TURUN YLIOPISTON JULKAISUJA
ANNALES UNIVERSITATIS TURKUENSIS

SARJA - SER. B OSA - TOM. 309

HUMANIORA

KYOTO PROTOCOL FLEXIBILITY MECHANISMS AND THE CHANGING ROLE OF SOVEREIGN STATES

BY

ERIIKA MELKAS

TURUN YLIOPISTO
Turku 2008

ISBN 978-951-29-3588-8 (PRINT)
ISBN 978-951-29-3589-5 (PDF)
ISSN 0082-6987
Painosalama Oy – Turku, Finland 2008

SYNTHESIS: KYOTO PROTOCOL FLEXIBILITY MECHANISMS AND THE STATE

Acknowledgments

There are probably as many ways to a doctoral dissertation as there are doctoral candidates – and by this I do not mean methodological choices or the like that one can agree or disagree with, or by which the end result can be evaluated. I mean the personal process that first convinces one to get started with such a project, and the process that leads one to the end result. That personal process is often in many ways dependent on interaction with other people.

First of all, I would like to thank professors Tuomas Kuokkanen and Jonas Ebbesson for agreeing to review this work, and for providing me with a number of critical remarks in a positive spirit. I also wish to thank Tuomas Kuokkanen specifically for kindly agreeing to act as my opponent.

My supervisor, Judge at the Supreme Administrative Court, former professor Kari Kuusiniemi, first introduced research work to me, got me started – yet gave me all the room I needed to choose and limit the topic I wanted to write about – and opened doors to Nordic and international environmental law research networks. These networks, through which I have met likeminded colleagues, even made friends, have proven priceless over the years.

I am also ever so grateful to professor Anne Kumpula, my supervisor, whose door has always been open to me, and who has had – seemingly endless – patience to listen to my ideas, yet with a critical ear. She has been able to support and encourage me even when nothing seemed to be happening, and when I was myself in doubt as to whether I would ever manage to finish this work.

Professor Hans-Christian Bugge has contributed to this work greatly by kindly commenting on my work, as well as making it possible for me to visit the Faculty of Law at the University of Oslo several times to explore libraries, gather material and meet with other researchers. These visits have indeed proven worthwhile, pleasant and at one point even quite crucial – thank you!

International law, alongside environmental law, turned out to play an important role in this study. In this field professor Lauri Hannikainen has acted as an important guide. Lauri has never ceased to have an interest to my ideas, helped me keep up the positive spirit, and provided me with lots of good advice, together with the informal researcher group of international law (EUKAN) involving researchers of international law at the Faculty of Law at the University of Turku and the Institute of Human Rights at the Åbo Akademi University. Thank you! Within the field of international law I also wish to thank sincerely professor Martti Koskenniemi, who, in spite of his undoubtedly very busy timetable, at one critical point helped me overcome a significant hurdle. I truly enjoyed the discussions I had with him and benefited from the help I got from him. These are greatly appreciated.

I wish to thank the Faculty of Law at the University of Turku as well as the Institute of International Economic Law at the University of Helsinki for providing me with office space and facilities, together with two very pleasant working communities. It has indeed been a pleasure working with people with a genuine interest to – even passion for – what they are doing.

A supportive working community can indeed be an absolutely crucial factor on the road to a doctoral dissertation. The support, even friendship, I have received from a number of colleagues at the Faculty of Law of the University of Turku and at the Institute of International Economic Law at the University of Helsinki has turned out to be irreplaceable. Thank you for the innumerable discussions over lunch, coffee or other on matters of law as well as everything else on earth!

I have had the fortune of being funded by several organisations – having the possibility to work full time on a dissertation makes its finalisation considerably easier. Therefore I wish to thank sincerely the Finnish Academy with its Finnish Global Change Research Programme (FIGARE), Maaliskuun 25. päivän rahasto, Otto A. Malmin Lahjoitusrahasto, Maj and Tor Nessling Foundation, Turku University Foundation, Olga ja Kaarle Oskari Laitisen säätiö, and the Finnish Lawyers' Association for their financial support.

Finally, I wish to thank my family. My parents and my brother have supported me in many ways in my academic aspirations with great commitment throughout the years. My partner, Kuisma, has been a fantastic support during the past years. What ever obstacles I have come across in my research work or other walks of life, I have been able count on finding a shoulder to lean on and peace of mind at home. Thank you for being there.

Helsinki, May 2008

Eriika Melkas

CONTENTS

This thesis is a summary of the following four articles:

1. Melkas, E. “The Climate Convention and the Kyoto Protocol – an Overview of the Legal Framework for State Action”
Ympäristöjuridiikka 4/2001 pp. 7-58

2. Melkas, E. “Sovereignty and Equity within the Framework of the Climate Regime”
Review of European Community and International Environmental Law 2 (2002) pp. 115-128

3. Melkas, E. “Emissions Trading in the Kyoto Protocol – Caught Between Form and Substance”
Tilburg Foreign Law Review 14 (2007) 3, forthcoming

4. Melkas, E. “Equitable as Equal: the Kyoto Protocol Project Based Flexibility Mechanisms in an Unequal World”
International Community Law Review 9 (2007) pp. 263-289

1. Background and structure of the study

1.1 Climate Change

The period from 1901 to 2005 has witnessed a warming of the global average surface temperature greater than any since at least the 11th century.[1] This implies a temperature increase of about 0,74°C over the past hundred years, although the warming has been neither steady nor the same in different seasons or in different locations.[2] The development has also shown an accelerating trend.[3] The other side of the coin is the nearly worldwide reduction in glacier and small ice cap mass and extent in the 20th century.[4]

Temperature changes are somewhat obvious and easily measured – more so than many of the other changes in climate. It must, however, be kept in mind that the whole climate system is affected, thus, the changes manifest themselves in many different ways, and uncertainties as well as regional differences may be substantial.[5] In any case, it seems to have been established that changes in the climate system can be abrupt and widespread.[6]

Changes in precipitation patterns are an example of the multiple manifestations of climate change. These changes seem to be occurring in the amount, intensity, frequency and type of precipitation. There is also evidence that winter precipitation has increased at high latitudes – thus in different areas than drought – although uncertainties exist. Especially precipitation intensity and the risk of heavy rain and snow events seem to have increased.[7]

Warming accelerates land surface drying and increases the potential incidence and severity of droughts. For example a severe drought affecting central and southwest Asia in recent years

[1] IPCC 2007 p. 249.
[2] IPCC 2007 p. 252. See also IPCC 2007 p. 316 and *passim.*
[3] See IPCC 2007 p. 318.
[4] See IPCC 2007 p. 317. This is, however, also due to changes in precipitation patterns.
[5] IPCC 2007 pp. 254, 265, 271.
[6] IPCC 2007 p. 775.
[7] IPCC 2007 p. 262.

appears to be the worst since at least 1980. Drought has also become widespread throughout much of Africa and more common in the tropics and subtropics.[8]

Snow cover as well as seasonally frozen ground has decreased in many parts of the Northern Hemisphere, and more precipitation is falling as rain instead of snow. Sea ice extents have decreased substantially in the Arctic and the mountain glaciers have been shrinking.[9]

Climate change manifests itself also in extreme events, such as heat waves, droughts, floods and hurricanes. Since 1950, there has been detected an increase in the number of heat waves, as well as in the extent of regions affected by droughts.[10] It is also likely that there has been a poleward shift as well as an increase in Northern Hemisphere winter storm track activity over the second half of the 20th century.[11] For extratropical cyclones, the trends in storm intensity are positive for recent decades. This would entail greater wind speeds and more intense precipitation in those storms. Furthermore, the density of strong cyclones increases while the density of weak and medium-strength cyclones decreases. In addition, there is likely to be a poleward shift of storm tracks in both hemispheres.[12]

The rising sea level is often pointed out as an example of an utmost concrete manifestation of the global climate change.[13] Sea level has, indeed, been rising throughout the 20th century, and the rate thereof has increased during the 1990s and seems to keep rising.[14] The rise is partly due to the warming up of the seawater, which leads to the expansion thereof, thus increasing the volume of the global ocean and producing thermosteric sea level rise[15]. Another reason is the melting of continental ice and mountain glaciers.[16]

[8] IPCC 2007 pp. 261, 263.
[9] IPCC 2007 pp. 317, 374; see also p. 776.
[10] IPCC 2007 pp. 308, 317.
[11] IPCC 2007 p. 308.
[12] IPCC 2007 pp. 316, 786-789.
[13] See e.g. IPCC 2007 p. 408.
[14] IPCC 2007 pp. 318, 409.
[15] See e.g. IPCC 2007 p. 414.
[16] IPCC 2007 p. 812; see also IPCC 2007 pp. 417-418.

Vegetation boundaries will migrate due to global warming, thus leading to large and rapid changes in areas close to those boundaries.[17]

These changes have been connected to the immense increase over the last couple of decades in the emissions of the so-called greenhouse gases, of which carbon dioxide (CO2) is the most common.[18] This increase in emissions has enhanced the initially natural mechanism where the sun's radiation is reflected off the Earth's surface and trapped by CO2 and other greenhouse gases in the atmosphere. The most important activities behind the increase are combustion of fossil fuels in e.g. energy production and traffic, and deforestation. Others include agriculture, waste and industry.[19]

A peculiarity in the climate change phenomenon is that it is happening to the climate as a whole regardless of the location of the greenhouse gas emissions. So, what has been said about long range air pollution in general – that it does not recognize state boundaries – is especially true for climate change. The effects vary very much regionally, but greenhouse gas emissions do not have local polluting effects in the same way as sulphur emissions, for instance. What is essential is the percentage of greenhouse gases in the atmosphere, not their location.[20] Thus, it is also of no importance to the occurrence of the consequences where emission reductions take place.

As climate change is largely human induced and has an influence on human settlements and societies, climate change is not only, or purely an environmental problem, but also a social and societal, as well as structural, problem. The structures that lie behind climate change were created already at the dawn of industrialisation. Thus, the solutions need to be found in the society, and these solutions need to be able to tackle the omnipresence of the causes of the problem.[21] There is still a great deal of uncertainty in the scientific understanding of the problem and its complex nature, which sets a challenge to the international response. The

[17] IPCC 2007 p. 777.
[18] See e.g. IPCC 2007 p. 137.
[19] See Oberthür & Ott 1999 pp. 3-9.
[20] See Melkas 2001 p. 9.
[21] See Beck 1990 p. 228.

realisation and recognition of this connection between human activities and climate have brought about the political process discussed below.

The emissions are also most often caused by activities that are crucial to the economies of states, such as energy production, industry and transport. In practice this has led to a clash of climate policies aiming at curbing the emissions and mitigating the problem on one hand, and economic policies and development on the other hand, as climate policies are often seen as requiring either bringing development to a halt or investing in new, expensive technologies, that poor countries cannot afford and that are politically controversial in richer ones.

This clash is, however, to some extent a misguided interpretation of the state of affairs. The unequal distribution of the consequences of climate change is also causing increasing inequalities between different countries, as poorer countries are often hit the hardest. But these countries often do not have the funds to cover for the damages, which also creates a need for investments and assistance from the developed world. This, too, sets a challenge to the international response.

1.2 How to Get There – the Approach

This study started out with an intuition that the position of states defined by international law – "position" referring to constraint or lack thereof imposed upon states – has changed from that described in international law schoolbooks. That the prevalence of state sovereignty as a *prima facie* freedom to act as one pleases has given way to understanding this freedom as a competence that is to begin with limited. The intuition included the perception that the change has been entailed by the multiplication of the international obligations undertaken by states and the increase in the volume of international law. From a different direction, the so-called second generation environmental problems, of which ozone depletion together with climate change is an example, have presented demands to the state-driven international system. This change is manifested by, *inter alia*, co-operative instruments such as the Kyoto Protocol flexibility mechanisms. In these arrangements obligations imposed upon states by international law, albeit in practice agreed upon by states themselves, may be rearranged and

renegotiated among two or more states. But the freedom to do so is not unlimited, and may involve also other actors than states. Are these limitations of the freedom reflections of a more general development of the law? What kind of demands does this set to the implementation of the Kyoto Protocol flexibility mechanisms?

The approach used in the study has been somewhat dogmatic – the kind that Immi Tallgren has described in her dissertation as "the world according to a lawyer"[22]. The focus is on the systematisation and development of international law within the particular framework of the United Nations regime on climate change. The discussion addresses environmental and international law, and the general doctrine[23], especially principles, of these disciplines have been the starting point in the discussion – thus, a principled approach has been used in the discussion.[24] The discussion takes, however, the point of view of environmental law – thus, more general conclusions as to the role and position of the state in international law in general or in other fields than international environmental law cannot be drawn.

The United Nations Framework Convention on Climate Change has been the starting point in the discussion. The questions to which answers have been sought in this study have been, first, whether the Kyoto Protocol flexibility mechanisms may be taken as implications of a change in the position into which states are put by international law, and second, whether they, on the other hand, also contribute to such a change.

The discussion has been formalist in the sense that it relies on treaties – most importantly the Climate Convention and the Kyoto Protocol – as the most significant source of international law. Rigid formalism is, however, rejected especially when it comes to principles of law, as has been explained above. Principles bring a material element to law, they promote substantive goals instead of merely providing for procedures. In this way, they have been said

[22] See Tallgren 2001 pp. 13-18.
[23] It should be pointed out here that the significance of general doctrines has been stressed mainly in Continental European legal culture, whereas in Anglo-American legal culture such aspirations have met with suspicion, see Tuori 2002 p. 170.
[24] See e.g. Ranta 2001 pp. 22-23, according to whom a principled approach and the use of material criteria is well founded in the interpretation of and research concerning environmental regulation, stigmatised by flexible norms and balancing of interests. The relationship between international and environmental law, and the possibility of an international environmental law will be discussed later in this synthesis, as it has significance also as to the substance of this study. See also e.g. Pirjatanniemi 2005 pp. 93-94.

to promote the consistency and coherence of law and to improve predictability.[25] They have been observed and discussed as guides of and setters of limits to states' activities, and provided the yardsticks against which the rules within this particular framework, the Kyoto Protocol flexibility mechanisms, have been reflected. Also case law has been relied on for authoritative interpretations.

