of propositions, consequence sensitivity, coherence and reasonableness) can be used to explain how law resolves conflicts between private property rights and public interest demands. Together, the elements of legal and physical excludability suggest that a more complex form of property relationship—stewardship—may provide the appropriate framework for the regulation of certain natural resources.

This conceptual framework was tested in the context of the development of marine natural resources regimes in chapter 5. In general, the historical development of these regimes was strongly influenced by international law. As a result different values shaped marine resource regimes than land-based natural resource regimes under domestic law. What was also apparent was the initial isolation of exclusive claims from important socialising factors that limited the development of property under domestic law, and which permitted largely unhindered and exclusive legal claims over natural resources. This resulted in few legal limits to exclusive claims. This analysis revealed the central importance of physical factors in the early development of sovereignty over maritime spaces and property rights in marine resources. Thus the unboundable

nature of the sea precluded its exclusive appropriation. Of course, such claims were eventually sustained through the use of legal excludability. However, consolidation of exclusive rights faced a long struggle to overcome the dominance of non-excludability that had become entrenched in international law. It should be noted that international law in its formative period was as much the product of political self-interest as it was the application of legal principle, and this often resulted in the latter taking second place to pragmatism. However, despite some scepticism, a more careful examination of early maritime claims reveals that the operation of the techniques of legal reasoning has always been present. Into the 20th century the legalism of international law became much more obvious and much more influential on the formulation of legal rules. This was the result of a number of factors. First, the institutionalisation of international law and acceptance of it as a positive legal order meant that action was to be dictated in accordance with legal rules rather than political self-interest. Moreover, the institutionalisation of international law facilitated the development of international community interests that transcended the interests of individual States. In this context, considerations of propriety and order emerged to balance the strong liberal paradigm that favoured the autonomous and decentralised allocation of authority in international law. Secondly, the increasing availability and complexity of international rules concerning the regulation of oceans spaces and resources made it much more important to ensure coherence in the formulation of new legal claims. This reached its apogee in the late 20th century with the consolidation, systematisation and near universal acceptance of the law of the sea in the form of the Law of the Sea Convention. Here the ordering role of the principle of reciprocity becomes fundamentally important.

Throughout the development of the law of the sea there has been a strong reliance on property concepts to explain the basis of State authority over maritime space and resources. In chapter 6 an essentially proprietary theory of territorial sovereignty was advanced, which enabled the construction of sovereign rights over natural resources to be conceived of in terms of private and public incidents of ownership. Even if this approach is considered to blur the precise nature of the discreet legal relationships, it cannot be wholly discounted because this only serves to mask the fact that both property and territorial sovereignty are concerned with allocations of competence and the fact that limitations on sovereignty necessarily generate limitations on property. It also overlooks how marine resources, ie the mineral resources of the continental shelf, are regarded as State property under domestic law. International law clearly places a number of public interest type limitations on the use of natural resources. Of particular importance is a burgeoning body of environmental rules. These rules are very much a response to developments in science and our understanding of the natural world. With the aim of protecting natural

resources, these rules service first order public interests by protecting the means of satisfying basic needs. Of particular importance is the development of rules on the protection of biodiversity and the protection of ecosystems because these show how traditional property rules are ill-suited to regulating quite complex ecological conditions and servicing multifaceted and diffuse private and public interests. It is suggested that in the context of natural resources, stewardship provides a more adaptable and suitable vehicle for facilitating these ends.

In chapter 7, the detailed international framework for the regulation of marine resources under the Law of the Sea Convention was examined. This reveals how the exclusive competence of States over the territorial sea, archipelagic waters, continental shelf and exclusive economic zone provides States with sufficient authority to establish property rights-based resource management regimes. However, such rights are far from untrammelled. It remains the case that certain physical attributes of natural resources predispose them to particular forms of regulation, for example in the common property treatment of the high seas. Although the obvious influence of physical excludability in respect of oceans spaces has seemingly waned with the vast expansion of exclusive claims in the 20th century, the international law of the sea has embraced a pivotal role for science in the regulation of ocean spaces and resources, especially in the context of fisheries regulation. Thus the Law of the Sea Convention, in its rules on the TAC and MSY, places the physical attributes of the resource and its broader environmental context at the heart of the regulatory framework. These provisions have been supplemented by much more explicit technical requirements in post-Law of the Sea Convention developments, such as the Fish Stocks Agreement and FAO Code of Conduct for Responsible Fisheries. These require a much more carefully calibrated use of science through the ecosystem approach and precautionary principle. As a result, a much more sophisticated form of physically excludability has become determinative of resource use regimes.

In addition to these physical influences on resource regulation, the Law of the Sea Convention places important legal limits on resource use. Thus it establishes duties to ensure certain rights of navigation, to conserve and manage natural resources and to protect the marine environment more generally. In practice, these obligations comprise important public interest type limits on the use of natural resources. For present purposes the most important of these are the conservation and management obligations that form an essential component of the package of coastal State entitlements to utilise the resources of the EEZ. The need to balance resource conservation and economic utilisation of natural resources has resulted in a *sui generis* regime that echoes the model of stewardship outlined in chapter 5, where use rights are subject to overarching public responsibilities. Although these responsibilities are broadly drawn and the accountability

of the State to the international community is not strongly provided for, the basic regime has been enhanced by developments since the adoption of the Law of the Sea Convention. More importantly, conservation and management responsibilities are increasingly reaffirmed in domestic resource management regimes as part of widespread efforts to prevent the further degradation of marine resource systems.