The choice of principles to be discussed has been based on an estimate of what is most relevant to the use of the mechanisms and to their functioning as means and aids of fulfilment of the obligations based on the Kyoto Protocol. These principles are the principle of common but differentiated responsibility, the precautionary principle, sustainable development, state sovereignty, its derivative the sovereign equality of states, the principle of equity, and the polluter pays principle. Most of these have been included in Article 3 to the Climate Convention. Sovereign equality and the polluter pays principle have been included in the discussion as they may well be seen to lie behind the system's logic. The most significant of these to the position of states have, however, turned out to be sovereignty, equity and an application of equity, common but differentiated responsibility. In addition to these, cost-effectiveness as a goal of environmental law and policy has been addressed, mainly in relation to some of the principles mentioned above. Furthermore, a general doctrine applicable to the mechanisms has been sought and interpretations made in the light of that doctrine.

The use of value-laden principles as yardsticks is far from unproblematic. Flexible and open standards, examples of which principles are, have faced criticism especially within the most recent international law discussions, although they have received a significant degree of popularity within environmental law. Whereas one has accused this development of the law of e.g. focusing on identifying concerns and actors as well as sheer vagueness, and due to this, leaving material regulation to be decided contextually, leading to increasing managerialism, casuistry and hegemonic tendencies, without possibilities of politically contesting the decisions taken, the other promotes exactly those as efficient means of reaching the set

[25] See Tuori 2002 pp. 162, 170 and 179, who points out that "new, instrumentally devised regulations always constitute a threat to the systemic character of the law. The legal order reacts to this threat, arising from the political determination of legislation, at the level of legal culture; at this level the equilibrium, disturbed on the surface by legislative interventions, is restored", that "the systematic nature of the legal order presupposes, on the one hand, its consistency and, on the other, its coherence", and that "the coherence of the legal order stems from its principled nature". See also Ranta 2001 pp. 116-117.

objectives and promoting the generally accepted values, thus, on instrumental grounds.[26] Of course, a researcher, especially one of law, can never be completely objective and unbound by values. The same applies to law itself. But a certain aspiration towards objectivity should certainly always be present, even if objectivity as such can never be reached.

The study has been carried out in four separate articles. In the first one[27], "Overview", I outlined in a general manner the legal framework built to respond to the problem of climate change, and how the latitude for state action is limited in that system. The article described the regulatory framework at a general level, as well as the legal challenges that one faces and the approaches developed in trying to provide a response to a problem that has to do with such a difficult element to grasp as climate.

I chose to devote a great deal of attention to principles – those adopted in the Convention as well as one principle in addition to those, that may been seen to lie behind the functions of the treaty regime, the polluter pays principle – in a rather lengthy manner due to their nature as more long-term elements in the legal system that are less liable to change momentarily. Thus, the article outlined the approach that defined the work also later on.

In the second article, "Sovereignty and Equity"[28], the international law concepts of sovereignty and equity, and their role in the climate regime were discussed – a discussion that has turned out to be quite relevant considering the whole study. The discussion followed the approach adopted in the whole study. For both concepts I first discussed the way they have presented themselves in international law, then in environmental law and finally in the climate regime.

That discussion has continued in my third and fourth articles, of which the third one addressed emissions trading and the fourth joint implementation (JI) and the clean development mechanism (CDM)[29]. In these articles the idea has been to discuss sovereign equality, a

[26] See e.g. Koskenniemi 2005c pp. 74-75; Koskenniemi 2005b p. 6; Kelman 1987 pp. 40-45, 78; Klabbers 2006 p. 1204.
[27] Melkas 2001.
[28] Melkas 2002.
[29] Melkas 2007a; Melkas 2007b.

component of state sovereignty, and its compatibility with cost-effectiveness, a criterion that has entered international environmental law from the national level, and that calls for a spatial flexibility also at the international level that seems to run counter to the equality of states. The discussion has concentrated on the analysis of the two legal concepts on the basis of legal literature and relevant international case law.

In addition to the themes mentioned above, the actors in the system have been throughout the study a recurring theme. Is the climate regime a genuinely inter*national* system that relies on states? Or do the "legal entities", taken account of in several places in the official documentation, have a role that carries such a significance that changes this state of affairs? In this synthesis I have tried to pull the threads together and draw some general conclusions.

In addition to drawing conclusions, this synthesis also aims at drawing a picture of a post-modern international environmental law, and the state within that framework. The climate regime is viewed as a manifestation of this phase in the development of international environmental law, especially its two central features, notably its nature as a special regime and the significance of guiding principles within the framework. The presence of a regime as well as the principles set preconditions to the measures taken within the regime, as will be discussed below.

2. The State and International Environmental Obligations

2.1 The United Nations Climate Change Regime

The United Nations Framework Convention on Climate Change (the Climate Convention) constitutes the basis for the Climate Regime, the ongoing political process engaging most of the world's states in co-operation to mitigate climate change. It was opened for signature at the United Nations Conference on Environment and Development in Rio de Janeiro in 1992. The most significant of the outcomes of the Climate Convention is that it created a basis for the international co-operation.

First, the Convention created an organisation for the co-operation. The annual Conference of the Parties (COP) is at the centre stage in that organisation as the supreme decision making body[30]. The COP also *inter alia* supervises the implementation of the Convention and related documents (Article 7). In addition to the COP, the organisation consists of the secretariat (Article 8), the Subsidiary Body for Scientific and Technological Advice (SBSTA, Article 9) and the Subsidiary Body for Implementation (SBI, Article 10). Furthermore, the Convention sets up a financial system (Article 11).

The Convention also sets some preconditions to the co-operation and the results achieved. Article 2 of the Convention defines the overall objective of the Convention and the co-operation based thereon:

> "The ultimate objective of this Convention and any related legal instruments that the Conference of the Parties may adopt is to achieve, in accordance with the relevant provisions of the Convention, stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. Such a level should be achieved within a time-frame sufficient to allow ecosystems to adapt naturally

[30] There is, however, no consensus concerning the legally binding nature of the decisions taken by the COP and the COP/MOP, on this discussion see Brunnée 2002 pp. 23-26, 33-34, 37-38, who also concludes that "whether or not the mechanism rules, formally, are legally binding, at least *de facto* they significantly affect the position of a party under the agreement". Brunnée argues for an interactional understanding of international law, according to which international law arises from a mutually generative process, and thus entails a wider understanding of bindingness. The same understanding is present in this study. But cf. Yamin & Depledge 2004 p. 8.

> to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner."

Article 3 of the Convention recognises a few, already in international environmental law somewhat established, principles that are also binding in this context. These are equity and its concrete manifestation the principle of common but differentiated responsibilities, the precautionary principle, cost-effectiveness and sustainable development[31]. Thus, these principles contribute to setting limits and preconditions to measures taken by states, both domestically and in their international undertakings, as well as to the implementation of the flexibility mechanisms. In this way they limit the discretion available to states.

In addition to the objective and the guiding principles the Convention imposes certain general obligations upon the states parties. The obligations are differentiated between developed and developing states – Annex I and non-Annex I -states[32] – so that some of the obligations are imposed upon Annex I states only and some upon all states parties. The obligations imposed upon all parties (Article 4.1) are mainly concerned with developing domestic policies, developing technologies, adaptation to climate change, exchange of information etc. The obligations imposed upon Annex I states only (Articles 4.2-4.10) are more detailed. Article 4.2 even includes a quantified goal for emission reductions: The aim is to reach the level of greenhouse gas emissions of 1990. This can be reached either individually or in co-operation with other parties, which is the first appearance of the idea of a joint implementation of commitments in this context.

The special position accorded to developing states and states with economies in transition, as well as the obligation imposed upon developed states to take into account this special position is also brought up, although a distinction is made between these two groups. States with economies in transition are separated from other industrialised states by excluding them from Annex II to the Convention (all industrialised states are listed in Annex I), whereas developing states – or states that within this particular regime are considered developing – are excluded from both.

[31] I have addressed several of these in separate articles.
[32] Annex I to the Climate Convention includes a list of states that are considered developed states within the climate regime. Other states – those not on the list – are considered developing states.

The need for special treatment of the developing countries is also recognised in Article 3 of the Convention concerning the principles applicable in the regime, by the introduction of the principles of equity and common but differentiated responsibilities and respective capabilities, by the requirement imposed upon the developed countries that they take the lead in measures to combat climate change, and by requiring a full consideration of "the specific needs and special circumstances of developing countries". "Policies and measures" should "be appropriate for the specific conditions of each Party and should be integrated with national development programmes, taking into account that economic development is essential for adopting measures to address climate change." The duty to promote sustainable economic growth is aimed at particularly enhancing that growth in developing countries. It has been seen, in general, that economic development is necessary to address the problem of climate change, and that by no means should a choice between the environment and economic development have to be made.

Also the general obligations introduced in Article 4 of the Convention are differentiated between developed and developing countries. Account shall be taken of the special situations of the different categories of developing countries[33]. Furthermore, the communication of information relating to the implementation of commitments has been differentiated according to Article 12 of the Convention.

The Kyoto Protocol is the first and so far the only Protocol concretising the Climate Convention. It was adopted in Kyoto, Japan, at the third COP, and entered into force in 2005. The most significant part of the contents of the Protocol are the quantified emission limitation and reduction commitments, imposed upon Annex B states only, and differentiated state-by-state within that group.[34]

[33] Least developed countries; small island countries; countries with low-lying coastal areas; countries with arid and semi-arid areas, forested areas and areas liable to forest decay; countries with areas prone to natural disasters; countries with areas liable to drought and desertification; countries with areas of high urban atmospheric pollution; countries with areas with fragile ecosystems, including mountainous ecosystems; countries whose economies are highly dependent on income generated from the production, processing and export and/or on consumption of fossil fuels and associated energy-intensive products; and land-locked and transit countries, see the Convention, Art. 4(8)-(10).

[34] Note that Annex B to the Kyoto Protocol and Annex I to the Climate Convention are not entirely identical.

Other important products of the Protocol are the flexibility mechanisms, the basic provisions concerning which can be found in the Protocol. The purpose of the mechanisms is to provide flexibility in fulfilling the emission reduction obligations set out in the Protocol. These mechanisms are emissions trading (ET)[35], joint implementation (JI)[36], and the clean development mechanism (CDM)[37]. In addition to the basic provisions in the Protocol, the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol has adopted more detailed rules concerning the mechanisms.[38]

Emissions trading, based on Article 17 of the Kyoto Protocol, refers to inter-state trading of emission units. Each state has been given a right to a certain amount of emissions, the assigned amount, consisting of assigned amount units (AAU). This at the same time means an obligation to reduce those emissions with a certain amount with respect to the 1990 emission levels[39]. If a state reduces its emissions more than required, it may sell the remaining part, or parts thereof, of its assigned amount to another state. Also the other two mechanisms create special emission units, JI emission reduction units (ERU) and CDM certified emission reductions (CER) that can be traded. Finally, also removal units (RMU), that indicate the amount of carbon sink that a state may use to fulfil its commitments, may be traded.[40]

Joint implementation, based on Article 6 of the Kyoto Protocol, entails a possibility for a developed state (Annex I state) to invest in e.g. cleaner technology projects or modernisation projects of industrial installations in another developed state. The emission reduction would thus take place in the state hosting the project, and the host country would then transfer the resulting "emission reduction units" to the investing Annex I state. In practice, it has been perceived that such projects are most likely to take place in states with economies in transition, i.e. former socialist states.

[35] Kyoto Protocol, Article 17.
[36] Kyoto Protocol, Article 6.
[37] Kyoto Protocol, Article 12.
[38] See decisions 2/CMP.1, 3/CMP.1, 4/CMP.1, 5/CMP.1, 6/CMP.1, 7/CMP.1, 9/CMP.1, 10/CMP.1, 11/CMP.1.
[39] There is an obligation to reduce emissions if the assigned amount is smaller than the 1990 emissions. The assigned amount is also in some cases equal to or bigger than the 1990 emissions for economic or development reasons.
[40] For definitions of the different emission units, see decisions 3/CMP.1, Annex, para. 1; 9/CMP.1, Annex, para. 1; 11/CMP.1, Annex, para. 1; 13/CMP.1, Annex, paras. 1-4.

The clean development mechanism based on Article 12 of the Protocol functions to a great deal in a similar manner as joint implementation, by means of investments in projects, but there the host country that receives the investment is a developing country that so far does not have emission reduction obligations. The purpose of the CDM is to assist non-Annex I states in achieving sustainable development and Annex I states in fulfilling their obligations under the Protocol.

2.2 International Law and International Environmental Law – an Overview of a Process of Deformalisation

2.2.1 Fragmentation

International law has sometimes been seen to be, typically for the post-modern era of law[41], in a process of fragmentation. Indeed, the number of norms of international law has been seen as having gone through an expansion during the past few decades and taken to cover an ever greater range of activities with increasing specificity. This has led to international law breaking into specialised subsystems.[42] Behind this process is another process, that of globalisation with its different, technically specialised co-operation networks that have a global scope: trade, environment, human rights, communication and so on. These are spheres of life and expert co-operation that transgress national boundaries and are difficult to regulate through traditional international law any more than through national laws.[43]

Also the number of competent actors has increased and there has been an attempt to improve the efficiency of the enforcement of international law obligations by setting up different "follow-up" systems and organizations.[44] Accordingly, demands have been imposed upon

[41] See Kuokkanen 2002 p. 236.
[42] Sands 2000 p. 548.
[43] Koskenniemi 2006 para. 481; see Slaughter 2000 *passim*. A similar tendency towards specialisation has been perceived within legal scholarship. The interest towards general, all-encompassing theory of international law has subsided, as it has been seen as being founded on invalid assumptions, and the interest has been replaced by the analysis of certain specific sectors of international law, such as international environmental law, see Shaw 2003 p. 61.
[44] See Hafner 2000 p. 329, according to whom this type of organization is especially typical within the field of international environmental law, among a few others; Higgins 2001 p. 121. The increase in the number of

international law to serve certain special interests, such as international trade, human rights or environmental protection.

Behind this phenomenon there has been seen to be a change in the operational principles of the international system. Recently all activity has been perceived to be based on informal relations between different actors, whereas the role of the state has turned from legislator into a facilitator and enabler of different self-regulating systems. As a consequence international and national are not always separable even in politics or administration.[45]

This has resulted in the emergence of special regimes of international law that have their basis in multilateral treaties and acts of international organisations. Specialized treaties and customary patterns that are tailored to the needs and interests of each network are a manifestation of the phenomenon.[46] The nature of international law as a coherent discipline has been seen to be threatened by this division into objective-oriented branches.[47]

Fragmentation entails theoretical, doctrinal as well as practical problems, such as what to do in a situation of a conflict of laws, how to fill in gaps in the law, or how to concretise a vague and open-ended rule in a concrete situation[48]. Also the established division of law into specialised fields is being rethought. Do the emerging specialised fields of international law have the qualities that would make them independent fields of law in their own right? What about international environmental law? Should these qualities be developed? And what kind of an impact does this have on practical legal problem solving? It also seems to me that the independence is not an either-or –issue, but rather a more-or-less –issue.[49]

---

competent actors is evidenced by e.g. the Kyoto Protocol flexibility mechanisms, where the participation of legal entities is made possible by means of state authorisation, and as for the project based mechanisms JI and CDM by granting an institutionalised position to certain legal entities (the Designated Operational Entities and the Accredited Independent Entities).

[45] Koskenniemi & Leino 2002 p. 557; Higgins 2001 p. 121.

[46] See Koskenniemi 2006 para. 482.

[47] See e.g. Koskenniemi & Leino 2002 p. 560.

[48] See Sands 2000 p. 549.

[49] Answering these questions in this study is necessary, as it provides some justification to the formation of the research questions as well as the choice – and use – of principles by locating the study in the wider context of law, and settles the question concerning the applicability of the general doctrine of international law.

It has also been suggested that even though the diversification of international law may threaten its coherence, it also increases its responsiveness to the regulatory context.[50] Specialisation allows the regime to take the specific characteristics of the problem that needs to be tackled into account. It is easy to imagine that the conservation of biological diversity calls for a different approach than, say, military conflicts. Besides this, the law of treaties provides a counterbalance by requiring that specific norms must be read against other relevant norms, "in a mutually supportive light"[51], also known as the principle of integration.[52]

The emergence of new judicial organs that apply general international law from a specific point of view, with their own specific interests and biases, has been seen as part of the problem of fragmentation[53]. Several new tribunals that focus on certain specific questions of international law have been created. An example of such a court is the International Tribunal on the Law of the Sea, based in Hamburg, Germany.[54] It has been perceived that this proliferation of international tribunals committed to their own sets of rules might lead to forum-shopping[55]. It may, furthermore, constitute a threat to the coherence of international law and, thus, also its role in inter-state relations[56] by leading to excess specialisation and the confinement of those making legal decisions to their narrow sectors[57]. Yet another

[50] Koskenniemi 2006 paras. 492-493.
[51] But cf. Koskenniemi 2006 para. 280, who views the issue of "mutually supportive" interpretation in a critical light.
[52] See Vienna Convention Art. 31(3)(c); see also Simma & Pulkowski 2006 p. 492. For case law, see *United States – Standards for Reformulated and Conventional Gasoline*, (WT/DS2/AB/R, 29 April 1996), Section III B; *Korea – Measures Affecting Government Procurement*, (WT/DS163/R, 19 June 2000), at paras. 7.93-7.96; *Oil Platforms Case* (Iran v. United States of America) (Merits) ICJ Reports 2003, para. 40. See also Koskenniemi 2006 paras. 416-419: "This points to the need to carry out the interpretation so as to see the rules in view of some comprehensible and coherent objective, to prioritize concerns that are more important at the cost of less important objectives".
[53] See Koskenniemi 2007 p. 5, according to whom "the point of the emergence of something like 'international criminal law' or 'international human rights law' (or any other special law) is precisely to institutionalise the new priorities carried within such fields. As a result, political conflict will often take the form of conflict of jurisdictions"; see also Sands 2000 p. 394 briefly on institutional fragmentation, in addition to which he sees the absence of an "appropriately effective and sufficiently financed central institution".
[54] The International Tribunal on the Law of the Sea was set up by the 1982 United Nations Convention on the Law of the Sea (UNCLOS), and its Charter is in Annex VI of the Convention. The Court's decisions are legally binding, see Hakapää 2003 pp. 487-488. A special chamber to deal with environmental matters was also set up in the International Court of Justice, see Higgins 2001 p. 122; see also Birnie & Boyle 2002 p. 224.
[55] Koskenniemi & Leino 2002 pp. 554-556; see also Hafner 2000 p. 332.
[56] See Koskenniemi & Leino 2002 pp. 555-560.
[57] Hafner 2000 p. 326; Oellers-Frahm 2001 p. 74.

consequence may be that the recognition of rights and obligations of legal subjects depend on which body is seized to recognise them.[58]

On the other hand, the fragmentation of international judicial functions has also been seen to have positive ramifications. According to J.I. Charney the situation allows certain experimentation, which may lead to improvements in international law. Hence, alternative fora complement the work done by the International Court of Justice, while strengthening international law by offering means of enforcement to back up legal obligations, even if diminish the coherence of international law[59]. Possible downsides have been seen to be avoidable.[60] A strictly hierarchical system might, on the other hand, hamper the development of the law in the absence of a possibility for the above mentioned experimentation, whereas a more pluralistic system offers a possibility to bring forward new thoughts, and to evaluate them within the international community.[61]

In addition to the obvious danger of conflicting interpretations or jurisdictions, the fragmentation of international judicial functions may be problematic due to the fact that a case under consideration in a tribunal rarely concerns only one field of law – e.g. international trade or the environment[62] – and that, thus, other fields and aspects must be taken into account, such as the law of treaties, state responsibility or state succession. Still, the primary cause of existence of the organization may turn out to be the decisive factor, under which the tribunal or some other judicial body making the decision functions.[63]

[58] Koskenniemi & Leino 2002 p. 561; Koskenniemi 2006 para. 489; see also Forster 2003 *passim* on the illustrative MOX Case, and decision on provisional measures reached by the International Tribunal on the Law of the Sea, *the MOX Plant Case* (Ireland v. United Kingdom) ITLOS 2001 No. 10.
[59] See also Koskenniemi & Leino 2002 pp. 565-567.
[60] Hey 2000 p. 10; see also Abi-Saab 1999 pp. 925-926.
[61] See Charney 1998 pp. 347-348; see also Abi-Saab 1999 p. 925, according to whom "complexification creates a need for specialized tribunals to accommodate normative diversification and specialization", although "this requires, in turn, a certain coordination or harmonization between the diverse tribunals; in other words, their correlation into a kind of constellation, however loose it may be" – a constellation that, as Abi-Saab himself concludes, is not possible within the current system of international law. Also concerning the fragmentation of judicial functions, more specifically the limitations on jurisdiction on one hand and on the applicable law on the other, see Koskenniemi 2006 paras. 44-45.
[62] See e.g. Voigt 2006.
[63] See Birnie & Boyle 2002 p. 224; *Gabčikovo-Nagymaros Project Case* (Hungary/Slovakia), Judgment, ICJ Rep. (1997) p. 7. This preference is also known as structural bias, and it is discussed briefly later in this text.

An equivalent problem is built into environmental treaties, where the supreme goal is sustainable development. This goal brings along considerations of international development law and the integration of environmental and development concerns. Environmental considerations will increasingly become a feature of economic policy, and vice versa. This has been justified by the assumed improved effectiveness of environmental regulations, although also critical views have been presented.[64] Human rights and international trade interests may need attention due to references to e.g. international trade or indigenous peoples.[65] The purpose of existence and the goals of the subsystem in question – "the object and purpose of the treaty" according to the Vienna Convention Article 31(1) – may, however, constitute the primary basis of interpretation, an example of which is the goal of the WTO to promote free trade[66].

Also general international law must be taken into account and applied when making decisions under a particular subsystem of international law, such as international environmental law or human rights – at least to the extent that the application has not been excluded in the rules of the subsystem itself. This is the case within e.g. the WTO system. According to Koskenniemi – Leino it has become regular practice with the WTO panels and the Appellate Body to refer to Articles 31 and 32 of the Vienna Convention on the Law of Treaties as well as to the relevant jurisprudence of the International Court of Justice.[67]

[64] See Sands 2000 p. 400; Pallemaerts 1993 pp. 16-19, who criticises the integration of environmental protection and development concerns: "The new discourse of 'integration' suggests that there is no longer any conflict between environmental protection and economic development, and that the latter has become a necessary complement, condition even, of the former"; see also Kuokkanen 2002 p. 299.

[65] Hey 2000 pp. 4-5.

[66] See e.g. Cameron & Gray 2001 p. 251; see also *United States – Import Prohibition of Certain Shrimp and Shrimp Products* (WT/DS58/AB/R, 12 October 1998) para. 114. One of the objectives of the WTO treaty, however, is sustainable development, on this see the Agreement Establishing the World Trade Organisation, Preamble, and e.g. *United States – Import Prohibition of Certain Shrimp and Shrimp Products* (WT/DS58/AB/R, 12 October 1998) para. 129. On possible conflicts between WTO law and climate change mitigation measures, see Voigt 2006.

[67] See Koskenniemi – Leino 2002 p. 571; Charney 1998 pp. 145-153, and the case-law discussed therein; see also e.g. *United States – Standards for Reformulated and Conventional Gasoline* (WT/DS2/AB/R, 29 April 1996) Part III B, where the Appellate Body has stated e.g. that the WTO agreements should not be read "in clinical isolation from public international law"; see also Human Rights Committee: General Comment, CCPR/C/21/Rev.1/Add.6, reproduced in 34 ILM 839 (1995) para. 6. The definition of general international law used here is that used by *inter alia* Kelsen, see Kelsen 1966 p. 18; on the concept of "general international law" see also Koskenniemi 2004 para. 192; Melkas 2007a.

An interpretative effect of general international law could be possible even beyond the point of exclusion. As the different issues and situations that arise can often be legally characterised and systematised in several different ways – not to mention counted as being included in the competence of several institutions and authorities – the total exclusion of the application of general international law within one treaty regime would seem arbitrary. A treaty regime cannot contain answers to every problem that may arise within the regime.[68] Instead, interpretative guidance provided by general international law could entail certain predictability to the regime.

2.2.2 Environmental law – an Intersecting Discipline and a Source of Influence

Environmental law is a field of law that is interested in norms regulating the relations between humans and their environment. It is a young discipline – it has become a discipline of its own during the 1970's in most of the western world and only after that also elsewhere. Its material limitation still varies from one country to another.[69]

Features typical to environmental law are e.g. its objective-orientation and its problem-orientation. The starting point for environmental regulation is normally in environmental problems or problems concerning the relations between humans and the environment. It is an instrument with which the society furthers its interests, such as a clean environment or the health of its citizens.[70] This is one reason why connections between environmental law and other fields of law are necessary – to steer activities in order to achieve the stipulated

[68] See also Koskenniemi 2006 para. 492, according to whom "even as international law's diversification may threaten its coherence, it does this by increasing its responsiveness to the regulatory context. Fragmentation moves international law in the direction of legal pluralism but does this … by constantly using the resources of general international law, especially the rules of the VCLT, customary law and 'general principles of law recognized by civilized nations'".

[69] Vihervuori 1995 p. 757.

[70] Also environmental problems are problems concerning the relations between humans and the environment, but the latter concept is wider. This regulatory approach has not, however, always been the prevailing one. To begin with, the aim of preserving the environment was connected with, even based on, the need to protect the legal position and interests of others. Examples of this are at the domestic level in Finland the old land use and water law that was mainly concerned with the use of real property, and at the international level the no harm principle that entailed a prohibition to cause (environmental) harm to other states, the prime example of which is the Trail Smelter Arbitration. But nowadays the intrinsic value of the environment is recognised; hence, the prevailing regulatory approach is the one described above, see Hollo 1991 p. 6. See also Ranta 2001 pp. 8-9.

objectives one will need instruments or other means which will usually be products of other fields of law[71]. This is also the reason why environmentally significant provisions may be found in legislation or treaties not generally thought of as "environmental", e.g. international trade law.

Objective-orientation is shown by, in addition to the fact that environmental law aims at protecting the environment, the fact that environmental law is meant to balance between the environmental goals provided for in the applicable legislation or international law on one hand and the interests to use natural resources or change or burden the environment on the other.[72] The best examples of the tension between environmental and other societal interests are provided by the numerous decisions of the WTO dispute settlement organs, also cited in this text.

Environmental law has also been described as the law of conflicts. It has been seen that conflicts between different actors and balancing between different interests are particularly characteristic to environmental law[73]. Thus, environmental law does not aim at prioritizing environmental protection above everything else, but finding a suitable balance between different interests.[74] Economic aspects are often in these conflicts the counterbalance to environmental interests.

In addition to these, a multidisciplinary basis is characteristic to environmental law. This refers to its connections with different (other) environmental sciences.[75] The effect that environmental problems have on human settlements, the fact that environmental problems largely have their background in human activities, and the fact that nature and the environment are nowadays seen to have an intrinsic value of their own to be taken into account, a societal response to these problems has been perceived as necessary. Furthermore, in addition to

[71] See also Ranta 2001 p. 12.
[72] Ekroos *et al.* 2002 pp. 6-7; Hollo 1991 p. 7. An equivalent to the fragmentation discussion in international law has taken place also domestically in Finland. Environmental law has sometimes been perceived as a typical product of such a development, together with a few other disciplines, see Nuotio 2002 p. 20, on objective-orientation in law generally.
[73] See e.g. de Sadeleer 2002 p. 297; Hollo 1991 pp. 6-7.
[74] Ekroos *et al.* 2002 p. 6. The idea of integration between environmental protection and development (or economic) concerns brought up above suggests the contrary, that there is no longer a conflict between these different interests, see criticism against this idea by Pallemaerts 1993 pp. 16-19.
[75] See also Kumpula 2004 p. 235.

environmental problems' background in human activities, also the societal significance of those problems is determined in societal processes.[76] This makes the multidisciplinarity of environmental problems as well as environmental policy and law especially concrete and visible.