In chapter 8 we considered the way in which an increasing number of States have sought to use property rights to regulate a common pool natural resource. This brings us back full circle to an assessment of rights-based fisheries management systems. Although the jury is still out in respect of the overall benefits of this approach, it seems clear that property rights have improved the efficiency of fishing activities and reduced over-fishing. These benefits alone will sustain calls for the use of property rights in fisheries management regimes. They will also lead to calls for the strengthening of such rights, by giving individuals permanent, less restricted rights in fisheries and a greater say in the management of fisheries. However, it is important to caution against an uncritical acceptance of this approach. Whilst the perceived improvements in rights-based fisheries may support stronger private property rights in fisheries, the existence of defects in such management systems provide equally strong reasons for retaining a strong degree of public control over fishing activities. Moreover, as we have seen throughout his book, the introduction and operation of property rights is not simply a matter of economics. Property rights are legal rights and so shaped by legal considerations. Property rights play a fundamental role in allocating wealth in societies. Property rights form a fundamental building block of society and are central to allocations of power. Property institutions have a strong social, political and philosophical dimension. Property is a pluralist, bivalent concept in which economics is just one strand of thought. This study has sought to reinvest the debate about privatising fisheries and other natural resources with a more rounded, legal perspective on property. This has lead to a number of specific cautions being offered up against a casual acceptance of merits of privatising fisheries.

First, it is not only private property rights that are capable of preventing the tragedy of the commons. Other forms of property are capable of regulating common pool natural resources. Indeed, other forms of holding that limit access to natural resources, such as common property or collective property or even community held property may be as effective as individually held entitlements, as well as providing for other social benefits.

Secondly, property rights systems are underpinned by a range of values, of which preference maximisation is but one. These values may support other forms of property. In particular, the explicit prioritisation

of sustainability and the protection of other public interests in natural resources may militate against privatisation, or at least strong forms of private property. This is particularly the case in regimes where the parameters of the resource, ie the object of the property right, are determined by scientific factors. Fish stocks, which are determined by complex models, are a case in point. Of course, a fundamental difficulty with all fisheries management systems is precisely this dependence upon science to provide the basis for management decisions. As long as science is lacking, incomplete or open to debate, statutory regimes that involve some degree of cost benefit analysis as to the risk of regulatory action are vulnerable to legal challenge, particularly when management decisions run counter to the interests of the rights holders. The potential for such challenges can be mitigated by ensuring that the fishing rights are precisely defined (and limited) so as to permit wide regulatory control of the fishery. However, as the case of *Antons Trawling Co* demonstrates, in systems with strong private rights this may result in more frequent challenges to management steps taken on a highly precautionary basis.

Thirdly, the way in which property rights are constructed as a matter of law means that stronger forms of private property in fisheries may not be possible in practice. This is very much the result of how the physical, legal and moral excludability dictate the evolution of property rights in natural resources. Thus exclusive harvesting rights exist because of the practical difficulty of establishing property rights in *ferae naturae.* These harvesting rights may be subject to important legal limits. For example, in order that States can meet their international obligations and pursue domestic community objectives, the incidents of use and management of harvesting rights are typically reserved to the State. These incidents are exercised by States with the aim of ensuring resource sustainability and protecting the environment. As these are linked to first order interests they ordinarily take priority. The transboundary aspects of marine living resources, either through the characteristics of fish stocks or marine ecosystem and biodiversity considerations, may result in further limits on exclusive rights, such as the creation of positive duties to cooperate in resource use. Finally, the requirements of legal coherence mean that property rights in fisheries must fit with existing principles of law. Thus the strong constitutional protection of property rights in some States precludes the emergence of anything more than statutory entitlements. Even in States where statutory forms of holding were intended to take on the lineaments of strong property rights, the statutory origin of such entitlements means that they remain subject to important public law limitations concerning their construction and operation. There must also be coherence with other relevant bodies of law and, in particular, environmental law. As the exercise of fishing rights invariably impacts upon the environment, the legal framework for the protection the environment becomes an

essential component of any system of fisheries management. This results in further limits to any exclusive use rights.

The existence of complex values, rights and interests in marine living resources systems together with property and environmental laws have resulted in quite sophisticated forms of holding for marine fisheries. Indeed, as the review of domestic fisheries management regimes suggests, it seems misleading to characterise existing rights in fisheries as private property. Although they have some of the attributes of private property, they are fundamentally linked to certain public interests, such as ecological sustainability. Given the complex arrangement of rights and interests that truly characterises these forms of holding, they are better regarded as a form of stewardship. The fundamental linkage of rights and responsibilities under international and domestic law combined with the fact that complex forms of holding are already quite well-established under domestic law, shows that we have good reason for treating calls for stronger forms of private property in marine fisheries with a degree of scepticism.

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