The existence of an international environmental law as an independent discipline has often been called into question. It has generally been perceived that the international law concerning the environment still relies on the principles and sources of general international law. In other words international environmental law should be thought of as a part of international law.[77]

This view, although partly correct, however ignores the bigger picture. "International environmental law" surely refers to the application of international law to environmental problems. But environmental problems and the legal responses thereto indeed have posed significant challenges to international law – a good example is provided by the traditional dispute settlement mechanisms, that have been partly replaced by non-compliance procedures in different environmental regimes. For example, causality between behaviour and environmental degradation is often difficult to establish precisely enough to satisfy the demands of the law. Rules on standing may be inflexible or insufficient. *Status quo ante* can not be restored, even if responsibility for the damage has been established. The applicable standards are too indeterminate to be enforced by traditional means. At a more general level, it is often not the states that pollute, but actors within them, but traditionally international law has been seen to be unable to deal with these other entities.[78]

The role of principles within international environmental law gives international environmental law certain particularity in relation to international law. At least in the Finnish discussion there seems to be a consensus that the recognised general doctrine of a discipline is

[76] See Kumpula & Määttä 2002 p. 209.
[77] See Birnie & Boyle 2002 pp. 1-3; on the discussion see also a slightly different view by Kuokkanen 2002 pp. 356-357. Similar lines of thinking can be found in the field of human rights, see e.g. Human Rights Committee: General Comment, CCPR/C/21/Rev.1/Add.6, reproduced in 34 ILM 839 (1995) para. 17, where it is pointed out that "it is the Vienna Convention on the Law of Treaties that provides the definition of reservations and also the application of the object and purpose test in the absence of other specific provisions. But the Committee believes that its provisions on the role of State objections in relation to reservations are inappropriate to address the problem of reservations to human rights treaties."
[78] See Klabbers 2007 pp. 1001-1003.

the source of the particular identity of that discipline[79]. A particular, defined subject of regulation, say the use of the environment, is, thus, not sufficient. The legal concepts structuring the subject of regulation and principles providing the normative bases for it are still needed.[80]

These concepts may serve several different functions, according to Tuori. They may condense the normative contents of the law, they may describe the interaction between legal norms and their object of application in the society, or they may structure the object of regulation of the legal norms.[81] Tuori's discussion focuses on the national legal system, not international law. Some guidance may, however, be sought from it also in this discussion. It seems appropriate to conclude that the general doctrine applicable in international environmental law is largely that of international law. Concepts and principles such as state sovereignty, sovereign equality and equity support this conclusion.

This being said it must be kept in mind that there are concepts and principles particular to international environmental law, or environmental law, too, such as sustainable development or the precautionary principle – although the concepts and principles may not always be particular to environmental law *only*, but be shared between two or more legal disciplines.[82] Their particularity, regardless of this multidisciplinarity of one kind, lies in the fact that they do not seem to have been granted a general application in law, domestic or international, but within specific fields.

International environmental law does have characteristics that makes it differ from other fields of international law much in the same way as domestic environmental law differs from, say, domestic labour law. This is to say that – to return to the nature of the independence of a legal

[79] See e.g. Nuotio 2002 p. 3; Tuori 2002 pp. 169-172.
[80] See Tuori 2004 pp. 1203, 1216; Määttä 1999 p. 41, see also p. 458, where Määttä points out that legal scholarship cannot "hide behind the backs of the legislator or the courts", but rather take part in the discourse by recognising and articulating the principles. This would, according to Määttä rather be the task of legal scholarship than that of the legislator or the courts.
[81] See Tuori 2004 pp. 1216-1218.
[82] See also Sands 2000 pp. 372-373; Nollkaemper 1996 p. 80, who even finds that "ideally, international environmental law should be a principled system of rules, with specific obligations being based on and consistent with underlying principles". Sustainable development and the precautionary principle are examples of principles shared by two or more legal disciplines, as sustainable development has a development side to it as well, and the precautionary principle is frequently invoked within the field of foodstuffs policy.

discipline as a more-or-less issue – environmental law does have some characteristics that separate it from general international law (such as extensive reliance on principles and flexible standards). But general international law is still relied on as to such crucial features as validity and subjects, for example. Thus, a distinct character seems difficult to ignore, but this does not mean total independence. To claim that it would be would be equally preposterous as to claim that domestic environmental law is not part of domestic/national law.

2.2.3 Principles and International Environmental Law

Principles have been the object of great interest within environmental law – both national and international. They characterise many of the instruments adopted within the past few decades, binding treaties as well as soft law instruments such as the Stockholm and Rio Declarations. Principles have been introduced into many national legal systems after having been adopted at the international level. International environmental treaties may even contain a separate article concerning principles, and e.g. the EC Treaty makes several environmental principles binding upon the Member States[83]. This has necessitated the transposition of these principles into national legal systems.[84] The traffic on this road between international and national is, however, two-way. Principles have also been brought to international environmental treaties as an influence by national legal systems.[85] In international legal literature a reference to municipal legal systems as sources of the general principles of international law is often made.[86]

Environmental law is particularly attractive a discipline for the introduction of such open legal standards as principles. It is objective-oriented (it aims at protecting the environment), there is often a significant amount of uncertainty involved concerning the problems that require

[83] See e.g. Climate Convention, Article 3; UNCLOS, Article 5; Convention on the Protection of the Baltic Sea Area, Article 3; Treaty Establishing the European Community, Article 174(2).
[84] Nowadays most of e.g. Finnish domestic environmental legislation is guided by the principle of sustainable development, and many of the other internationally accepted environmental principles have been adopted, see e.g. Section 1 of the Environmental Protection Act (86/2000), Section 1 of the Nature Protection Act (1096/1996), and Section 1 of the Planning and Building Act (132/1999).
[85] Ranta 2001 p. 123.
[86] See e.g. Cameron & Abouchar 1996 pp. 32-33; Lauterpacht 1970 pp. 74, 77; Ross 1946 pp. 114-115 referred to above.

response, and the questions often touch upon some crucial interests of states (or other addressees of the regulation).

In the case of international environmental law the role of principles is especially established due to their firm position as one of the sources of international law. Article 38 of the Statute of the International Court of Justice, which is usually referred to as a list of the established sources of international law, mentions international conventions, international custom, the general principles of law, and judicial decisions and the teachings of the most highly qualified publicists of the various nations, the last one of which is a subsidiary source.[87]

The term general principles of international law refers to the guidelines and principles steering the legally relevant international activities of states.[88] These principles have also been seen as forming the basis of a "substantial body of international law".[89] These general principles referred to in the Statute of the International Court of Justice have, however, often been seen as representing something different from the principles discussed and developed within the current international environmental law. The reliance has been primarily on the view according to which general principles of law are derived from "general principles common to the major legal systems of the world".[90]

---

[87] Statute of the International Court of Justice, Article 38; Hakapää 2003 p. 21; see also Birnie & Boyle 2002 pp. 11, 23; Hakapää 2003 pp. 59-62; Shaw 2003 p. 66; Hollo & Parkkari 1994 p. 17. It seems clear that an exhaustive list of this kind cannot serve as an entirely satisfactory description of the sources available. Material comparable to the traditional sources just mentioned has been created in the decision making processes of international – intergovernmental – organizations, such as decisions, resolutions, declarations etc. Some of these are binding law, but most of them merely declaratory. Even non-binding documents may, however, have an influence on the development of international law *de lege ferenda*. Ross 1946 p. 105 criticises this for basing the sources doctrine on a provision in one of the sources. For a discussion on the distinction between general principles of law and the general principles of international law, see Voigt 2006 pp. 199-201.

[88] Hakapää 2003 p. 54; see also Shaw 2003 pp. 92-103, who lists some established principles and their application by the International Court of Justice.

[89] See Lauterpacht 1970 p. 114, according to whom "the universality of a substantial body of international law" is due to this; see also Cheng 1987 p. 4, who points out that there has been disagreement among commentators concerning the grounds for perceiving the general principles as part of the international legal order – as to whether this is due to the fact that the international legal order is indeed a legal order, and general principles necessarily form part of any legal system, hence also of international law, or whether there is a rule of customary international law according to which such principles are applicable in international relations.

[90] See e.g. Cameron & Abouchar 1996 pp. 32-33, who refer to the American Law Institute Restatement (Third) on International Law, according to which "a rule of international law is one that has been accepted as such by the international community of states […] by derivation from general principles common to the major legal systems of the world"; Lauterpacht 1970 pp. 74, 77 according to whom "the formulation of Article 38 of the Statute […] emphasises their pragmatic and inductive character inasmuch as they are derived from systems of law actually in

A different approach, less rigid as such in my view, has been adopted by Brownlie, according to whom the expression "general principles of international law" may refer to "rules of customary law, to general principles of law as in Article 38(1)(c), or to logical propositions resulting from judicial reasoning on the basis of existing international law and municipal analogies". He goes on to state that a rigid categorisation of sources is inappropriate.[91]

The principles discussed here are what de Sadeleer calls directing principles, as opposed to general principles of law or general principles of international law. This difference between directing principles and the "general principles of international law" marks, according to de Sadeleer, the shift from modern to post-modern model of law. The break is not complete, but rather the difference is one of gradation, as the value basis is, in the end, the same.[92] But the role played by principles shifts the focus of law from the modern model of law, where solutions to an infinite number of cases may be deduced from a legal norm to other types of reasoning which seek to balance interests by applying directing principles set out in legislative instruments.[93] This more discursive and co-operative approach to law has been seen as having replaced the classical legal imperative, the command-and-control approach.[94]

There does not seem, however, to be reason to treat the principles typical to post-modern law, addressed by de Sadeleer, and the general principles referred to by the Statute of the ICJ as fundamentally different. The post-modern principles are typically to a great extent objective-oriented and specific to different subsystems of law, such as environmental law, whereas the modern principles – such as *pacta sunt servanda, audiatur et altera pars* or *res judicata* – are, indeed, more general.[95]

---

operation as distinguished from the speculative and philosophical aspects of the classical law of nature"; Ross 1946 pp. 114-115; Shaw 2003 pp. 93-94.

[91] See Brownlie 2003 pp. 18-19.

[92] See de Sadeleer 2002 p. 229. See e.g. Hakapää 2003 pp. 53-55 on the general principles of law as a source of international law.

[93] See de Sadeleer 2002 p. 230.

[94] See de Sadeleer 2002 pp. 246-247.

[95] See de Sadeleer 2002 pp. 229-230.

These principles often serve to promote certain public policy objectives, and thus, represent a substantive approach to law, as opposed to a formal one[96]. According to de Sadeleer, in modern law the main task of the general principles of law has been to ensure the coherence of law, *inter alia* to fulfil gaps in law.[97] It is, however, justified to conclude that this task has not disappeared along the introduction of the new post-modern principles, although the function of principles as tools for different policy objectives has been brought more to the fore. The task seems to be more confined to the field of environmental law, but it is still there. In fact, according to de Sadeleer, "the autonomy and coherence suitable for a new legal discipline thus go together with the affirmation of fitting directing principles" – the existence, recognition and affirmation of principles are necessary for a new legal discipline.[98] Indeed, it seems that in post-modern law coherence is "local", i.e. confined to each legal discipline, and not "total", the coherence of the entire legal system[99].

[96] See also Sands 1995 pp. 184-185. General principles of law have sometimes, in earlier discourses, even been accused of resembling natural law, see the discussion in Cheng 1987 pp. 14-17. Formalism expressed in e.g. positivism and the rule of law on the one hand and its opposite expressed in substantive standards and recognition of the value basis of the law on the other seem to take turns in law. Modernity brought the unformulated law (e.g. principles) to supplement, balance and even correct other positive law – still, even if unformulated, this law may indeed be positive. See also Graver 1989 pp. 69-70, who points out similarly concerning the norms of the welfare state (in an earlier phase of the development of the law) that they have the function of securing external, substantive goals.

[97] See de Sadeleer 2002 pp. 233-234, 239-243; see also Kumpula 2004 p. 235. According to Shaw 2003 p. 93, this was the reason for the inclusion of general principles in the list of sources of international law that the ICJ shall apply in Art. 38 of the Statute of the ICJ. The argument about principles ensuring the coherence of the legal system has been viewed critically by Koskenniemi 2005a p. 62, as "indeterminacy follows as a structural property of the international legal language itself. It is not an externally introduced distortion"; see also Koskenniemi 2006 para. 491, who points out that "no added value is brought by the fact of its [a legal system's] being coherently so [unjust and unworkable]. Therefore, alongside coherence, pluralism should be understood as a constitutive value of the system." For a discussion dating back to the modern era, see e.g. Lauterpacht 1970 pp. 68-69. Coherence has sometimes been addressed also in the discussion concerning regimes within political theory, i.e. coherence within regimes, see Young 1989 p. 25.

[98] De Sadeleer also recognises the need for coherence within environmental law, especially in international environmental law: "Law-making is decentralized, and the absence of adequate co-ordination between various initiatives taken at the global, regional, and sub-regional levels often results in measures that are duplicative, and sometimes even inconsistent"; see also Sands 2000 pp. 387-394, according to whom this duplication would be possible to avoid by means of an institutional reform within international law. Particularly problematic is the nature of international environmental law, "which has proceeded incrementally and in a piecemeal fashion". See also de Sadeleer 2002 pp. 258-259, 264, who recognizes the function of also post-modern law principles as the providers of coherence; Kumpula 2004 p. 235, according to whom the functions of environmental principles as part of the general doctrine of environmental law and as means to locate environmental law as a discipline of its own are emphasised by the definition of principles. See also Tuori 2004 pp. 1219-1224 who speaks of local coherence.

[99] See Tuori 2004 p. 1211; see also *European Communities – Measures Concerning Meat and Meat Products (Hormones)* (WT/DS26/AB/R, 13 February 1998), Part VI; Koskenniemi 2006 paras. 55, 129.

The coherence function could be relevant within international law as well, in the state of fragmentation discussed above. Principles could aid in "reading norms against other relevant norms in a mutually supportive light"[100] by providing a framework and guidelines for interpretation. But when it comes to post-modern principles, their most significant characteristic is that they promote certain values and morality that are seen as prevailing in the society, or worthy of promotion. They are not value-neutral – instead, the basis of their validity is material, and they set material requirements to the end-result of legal decision-making.[101]

Furthermore, principles serve to "weaken confrontation and conflict, and harmonise national and supranational legislation". They make the compatibility of different legal systems possible, and create links and connections between different parts of these systems and between different systems, and in this way ensure the effectiveness of the law.[102] They also create possibilities for the existence of different values and perceptions by providing flexibility necessary for the balancing of different interests and following the developments in the society, as regards e.g. the use of the environment[103]. Thus, first, they open up possibilities for a more pluralistic law, and second, they open law and its interpretation to their factual context, i.e. non-legal factors, and eventually casuistry[104] – as the relevant facts vary from one case to another. On the other hand, they also limit the options available to the interpreter[105].

At a more practical level, the use of principles may be justified by their function as promoters of compromise. In a field of law of the kind of environmental law, where it is particularly difficult to agree upon precise rules at the international level, "it is far easier to come to a public understanding about indefinite principles that can progressively be given more concrete

[100] See Peel 2002 pp. 53-78. But cf. Koskenniemi 2006 paras. 416-419 – this presumes the acceptance of some degree of instrumentalism, as interpretation "in a mutually supportive light" assumes an accepted purpose to the instrument. It also entails managerialism and decision making *in casu*. This approach has been criticised by, *inter alia*, Koskenniemi 2006 para. 280.
[101] See Tolonen 1988 pp. 187-190; Ranta 2001 p. 127.
[102] See also Kumpula 2004 p. 238.
[103] Kumpula 2004 p. 238; Ranta 2001 pp. 131-132; see also Nollkaemper 1996 pp. 81-88.
[104] See e.g. Nollkaemper 1996 p. 82, who points out in his discussion concerning the precautionary principle, that "the discretion left by the threshold is so great that as a practical matter it may be difficult to assess whether a state's determination that a threshold is or is not crossed is a purely scientific affair or involves some consideration of costs. It is this discretion that may undermine the objective of precaution".
[105] See Ranta 2001 p. 156.

form".[106] In addition to this, the complexity of environmental issues in both social (acceptance of risks by populations) as well as scientific terms (the emergence of a new generation of environmental and ecological risks) has contributed to the demand for more open concepts.[107] Thus, by means of principles and the flexibility they entail it is easier to find agreement between different interest groups, than by means of more precise rules.[108] Hence, principles have come to occupy a significant role in environmental legal argumentation.

In addition many principles bring a reflection of the value basis underlying the law, and thus, emphasise the necessary connection between law and morality.[109] Often the precept provided by a principle rests upon an idea of justice[110], and, according to Kuusiniemi, the most significant ground for its validity is general acceptability, its legitimacy.[111]

As the value basis of the law, as well as perceptions of justice, change more slowly than legal rules, principles are a relatively long-lasting, and hence stabilising, element in the legal system[112]. In addition to this, principles have a significant interpretative role. It is common knowledge that rules can never be written in such a manner that one could always, in every situation, find an applicable rule without interpretation. Principles may serve to limit this interpretative discretion. Consequently, principles may improve legal certainty and predictability through guidance and steering of decision making.[113]

---

[106] De Sadeleer 2002 p. 1; see also Kumpula 2004 p. 238. But cf. Kelman 1987 p. 41, who, however, speaks of standards, one type of which, it may be assumed, principles are, see also p. 3. Kelman also points out the criticism concerning the problem of rules applied to a fixed social situation, implying that the social situation will not stay fixed once the rules are in place, but that unjust outcomes will occur more often because people will try to arrange their affairs so that they are favoured by the rules, see Kelman 1987 p. 41.
[107] See de Sadeleer 2002 p. 4.
[108] See de Sadeleer 2002 p. 259; Lauterpacht 1970 pp. 46-47. The same has been said about soft law, see e.g. Kiss & Shelton 2000 p. 52.
[109] See also Kuusiniemi 1992b pp. 136-142; Ranta 2001 p. 150; but cf. Maus 1989 p. 155, according to whom in legal practice principles rarely have the moral intention ascribed to them in legal theory; instead, they are identical to the principles of the administrative state. Thus, even if the development, where moral grounds are increasingly taking the place of democratic legitimacy, occasionally leads to corrections of political democratic processes which accommodate moral-jurisprudential intentions, it does not offset the loss of democratic control functions. On morality within legal scholarship, see e.g. Nuotio 2002 pp. 15-16.
[110] See Kuusiniemi 1992b p. 139.
[111] See Kuusiniemi 1992b pp. 140-141; Dworkin 1977 p. 22; see also Cassese 2005 p. 48.
[112] See Kuusiniemi 1992b pp. 140-141.
[113] See also Ranta 2001 pp. 150-151; Nollkaemper 1996 p. 80. See also Kelman 1987 pp. 43-44, who discusses the "pros" and "cons" of standards vis-à-vis rules.

As opposed to this, employing a principle, such as sustainable development, in a treaty as a substantive requirement, or basing substantive obligations on principles may indeed turn out to be problematic due to the generality of principles. There are countless ways to interpret e.g. sustainable development in a concrete problem, depending on the interpreter's convictions and biases. Rather, the principles employed should be operationalised by turning them into concrete requirements and rules especially in implementing treaties and implementing instruments at the national level. This applies in particular to sustainable development, which is especially difficult to define – but also to other principles, although their role as guidelines steering interpretation and limiting the latitude for discretion cannot be underestimated either.[114] Thus, instead of sustainable development, the treaty or the parliamentary act could include provisions on e.g. an environmental impact assessment[115].

This does not only refer to national legislators, but must also be seen to mean the international community of states at the international level. And when the law-maker proclaims principles he is also addressing the subordinate administrations – principles will serve as guides and signals for the use of discretionary powers by administrative authorities.[116] As for legal certainty, in a post-modern model of law principles are elements that rather stabilise than perturb the legal system by providing general goals and guidelines for individual decisions, whether regulatory, legislative or other.[117]

De Sadeleer claims that principles declared in soft-law instruments cannot be placed in the same category with normative principles, as soft law is not legally binding *per se*. Furthermore, as their formulation is imprecise, they cannot serve a similar role as normative principles at the substantive level. They mainly have interpretative value. They may, however, serve as forerunners of treaty law, and in this way, implicitly, contribute to the creation of new

[114] See de Sadeleer 2002 p. 269, who has considered it necessary to adopt specific implementing laws. This is indeed a possibility, but even more effective would probably be to follow the principles in writing actual substantive rights and obligations – after all, interpretative choices are made also in this process. See also Haila 1991 p. 60. The 1991 Bamako Convention Article 3 (f)-(g), provides an example of this in the field of pollution control by requiring certain clean production methods. Another typical operationalisation is the employment of an environmental impact assessment. See also Trouwborst 2006 pp. 170-182.
[115] See also Kuusiniemi 1992a p. 15.
[116] De Sadeleer 2002 pp. 270-271.
[117] See de Sadeleer 2002 pp. 272-275.

law[118]. They may also play a role in customary international law-making process by attracting and channelling state practice.[119]

When a principle is set out in a hard-law instrument – a treaty or a convention in international law – it should, according to de Sadeleer, have the normative value that is attached to the instrument itself[120]. This does not mean, however, that the form or the type of the instrument would determine the legal status of the principle in question, and that a principle set out in an international convention would automatically be a normative principle[121]. De Sadeleer claims that a distinction should be made between the principles set out in the preambular sections of treaties and principles found in the operational parts, and that a principle can be normative only to the extent it is affirmed by an operative provision of a convention. The role of principles merely mentioned in the preamble is simply to inform the more precise legal norms contained in the convention's operative paragraphs.[122]

The effect of principles is often weakened by the way they are expressed in treaties, as they are not always presented as normative principles that are directly binding on states. First, principles often appear in framework treaties, as has been the case in the climate change context. They would, however, need to be made operational through protocols adopted to implement framework conventions. Also the wording by which the principles are adopted should be obligating.[123]

Principles have also been seen as implications of the process of deformalisation of law. They are open-ended, and do not create obligations or commitments that would be executable[124].

[118] See Shelton 2000 p. 10; Kiss 2000 pp. 223-242. It has already been pointed out earlier in this chapter that principles often need to be concretised into specific requirements or norms – operationalised – in order for them to become fully operational.
[119] De Sadeleer 2002 pp. 312-313.
[120] See also Beyerlin 2007 p. 437.
[121] See Chinkin 2000 pp. 25-26.
[122] De Sadeleer 2002 pp. 313-314; see also Cassese 2005 p. 47.
[123] See de Sadeleer 2002 pp. 314-315.
[124] It may be presented as a counter-argument that principles still do not liberate the decision-maker from the confines of the law, but rather set limits to the application of rules that always include room for interpretation – the argument that seems to lie as a basic assumption behind a lot of the recent environmental law literature concerning principles.

Furthermore, principles typically require decision making *in casu* due to their generality and indeterminate nature.[125]

The validity and the question of bindingness of principles are crucial within the context of the climate regime. Principles could serve a stabilising (coherence-enhancing) purpose by steering interpretation in different fora and harmonising legislation at different levels. Principles also reflect the value basis behind the rules of the climate regime, and in this way improve the legitimacy of the different policy measures adopted within the system, especially those in connection with the use of the Kyoto mechanisms, particularly JI and CDM project agreements. For example bearing in mind the precautionary principle and sustainable development in designing project activities may contribute to ensuring that the project based mechanisms serve their purpose in facilitating the fulfilment of commitments as well as ensuring the environmental benefit without simultaneously causing other environmental hazards.[126]

2.2.4 Special Regimes

Special regimes[127] are a factor in the discussion concerning fragmentation of international law, as well as the discussion concerning the possibility of independence of subsystems of international law, such as international environmental law. They have been seen as a feature of the post-modern era of law, as well as a result ensuing from the fragmentation of international law[128]. They may also be seen as contributors to this development, as they tend to emerge as responses to particular problems.

[125] This has given rise to criticism, see Tuori 2002 pp. 179-180; see also the discussion concerning the indeterminacy of the doctrine of absolute sovereignty in Kuokkanen 2002 pp. 22-24.
[126] This is how principles have been viewed in the earlier, substantive parts of this study presented in separate articles, regardless of the problems brought forward in the international law discourse.
[127] This terminological choice is due to the position taken by Koskenniemi 2006 para. 152(5), according to whom self-contained regimes should not be called "self-contained", although this is an established characterisation of the issue – they should rather be referred to as "special regimes", as in reality, these regimes are not self-contained. What they are instead, is increasingly specialised norm constructions.
[128] See Kuokkanen 2002 p. 271; Koskenniemi 2007 p. 4.

Systems based on framework conventions, that are especially typical in dealing with environmental problems, are on a regular basis raised in this connection[129]. The approach, in which conventions containing only very general provisions are complemented by implementing protocols, is not a new phenomenon within international environmental law. The regime based on the UN Framework Convention on Climate Change is an example of this. A similar approach has been adopted e.g. in the Vienna Convention on the Protection of the Ozone Layer and the Convention on Long-Range Transboundary Air Pollution, with its several protocols on different pollutants.[130]

Regimes have in political theory been defined as "sets of implicit or explicit principles, norms, rules, and decision-making procedures around which actors' expectations converge in a given area of international relations", and as man-made arrangements "for managing and limiting conflicts of interests in a setting of interdependence". Special regimes are responses to these problems of coordination and situations where the pursuit of self-interest by states risks producing an undesirable outcome.[131] They can be seen as dynamic processes of continuous decision making and negotiation which are capable of securing universal, or nearly so, participation and support. They have been seen as including the obligation to fulfil non-reciprocal obligations and to cooperate in good faith for the promotion and implementation of the objectives of the special regime. Thus, they have been seen as including also an obligation to cooperate with one another, the necessary institutional and functional mechanisms to attain compliance, and the legal basis for further action.[132]

---

[129] See e.g. Perrez 2000 p. 235.

[130] See Keohane 1984 pp. 57-59; Ruggie 1975 pp. 557-584; Simma 1985 p. 111; Krasner 1983 p. 2; Young, 1983 p. 93. The term "regime", or "special regime", is used here to refer to what Young has called "negotiated orders", and more specifically "constitutional contracts" in his typology of regimes, see Young 1983 p. 99. See also Brunnée 2002 pp. 7, 17 n. 78.

[131] Krasner 1983 p. 3; see also Puchala & Hopkins 1983 pp. 61-62. But cf. Stein 1983 p. 116 n. 1; Young 1983 p. 93, whose definition is, however, only slightly different from that of Krasner's; Perrez 2000 pp. 232, 235. But cf. Young 1989 p. 5, who points out that "there remain substantial ambiguities about the core meaning of the concept of an international regime as well as the relationship between regimes and international institutions more broadly", and p. 195, where he criticises Krasner's definition for not allowing us "to identify regimes with precision and to separate regimes easily from the rest of international relations".

[132] See Perrez 2000 p. 236 and the references therein; see also Puchala & Hopkins 1983 pp. 61-62; according to Koskenniemi the term "self-contained regime", the use of which has been established in international law, is used in two senses: first, in a narrow sense to refer to "a special set of secondary rules under the law of State responsibility that claims primacy to the general rules concerning consequences of a violation", and second, in a broader sense to refer to "interrelated wholes of primary and secondary rules, sometimes also referred to as 'systems' or 'subsystems' of rules that cover some particular problem differently from the way it would be covered under general law", see Koskenniemi 2006 para. 128; see also Puchala & Hopkins 1983 p. 63, who point

Managerialism is a feature often associated with regimes. The emergence of second generation environmental problems, where uncertainty of scientific information is a defining characteristic, has brought about uncertainty as to the causes and consequences of these large-scale environmental problems. It has been recognised that there might be no solution available to these problems, at least none based on the current knowledge, and that it might be necessary to move from problem-solving to their management.[133] For this reason, technical expertise has been integrated into regimes one way or another, and thus, "the distinction between the political and technical issues has virtually disappeared".[134]

These aspects of co-operation and coordination refer to the nature of regimes as processes. They entail an on-going co-operative and discursive process of evolving relations between states. New rules and procedures are created or old ones changed or altogether discarded along the way in response to the own inner dynamics of the regime or to changes in the political, economic and social environments.[135] The idea of special regimes is that they are more than merely temporary arrangements that change "with every shift in power or interests". As opposed to one-time agreements which are either fulfilled or not, regimes create a framework for an on-going co-operation, negotiation and adjustment of obligations.[136] This turn away from reliance on formal rules and their implementation (deformalisation) is inspired by a search for the legitimacy of the law (its capacity to reflect distributive and procedural concerns of international justice) and avoidance of disobedience.[137] For this same reason the success of individual regimes cannot be measured by how successfully they institutionalise centralised

---

out that "a regime exists in every substantive issue-area in international relations where there is discernibly patterned behaviour. Wherever there is regularity in behaviour some kinds of principles, norms or rules must exist to account for it." This has been further specified by Stein, who adds the requirement that the patterned state behaviour results from joint rather than individual decision making, see Stein 1983 p. 117. But cf. slightly differently Keohane 1984 pp. 59-62, according to whom "it clarifies the definition of a regime … to think of it in terms of injunctions of greater or lesser specificity", as the obligations implied by a regime are not enforceable through a hierarchical legal system; Gehring 1990 p. 55; Boyle 1999 p. 63.

[133] Kuokkanen 2002 pp. 266-267, who views this shift to environmental management as typical to the post-modern era.

[134] See Kuokkanen 2002 p. 272; Gehring 1990 pp. 38-42.

[135] See Young 1989 pp. 95-96; see also Brunnée 2002 p. 8.

[136] See Krasner 1983 pp. 2-3; see also Brunnée 2002 pp. 33-34, on the interactional understanding of international law.

[137] See Koskenniemi 2005b.

authority in world politics, or how solid the patterns of obligations and legal liabilities within them are.[138]

In regimes based on framework conventions the axis between a substantive approach to law on one hand and a formal one on the other, which I have outlined in my two last articles[139], is especially present and visible. The procedures and the forms of co-operation have to a large extent been defined in the framework conventions. The co-operation relies on those. But the substantive obligations are liable to change along the way, based on the progress in negotiations, and increase of scientific knowledge and understanding of the problem that needs to be tackled.[140] Thus the substance of the regime is formed and reformed as the process moves on[141].

This, in turn, reveals the inequality and the lack of equivalence between the roles and positions employed by states on one hand and non-state entities that often are involved in carrying out activities under regimes on the other[142]. The development of regimes depends formally on states; the participation of non-state entities is "at the mercy" of states also in this respect. On

[138] See Keohane 1984 p. 88; for examples see Kuokkanen 2002 pp. 276-277.
[139] See Melkas 2007a; Melkas 2007b.
[140] See Keohane 1983 p. 170; see also Krasner 1983 pp. 3-5, according to whom "a fundamental distinction must be made between principles and norms on the one hand and rules and procedures on the other … Changes in rules and decision-making procedures are changes within regimes, provided that principles and norms are unaltered", whereas changes in principles and norms are changes *of* regimes. Accordingly, a regime has weakened, if the principles, norms, rules, and decision-making procedures of a regime become less coherent, or if actual practice is increasingly inconsistent with principles, norms, rules and procedures. In this typology the principles of the regime define, in general, the purposes that their members are expected to pursue, norms to somewhat clearer injunctions to members about legitimate and illegitimate behaviour, although defining responsibilities and obligations in relatively general terms. The rules of the regime overlap to some extent with norms; rules are, however, more specific, they indicate in more detail the specific rights and obligations of members. "Finally, at the same level of specificity as rules, but referring to procedures rather than substances, the decision-making procedures of regimes provide ways of implementing their principles and altering their rules", see Keohane 1984 p. 58. See also Simma & Pulkowski 2006 p. 527: "It is crucial to distinguish between reciprocity as a formal characteristic of a norm on the one hand, and reciprocity as a substantive *do-ut-des* relationship on the other. Human rights treaties do not involve such a substantive exchange, since their ultimate beneficiaries are individuals under the jurisdiction of the state undertaking the obligation"; see also Young 1989 p. 15, according to whom "the core of every international regime is a cluster of rights and rules". For a more detailed discussion on rules in regimes, see Young 1989 pp. 16-18.
[141] An example of this formation and reformation of substance are the commitment periods used in the Kyoto Protocol – the substantive emission reduction and limitation commitments are made (at this stage) for five years at a time, and the idea is to review those obligations on a regular basis. At the time of writing this, the future of the climate regime beyond the first commitment period is under negotiation.
[142] See my previous articles Melkas 2007a pp. 12-13; Melkas 2007b pp. 271-273. The participation of different non-state entities in international co-operation on the environment is, in fact, a product of regime-formation as well as a feature in international law also at a more general level, see Rosenau 1990 pp. 245-246; Kuokkanen 2002 pp. 274-275; Sands 2000 pp. 543-548; Walser 1998 p. 1618.

the other hand non-state entities often have significant roles as background influence in many regimes.

An example of a possible role that non-state entities may have within regimes is provided by the US – Shrimp case by the WTO Appellate Body. In the US – Shrimp case the US claimed that in its earlier finding in the same subject-matter the Panel had erred in finding that it could not accept non-requested submissions from non-governmental organisations. The US claimed that there is nothing in the Dispute Settlement Understanding that prohibits panels from considering information just because the information has been unsolicited. The wording of Article 13.2[143] of the DSU is broad – it provides the panel with discretion in choosing its sources of information, and may well be interpreted as allowing it to take into account this kind of information.[144] The Appellate body found that the Panel had erred in its decision that accepting NGO's *amicus briefs* was incompatible with the provisions of the Dispute Settlement Understanding. Thus, now NGO's with relevant interests on the matter may submit their viewpoints in the form of *amicus briefs* to a panel.[145]

As can be read in the above text, regimes consist of and their rules apply to, in the first instance, states. The reason for this is that states are the primary actors under international law and members of the international society. It must, however, be acknowledged also that the parties that are actually engaging in the activities governed by special regimes may also be, and frequently are, private entities, such as multinational corporations, banks, fishing companies, or, as typically is the case in the climate context, energy or environmental consultancies. The forms of involvement of these non-state entities have in some respects come to replace the classical forms of state intervention.[146] Their role, however, differs in a significant way from that of states, as has been pointed out above, and they are by no means in an equal or equivalent position[147]. This difference in the position of states vis-à-vis private

[143] "Panels may seek information from any relevant source and may consult experts to obtain their opinion on certain aspects of the matter", see *United States – Import Prohibition of Certain Shrimp and Shrimp Products* (WT/DS58/AB/R, 12 October 1998), para. 99.
[144] See *United States – Import Prohibition of Certain Shrimp and Shrimp Products* (WT/DS58/AB/R, 12 October 1998), para. 9.
[145] See Ahn 1999 pp. 839-843.
[146] See de Sadeleer 2002 pp. 246-247; Rosenau 1990 pp. 245-246.
[147] See also Brunnée 2002 p. 49, who further points out that "it seems also appropriate, however, that their [non-governmental groups' or industry groups'] participation remains different from that of state parties".

entities under international law means that states make the rules and undertake the actual substantive obligations. It is also in most cases states' responsibility to ensure that non-state entities comply with the dictates of the regimes.[148] Besides this, the competence of the non-state entities is usually dependent on state approval.

Special regimes always need to be located in the wider context of international law. General international law may come for rescue where the particular special law remains silent. Also the general principles of international law apply.[149] Furthermore, general international law usually determines e.g. which actors are competent to take part, and provides the basis for the validity of the regimes.[150] Thus, special regimes of this kind are not independent from general international law.[151]

On the contrary, they are in many respects firmly and precisely international law: They receive their binding force under international law, and the conditions for their validity and invalidity are assessed by general international law, more specifically, where treaties are involved, the Vienna Convention on the Law of Treaties[152]. Furthermore, special regimes are always partial in a manner that makes them differ from national legal systems in a significant way. This means that special regimes presume the presence of a large number of other rules in order to function – they require the "systemic environment" provided by general international law.[153] Thus, special regimes do not exist in isolation of their normative environment – on the contrary, the presence of a special regime necessitates a contextual interpretation of the rules adopted within the special regime, context here referring to the normative context, not the

[148] See Young 1989 pp. 13-14.
[149] Cullet 1999 p. 173; see also *Dispute Concerning Access to Information under Article 9 of the OSPAR Convention* (Final Award 2 July 2003) para. 84, ILR vol. 126 (2005) p. 364; analogously *Saudi Arabia v. ARAMCO*, ILR vol. 27 (1963) p. 165; Keohane 1984 p. 63, according to whom "international regimes should not be interpreted as elements of a new international order 'beyond the nation-state'".
[150] See also Lindroos 2005 p. 51.
[151] See Simma 1985, 115-118; Koskenniemi 2004 paras. 19, 22-23, 105-172; on the concept of "general international law" see Koskenniemi 2004 para. 192. This also goes to show that international environmental law, of which regimes of this kind are representatives, is not independent of international law. See also Koskenniemi 2006 paras. 192-193.
[152] See in more detail Koskenniemi 2006 para. 194. The Vienna Convention is, in fact, codified customary law, and hence, general international law.
[153] Koskenniemi 2006 paras. 177-179.

factual one. Specific norms must be read against other relevant norms, again "in a 'mutually supportive' light".[154]

The Vienna Convention on the Law of Treaties, Article 31, may be interpreted[155] to support the conclusion presented earlier, that the normative environment of a rule does make a difference in the interpretation. According to paragraph 1 of that Article a treaty (e.g. the Kyoto Protocol) shall be interpreted, *inter alia*, in the light of its object and purpose (which are in the context of the climate regime mainly presented in other parts of the climate regime, most importantly the Convention and the Protocol). Furthermore, according to paragraph 2

> "the context for the purpose of interpretation of a treaty shall comprise, in addition to the text, including its preamble and annexes: (a) any agreement relating to the treaty which was made between all the parties in connection with the conclusion of the treaty; (b) any instrument which was made by one or more parties in connection with the conclusion of the treaty and accepted by the other parties as an instrument related to the treaty".

In addition to this, any subsequent agreement between the parties regarding the interpretation of the treaty or the application of its provisions shall be taken into account.[156]

As the documents and decisions approved under the Climate Convention can be placed under several of these paragraphs, it seems justified to conclude that it would be contrary to the Vienna Convention, as well as defeat the object and purpose of the Climate Convention not to follow the provisions of the Convention in the application of the rules adopted within the climate regime, and thus not to take the normative context into account in the interpretation of

[154] See Vienna Convention Art. 31(3)(c); see also Simma & Pulkowski 2006 p. 492. For case law, see *United States – Standards for Reformulated and Conventional Gasoline* (WT/DS2/AB/R, 29 April 1996), Section III B; *Korea – Measures Affecting Government Procurement* (WT/DS163/R, 19 June 2000), at paras. 7.93-7.96; *Oil Platforms Case* (Iran v. United States of America) (Merits) ICJ Reports 2003, para. 40. But cf. Koskenniemi 2006 paras. 416-419 for a critical remark: "This points to the need to carry out the interpretation so as to see the rules in view of some comprehensible and coherent objective, to prioritize concerns that are more important at the cost of less important objectives".

[155] Special regimes are, at least within the environmental field to a large extent a newer phenomenon than the Vienna Convention itself. This calls for interpretation.

[156] See also Rajamani 2006 pp. 97, 237-239. The WTO Panel has adopted a restrictive interpretation on this matter, see *United States – Restrictions on Imports of Tuna* (16 June 1994), Panel Report (DS29/R) paras. 5.18-5.20.

different provisions.[157] The same applies to the Kyoto Protocol both as "a document and a decision approved under the Convention", as well as the decisions of the Conference of the Parties to the Convention and the Meeting of the Parties to the Protocol.

Take for example the rules concerning compliance in the climate regime[158] and the general international law rules concerning state responsibility[159]. The procedure under the Enforcement Branch of the Compliance Committee[160] is applicable only in three cases according to the set of rules mentioned first: first, in a case of a failure by a state party to fulfil its emission reduction obligations, second, in a case of a failure to comply with the methodological and reporting requirements, and third, in a case of a failure to comply with the eligibility requirements under Articles 6, 12 and 17 (the flexibility mechanisms). The Kyoto Protocol, however, imposes also other obligations upon the parties, for instance concerning transfer of technology and the provision of financial resources[161], which have, thus, not been covered by the procedure under the Enforcement Branch set out in the COP-decision concerning compliance[162]. In other words, as the exclusive wording of the decision does not include those other obligations, the procedure under the Enforcement Branch is not applicable to breaches thereof. Accordingly, it would seem that the general international law rules concerning state responsibility would apply to these other breaches of treaty. Another question is, whether these other obligations are formulated in a sufficiently specific manner in order to be considered as legally binding obligations.

[157] See Vienna Convention on the Law of Treaties (1155 UNTS 18232, 23 May 1969), Art. 31(1), according to which "a treaty shall be interpreted in good faith in accordance with the ordinary meaning to be given to the terms of the treaty in their context and in the light of its object and purpose". The object and purpose of the Kyoto Protocol can be found in the Climate Convention to a great extent. See also Rajamani 2006 pp. 97, 237. For case law, see e.g. *McElhinney v. Ireland* (App no 31253/96) ECHR 2001-XI, para. 36; *Al-Adsani v. the United Kingdom* (App no 35763/97) ECHR 2001-XI, para. 55; *Bankovic et al. v. Belgium et al.* (Grand Chamber Decision as to the admissibility) (App no 52207/99) ECHR 2001-XII, para. 57; *Loizidou v. Turkey* (App no 40/1993/435/514) ECHR 1996-VI, para. 43, all of which shed light on the interpretation of Article 31 of the Vienna Convention on the Law of Treaties, albeit are located within the field of human rights law.

[158] See decision 24/CP.7 (FCCC/CP/2001/13/Add.3).

[159] See the ILC Draft Articles on State responsibility, GA Res. 56/83 (12 Dec. 2001), Annex.

[160] The Compliance Committee includes also another branch, the facilitative branch, the competence of which has a wider scope. The activities of the enforcement branch are, however, more equivalent to the logic of the general international law rules concerning state responsibility, as they concern the consequences of non-compliance instead of assistance towards compliance. This is why only the Enforcement Branch is addressed here.

[161] See Kyoto Protocol, Articles 10 and 11.

[162] See decision 24/CP.7, Part I.

Besides this, the coverage of this compliance regime is to begin with limited – apart from the advisory and facilitative functions of the Facilitative Branch[163]. Even if the most important obligations probably are covered, the fact that the system defines which obligations are covered simultaneously excludes everything else. This "else" may include e.g. obligations to be adopted by the COP and the COP/MOP in the future – provided that the rules concerning compliance are not amended accordingly.[164]

General international law – including the Vienna Convention on the Law of Treaties – as well as other applicable and binding rules of international law, provide a "safety net" in the playing field of often very objective-oriented and issue-specific regimes set up to provide solutions to particular problems. Not only does it provide assistance in situations of *lacunae*, but they also guide the interpretation. Thus, it serves functions quite similar to the ones served by principles.[165] As Georges Abi-Saab has put it, "… if all links [to the international legal order] are severed, the special regime becomes a legal order unto itself – a kind of legal Frankenstein, or Kelsen's 'gang of robbers' – and no longer partakes in the same basis of legitimacy and formal standards of pertinence."[166]

The extent to which general international law may come for rescue remains unclear, however.[167] It seems appropriate to conclude that insofar as the rules of a particular special regime cover the legal ground, the application of general international law is excluded, but

[163] See decision 24/CP.7, Part IV, paras. 4-5.
[164] See also Koskenniemi 2006 para. 172, according to whom "though States have the *faculté* to set aside much of the general law by special systems of responsibility or rule-administration, what conclusions should be drawn from this depends somewhat on the normative coverage or 'thickness' of the regime. The scope of a special State responsibility regime is normally defined by the relevant treaty. No assumption is entailed that general law would not apply outside of the special provisions."
[165] See *Différend concernant l'accord Tardieu-Jaspar* (Belgium/France) Award of 1 March 1937, UNRIAA, vol. III p. 1713; see also Koskenniemi 2006 paras. 415-416, 434; see also *Amoco International Finance Corporation v. Iran*, Iran – US C.T.R., vol. 15, 1987-II, p. 222, para. 112; *United States – Import Prohibition of Certain Shrimp and Shrimp Products* (WT/DS58/AB/R, 12 October 1998), para. 158; United Nations International Covenant on Civil and Political Rights, Human Rights Committee: General Comment, CCPR/C/21/Rev.1/Add.6, November 2, 1994, 34 ILM 839 (1995).
[166] Abi-Saab 1999 p. 926; see also Simma & Pulkowski 2006 p. 492; for case law, see e.g. within the WTO regime *US – Standards for Reformulated and Conventional Gasoline*, Report of the Appellate Body, (WT/DS2/AB/R, 29 April 1996), Section III B; *US – Import Prohibition of Certain Shrimp and Shrimp Products*, Report of the Appellate Body (WT/DS58/AB/R, 6 November 1998), para. 129. On the application of general international law within human rights regimes, see Koskenniemi 2006 paras. 161-164, and within WTO law, see Koskenniemi 2006 paras. 165-171.
[167] See Simma & Pulkowski 2006 p. 501. This discussion approaches the vivid discussion within international law scholarship concerning universalism and particularism in international law, see e.g. Simma & Pulkowski 2006 pp. 504-505, 510-512.

where they do not cover the ground, it should be possible to apply general international law.[168] This may lead to the application of both the rules of the special regime and rules of general international law within the regime in question to issues that seem very similar at least at the first glance.[169]

2.3 Turning International Environmental Law into Action

Previously in international law the forms and means of domestic implementation of obligations set out in international agreements have been left up to the implementing states parties themselves to determine. It seems now that within the field of environmental law this state of affairs has changed along with the expansion in the number of environmental treaties, at least in the case of those treaties. These treaties often do not contain clear, detailed or specific rules that could without any further ado be enacted into national law. Framework conventions addressed to above are an example of this.[170]

The other side of the coin are protocols and decisions adopted within the organisation set up by these framework conventions. These entail regulation that no longer merely stipulates an end result to be achieved, but provides for mechanisms of implementation and technical requirements that leave little latitude for the states parties. This detailed and technical regulation may better reach the actual culprits – individuals, firms etc. – that cause the pollution that international environmental treaties aim to mitigate, as the requirements set by this regulation tend to fall within the confines of their activities, and the role of states often merely includes the formal adoption of the obligations. They are under their home state's jurisdiction, and thus their conduct cannot be directly addressed by means of international treaties, to which only states and intergovernmental organisations may be parties.[171]

[168] See also Simma & Pulkowski 2006 pp. 525-526.
[169] The PCIJ and the ICJ have, however, on occasion come to different conclusions, see *S.S. Wimbledon*, PCIJ, Ser. A, No. 1, 1923, pp. 23-24; *Case Concerning United States Diplomatic and Consular Staff in Tehran*, ICJ, General List No. 64 (24 May 1980), pp. 38-40; see also Simma & Pulkowski 2006 p. 491.
[170] Birnie & Boyle 2002 p. 14.
[171] See Ebbesson 1996 p. 53; Sands 2000 p. 397.

This is not, however, entirely without problems. Regimes under framework conventions are usually formulated in an open-ended manner, which necessitates the decisions taken within these regimes, prepared by representatives appointed by governments and experts appointed to the supervisory organs.[172] For example, the rules adopted within the climate regime have turned out to be detailed and technical to the extent that renders questionable the freedom of the individual state party to determine the forms and means of implementation. Still, the commitments that governments make in joining a regime do reduce the flexibility available to those governments, and limit their ability to act "on the basis of myopic self-interest"[173].

Furthermore, the diversity of political, legal and social contexts within which policy initiatives are located will need to be realised. The regulation within particular subsystems becomes "one size fits all" –type of regulation, where no room exists for national particularities.[174] This may, depending on the state party, even lead to constitutional problems in the implementation process, such as problems concerning the fundamental rights of individuals, as set out in the national constitution.[175]

A more pluralistic approach would certainly help avoid the constitutional pitfalls and preserve the possibility of national particularities, but it falls outside the scope of this study to define what exactly this approach would be like. Suffice it to state here that environmental protection *de facto* requires some degree of universality. And if it is found appropriate to introduce such goals into environmental policy – and through environmental policy eventually into international law – as cost-effectiveness, for example, a purely domestic implementation is

[172] See Koskenniemi 2007 p. 4; see also Shelton 2000 p. 12, who speaks of the bureaucratisation of international institutions as an explanation for the use of soft law.
[173] Keohane 1984 pp. 108, 115.
[174] See Kennedy 2001 p. 482-484, according to whom the problem is not only the failure of policy solutions to respect local cultures, but also their tendency to underestimate the specificity of the culture of international governance itself; see also Koskenniemi & Leino 2002 p. 557; Higgins 2001 p. 121, according to whom a consequence of the recent move to emphasise the informal relations between different actors as the basis of all activity and the transformation of the role of the state from legislator into a facilitator and enabler of different self-regulating systems, is the inseparability of international and national even in politics or administration. This was already addressed earlier in this text, see Ch. 2.1.
[175] But cf. Ebbesson 1996 p. 225, according to whom "the substantive international rules concerning individuals may also be better adjusted to the domestic legal tradition, legislative drafting, and procedural and administrative structures. This is also the case when it is difficult to determine whether a treaty concerns the legal situation of individuals. Transformation would then be more adequate as a means for 'filling out' the normative framework of the international substantive rules." See also Tuori 2004 p. 1213; Koskenniemi 2007 p. 4.

likely to prove insufficient, and some international structures will be needed[176]. The extent, nature and functions of these international structures are then another matter.

Brunkhorst has pointed out a paradox in connection with this: "The independence of global law from states (and other social systems) is growing simultaneously with its dependence on states (and other social systems), and *vice versa*". States themselves have created systems among themselves that function according to their own laws, albeit a part of the international legal system – but have not noticed the demands that the functioning of these systems poses to the national sphere. Thus, states are still significant driving forces in the process of globalisation, but the global order created by states has evolved towards a set of autonomous social orders. To quote Brunkhorst, "it [the state] has to adapt to a widely changed role and to perform a much more specialised function, restricted more or less to the organisation of administrative power and social welfare".[177]

This implies tensions between, first, the democratic legitimacy[178] of the special regime and the increasing reliance on expert knowledge[179], and, second, reliance on state sovereignty in the

[176] See my previous articles, Melkas 2007a pp. 13-23; and Melkas 2007b pp. 274-288 on the tensions between cost-effectiveness and the spatial flexibility entailed by it on the one hand and the sovereign equality of states on the other.

[177] See Brunkhorst 2002 pp. 683-685. Brunkhorst comes, however, to the conclusion that "a high level of hard-law human rights" has come to constitute what rules the global legal order.

[178] See Wessels & Katz 1999 p. 5: "Democratic legitimation rests both on the effectiveness of policy achievements and on popular representation and participation. Democracy as an ideal combines these two criteria of governance and representation that are often seen being in tension… There is an inevitable trade-off between output legitimacy and input legitimacy, between an emphasis on government for the people and an emphasis on government by the people…". See also Maus 1989 p. 143, who speaks of the de-differentiation of democratic legitimation and moral grounding of law, and how that signifies the usurpation of a social control function by the political decision making bodies. According to her, furthermore, "it leads to a situation whereby the potential conflict between democratic and moral justification of legal decisions is resolved within the organs of the state which tend … to relieve themselves of the onus to obtain empirical consent. The moral argument can then easily be misused as a substitute for democracy". See also Brunnée 2002 pp. 11-14, according to whom international law would fall short "measured against standards of democratic legitimacy", at least if understood in the sense of a political system of popular representation and majority decision making. But the involvement of non-state actors may turn out to be crucial in this sense.

[179] See e.g. Beck 1995 pp. 116-117, according to whom "if one asks, say, what levels of artificially produced radiation the population is to accept, i.e. where to situate the thresholds of tolerance that separate normality from danger, the *Atomgesetz* (Nuclear Law) provides only a general answer: the requisite prior provision is to correspond to the 'state of science and technology' … This formula is then filled out in the 'guidelines' of the commission for reactor safety – an 'advisory body' of the Ministry of the Environment, in which representatives of the engineering associations have the last word"; also Beck 1990 pp. 102-103. Note that also principles may be seen as a contribution of expert knowledge to law, as they have been largely developed by the legal scholarship – even if adopted by the competent decision making bodies.

choice of means and methods in the implementation of internationally agreed standards and the increasing use of very technical regulation.[180] As Kuokkanen has pointed out:

> "As technical expertise was more firmly internalised within the environmental regimes, traditional diplomacy and politics began to lose their former role. Through the partnership of policy and science, regimes were created on a long-term basis to manage potentially adverse problems. Various new techniques were also developed within the regimes, to ensure compliance, for example. In particular, the administrative side of the environmental regimes were strengthened in order to manage day-to-day problems."[181]

Locating power in national sovereigns is to some extent a misconception. To cite David Kennedy: "Myriad networks of citizens, commercial interests, civil organisations and government officials are more significant than interstate diplomacy".[182] Kennedy illustrates the problem by dividing the playing field into three parts, foreground, background and context. In this illustration experts work at the background, between the official decision-makers ("the prince" in Kennedy's vocabulary) at the foreground and the laymen in the context. The task of the experts is to implement and interpret the decisions of the foreground decision-makers for laymen. They could be scientists, lawyers, administrators, pollsters even.[183]

The question is not that international law would not be doing its job in governing international relations, the real problem is the difficulty of finding opportunities for politically contesting the results it generates. And the power of the discretion of these people in the background, expert consensus, tends to be underestimated. In fact, it often provides the frame for political debates and decisions – a factor of significance within the environmental field.[184]

[180] See also Kuokkanen 2002 p. 238.
[181] Kuokkanen 2002 pp. 277-278.
[182] See Kennedy 2005 pp. 3-4; see also Kennedy 2001 pp. 465-466; Sands 2000 p. 395; Shelton 2000 pp. 6, 13, according to whom soft law often allows for more active participation of non-state actors.
[183] Kennedy 2005 p. 5; see also Wolf 1987 p. 370, who refers to the increase in complexity of everyday risks by pointing out that everyday experience and everyday knowledge are no longer sufficient to evaluate these risks; Kuokkanen 2002 p. 236; Walser 1998 pp. 1618-1620.
[184] Kennedy 2005 pp. 8-11; Koskenniemi 2005b p. 34; Koskenniemi 2007 p. 10; see also Slaughter 2000 p. 180, who points out that concerns relating to government networks, e.g. that these networks reflect technocracy more than democracy, create a need to build mechanisms for accountability to domestic constituencies. See also Klabbers 2006 pp. 1204-1205.

Furthermore, the apolitical nature of the influence of these background actors should also not be taken for granted; on the contrary.[185] In fact, assuming that the use of expertise is apolitical will easily hide the fact that by means of the deformalisation of the law, influential actors are able to realise their objectives "in the garb of 'regime management'"[186]. And as these managerial decisions do have significance to the different actors and their legal positions, and to the "distribution of economic and spiritual values", a legitimacy problem arises.[187] Also, it is not only that the expertise itself may be political to begin with – in order to turn scientific or technical knowledge into a political decision, a normative ("political") assessment on how to distribute the costs and benefits of alternative solutions will need to be made.[188]

This "new managerial ethos" is well illustrated by the turn into thinking of environmental problems in terms of sustainable development and the introduction of the common but differentiated responsibility[189]. Thinking about international regulation as "law" has turned into thinking about it as regime management. Within these regimes experts and policy-makers seek to manage environmental problems sectorally and on a case-by-case basis.[190]

On the other hand, the discretion of experts has its limits, too; the expertise itself – limited as it is – limits it. But experts do have an influence on how we perceive the world, what we imagine things such as law or economy to be, how problems are defined, and this, too, is limited by the limits of the expertise. So, as expertise is limited, they narrow the range of solutions considered in accordance with the limits of the expertise.[191]

Also this aspect should not, however, be exaggerated. Expertise is flexible. Lawyers are able to criticise reliance on rules or litigation, for example, and economists have an understanding and vocabulary for things that non-economists think of as matters of "value" rather than

[185] See Kennedy 2001 pp. 465, 471-472.
[186] See Koskenniemi 2005b p. 6.
[187] In a more formal system, this control would be located in the states that manage the system. As global governance is largely deterritorialised, structures corresponding to those within states are largely absent, see Koskenniemi 2005b p. 6; Beck 1990 pp. 170-171.
[188] Koskenniemi 2005b p. 35.
[189] See Koskenniemi 2005b pp. 30-31. This is another aspect connected to the discussion concerning the integration of environmental and economic or development concerns referred to above, see Pallemaerts 1993 pp. 16-19.
[190] See Koskenniemi 2005b p. 33, according to whom this management takes place largely on economic terms. See also Beck 1995 p. 68; Beck 1990 pp. 104, 170-171.
[191] See Kennedy 2005 p. 13, who uses the old adage "to a man with a hammer, everything looks like a nail".

matters of "efficiency". This makes it even more difficult to pinpoint the influence that experts actually have, and to see through the frame this expertise has provided to political debates and decisions.[192]

Structural bias, a factor related to the increase in the significance of experts, has an effect on treaty interpretation within regimes. The system – the actors within it – leans a certain way, prefers some outcomes to others.[193] Each system has its experts, its ethos, its priorities and preferences[194]. To cite Jan Klabbers: "…the environmental regime is composed of environmental experts and activists, and will look at normative issues through the environmentalist glasses worn by the members of the environmentalist epistemic community. The trade community does much the same, as does the community of human rights specialists."[195] It is, at least partly, the result of the increasing significance of experts, the participation of which has transposed the functional differentiation at the national level onto the international level, and partly also – one could imagine – the objective-oriented nature of these subsystems.[196]

An example of structural bias is the WTO, where both free trade and social policy objectives – as well as environmental objectives – are provided for in the treaties, but free trade is usually taken as a starting point in the practice of the WTO organs.[197] A similar tendency may be perceived in the case law produced by the human rights courts.[198] This does not, however, apply in all cases.

[192] See Kennedy 2005 p. 22.
[193] As for treaty interpretation, this may be seen as leaning on the Vienna Convention on the Law of Treaties, Art. 31(1).
[194] Koskenniemi 2006 para. 488.
[195] Klabbers 2006 p. 1200.
[196] Koskenniemi 2007; see also Sands 2000 p. 402 in connection with the application of the Vienna Convention on the Law of Treaties, Article 31(3)(c); Wolf 1987 p. 363, who takes part in the discussion concerning the shift in environmental policy and law towards open concepts to be given meaning case by case; Walser 1998 pp. 1677-1678.
[197] Koskenniemi 2005a p. 607; *European Communities – Measures Concerning Meat and Meat Products (Hormones)*, (WT/DS26/AB/R, WT/DS48/AB/R, 16 January 1998), Part VI; *US – Restriction of Import of Tuna* (DS21/R – 39S/155, 3 September 1991) paras. 5.28, 5.34; *US – Restriction of Import of Tuna* (16 June 1994) 33 ILM 839 (1994) paras. 5.35-5.42; *US – Standards for Reformulated and Conventional Gasoline* (WT/DS2/AB/R, 29 April 1996).
[198] See e.g. *Loizidou v. Turkey*, Preliminary objections, Judgment of 23 March 1995, ECHR Series A (1995) No. 310 paras. 95-96.

An opposite example from the WTO field is the case concerning the standards for reformulated and conventional gasoline brought against the United States, where the Appellate Body interpreted and applied one set of rules by reference to another set of rules, i.e. the rules concerning free trade by reference to conservation of natural resources.[199] In the dispute before the WTO panel that was appealed to the Appellate Body the appellant was Venezuela, later joined by Brazil. The topic under dispute was the implementation by the US of its Clean Air Act (CAA) and the regulation enacted by the United States Environmental Protection Agency (EPA) pursuant to the CAA. The purpose of these instruments was to control the pollution caused by the combustion of gasoline manufactured in or imported into the United States. The CAA established two programmes to ensure that pollution from gasoline does not exceed the levels of the year 1990 and that pollutants in major population centres are reduced. One of these programmes covered so-called non-attainment areas[200], where all gasoline sold to consumers was supposed to be "reformulated". The sale of conventional gasoline in these areas was prohibited. The other programme concerned conventional gasoline, which could be sold to consumers in the rest of the United States. The EPA, as the authority responsible for the implementation of these programmes, adopted the Gasoline Rule.

Within the reformulated gasoline programme, domestic refiners, blenders and importers could take advantage of an interim method of certification ("the simple model") before having to comply with the general method applicable to everyone ("the complex model"). The conventional gasoline programme only required that gasoline produced by domestic producers remain as clean as the 1990 baselines. The WTO Panel found this unjustifiable under Article XX, paragraphs (b), (d) and (g) of the General Agreement. As opposed to this, the Appellate Body confirmed the general rule of interpretation found in Article 31 of the Vienna Convention on the Law of Treaties[201] by stating that "the words of a treaty, like the General

[199] See Sands 2000 p. 550.
[200] Nine large metropolitan areas that have experienced the worst summertime ozone pollution; and various additional areas included at the request of the state governors concerned.
[201] See Vienna Convention on the Law of Treaties, Article 31(1): "A treaty shall be interpreted in good faith in accordance with the ordinary meaning to be given to the terms of the treaty in their context and in the light of its object and purpose".

Agreement, are to be given their ordinary meaning, in their context and in the light of the treaty's object and purpose".[202]

Within the field of human rights the Loizidou case may serve as an example, although not as clearly pointing one way or another. In that case, the applicant, a Cypriot national, was the owner of several plots of land in Kyrenia, in northern Cyprus. In one of the plots work had commenced for the construction of flats prior to the Turkish occupation of northern Cyprus in 1974. One of the flats was intended as a home for her family. The Constitution of the "Turkish Republic of Northern Cyprus" (TRNC) provides, *inter alia*, for the transfer of ownership of "immovable properties, buildings and installations" that were considered abandoned or ownerless on 13 February 1975, when the "Turkish Federated State of Cyprus" was proclaimed, or situated within the boundaries of the TRNC on 15 November 1983, to the TRNC. The international community did not approve of the proclamation.

As for the ownership issue, the Court came to the view that the applicant cannot be deemed to have lost title to her property as a result of the applicable provision of the Constitution of the TRNC, and that the applicant must still be regarded as the legal owner of the land. The continuous denial of access to her property must, according to the Court, be regarded as an interference with her rights under Article 1 of Protocol No. 1 on Enforcement of Certain Rights and Freedoms not included in Section I of the Convention to the European Convention on Human Rights, but not under Article 8 of the Convention concerning the right to respect for one's home. The decision not to accept the applicant's claim concerning Article 8 of the Convention was justified by emphasising the factual state of affairs. The applicant did not in fact have her home on the land in question; therefore, her right to respect for her home had not been violated. The Court did, by the application of Article 1 of Protocol No. 1, accept that the applicant was the owner of the property and thus had a right to the protection of this ownership.[203]

[202] *United States – Standards for Reformulated and Conventional Gasoline* (WT/DS2/AB/R, 29 April 1996); concerning this decision, see also Sands 2001 p. 550. Note that the wording refers to "public international law" in general, not general international law.
[203] See *Loizidou v. Turkey*, ECHR, 18 Dec. 1996, Application No. 15318/89.

The tensions referred to above – democratic legitimacy of a special regime versus reliance on experts, reliance on state sovereignty versus technicalities – hint on a transformation in who the legitimate actors within the international legal system are. These tensions are also interconnected – the increasing reliance on expert knowledge seems to be one of the major causes of the technicalities in the regulation, and the democratic legitimacy may be partly dependent on the possibility to rely on state sovereignty in the choices concerning implementation. Reliance on state sovereignty in these situations usually entails an intervention of some kind by the domestic legislative machinery. This, then, creates new possibilities and new pressures for public participation. These new possibilities could mean possibilities of involvement to other "representatives of the public" than just NGOs.

An example are the "legal entities" of the climate regime – non-state entities, primarily firms, that by means of state authorisation may take part in the fulfilment of the commitments under the Kyoto Protocol.[204] Firms with a speciality in a sector that has relevance in a project, e.g. energy consultancies, may use their expertise to their advantage; provide their expertise in the project in exchange for emission units that have financial value on the market. Why may this be problematic from a democratic legitimacy point of view? If one accepts that the term democratic legitimacy refers to, first, the possibility of people to affect the policy outcomes and, second, the quality of those policy outcomes, that is beneficial to the people[205], the increase in the significance of experts may e.g. *de facto* reduce the possibilities for the public to affect policy outcomes. Publicly available information may turn out to be scarce, the possibility to participate and have a say in the processes non-existent, to mention but a couple of examples.

An example of the latter tension (state sovereignty versus technicalities) may be provided by the international rules concerning national registries under the Kyoto Protocol and their use. This may also concern the rights and obligations of the private sector taking part in the activities under the mechanisms, the authorised legal entities.[206] National level regulation,

[204] See my previous articles, Melkas 2007a; Melkas 2007b; see also Kuokkanen 2002 pp. 238, 274-275; Brunnée 2002 pp. 14-15, who speaks of vertical and horizontal legitimacy.
[205] See Wessels & Katz 1999 p. 5.
[206] See decision 13/CMP.1 (Modalities for the accounting of assigned amounts under Article 7, paragraph 4, of the Kyoto Protocol).

should there be some and what kind, concerning the legal position of individuals vis-à-vis e.g. private property may come into conflict with these internationally agreed upon rules. In any case, the latitude left for national legislators becomes thinner, the more detailed the internationally imposed regulation is.[207]

[207] See Koskenniemi 2007 pp. 33-34. Koskenniemi has viewed the central role of experts critically, calling for the return of politics into international relations: "Managerialism was the dark side of the inter-war project of imagining international law in technical terms". The functionality of regimes, necessitating the reliance on experts, is part of the problem; "interest" is hardly a solid foundation for action. He seems to call for the opening up of relevant decision making processes, regardless of where they take place – "not only in diplomacy or intergovernmental organisations but transnational corporations, interest-groups, banks, armies, development agencies, universities and so on".
In Finland the use of the mechanisms is regulated by law, an act of Parliament. This may, however, not be the case everywhere. It depends on the national constitutions whether mere administrative orders or decisions are sufficient for the implementation of the applicable international and EU rules to, or whether the legislative machinery will have to be employed.

3. The Kyoto Mechanisms as New Instruments of International Environmental Law

3.1 The Climate Convention and the Mechanisms: the Application of Articles 2 and 3

As was explained above, the Vienna Convention on the Law of Treaties requires, first, that a treaty be interpreted, *inter alia*, in the light of its object and purpose, and second, that agreements relating to the treaty between the parties to the treaty in connection with the conclusion of the treaty belong to "the context for the purpose of interpretation of a treaty", and thus, shall be taken into account. Third, any subsequent agreement between the parties regarding the interpretation of the treaty or the application of its provisions shall be taken into account.[208] This must be interpreted to apply not only to the Climate Convention and the Kyoto Protocol – treaties *par excellence* – but also to the decisions of the Conference of the Parties to the Climate Convention and the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol, as they are, despite their nomination as "decisions", in fact agreements between states.[209]

The primary rules to be applied in using the mechanisms are, in addition to those rules set out in the documentation of the individual projects, the applicable COP- and COP/MOP-decisions. Considering the object and purpose of the mechanisms one should keep in mind the overall object and purpose of the climate regime, most importantly the goal, however generally formulated, set out in Article 2 of the Climate Convention[210]. A reference to Article 2 is made in the Preambles to some of the COP/MOP-decisions concerning the mechanisms, but even if it were not, Article 31 of the Vienna Convention would require taking it into account[211].[212]

[208] See Chapter 2.2.1.4 above.
[209] It has already been pointed out above that there is at present no consensus as to whether the COP- and COP/MOP-decisions are legally binding or not, see Ch. 2.1; on this discussion see Brunnée 2002 pp. 23-26, 33-34, 37-38.
[210] According to Article 2 itself, the goal is not just that of the Climate Convention, but also that of any related legal documents. As has been pointed out earlier in this text this kind of interpretation may be seen as required also by the Vienna Convention Article 31(1).
[211] See decision 2/CMP.1, Preamble; decision 7/CMP.1, Preamble.
[212] See my previous articles Melkas 2007a p. 5 and Melkas 2007b p. 275.

It seems justified to conclude that also Article 3 containing the guiding principles of the Convention could be considered as belonging to the "context", as it lays out the values accepted among the parties to the regime, that underlie these instruments. Accordingly, the goals and principles set out therein should guide the design of the national climate policies.[213] Article 3 does, however, use a conditional wording – "should" instead of "shall". This weakens its binding effect. Furthermore, as has been pointed out by de Sadeleer, already the fact that the principles have been provided for in the Framework Convention instead of the Protocol has limited their normative value.[214] This still cannot be taken to deprive those principles of all normative value, especially due to the fact that the COP- and COP/MOP-decisions on occasion refer to these principles (as for the mechanisms, in decisions that regulate all three mechanisms)[215]. They still have been adopted and approved by the states parties to the Convention, and thus carry certain momentum as a reflection of the values behind the system.

These principles were addressed in "Overview". The idea was to find content to principles that have merely been listed in a general article in a framework convention, and at a more general level take a look at the longer term elements in the legal system that should have an influence on how the system is operated.

I found out that in the context of the climate regime the principle of common but differentiated responsibility is intrinsically linked to both sustainability and human needs. Thus it is typical and quite similar to the other adopted principles in that it seeks to integrate environmental concerns with human interests. What gives it its identity is the focus on the developmental and economic differences between developing and developed countries, and the aim of diminishing those differences.[216]

[213] Note that the Vienna Convention on the Law of Treaties was concluded before the emergence of framework conventions within international environmental law, and thus was not in the position to address those. The decisions of the meeting of the parties to the Kyoto Protocol also sometimes refer to Article 3 – most importantly for the mechanisms, decision 2/CMP.1. But even when they do not, it would be justified to consider the Climate Convention binding upon the implementation of the related legal documents.
[214] See de Sadeleer 2002 pp. 313-315.
[215] See decision 15/CP.7, Preamble; decision 2/CMP.1, Preamble.
[216] See Melkas 2001 pp. 27-28; Perrez 2000 pp. 294-297.

It also became apparent that in the implementation of the precautionary principle the lack of scientific certainty is significant. This uncertainty may stem from limited scientific evidence or lack of scientific agreement concerning the level of risk to be tolerated. However, the precautionary principle does not provide an unambiguous basis for action, as it is always bound by existing legal and economic conditions.[217] These legal and economic conditions dictate, *inter alia*, that there must be some limits to precaution, and that the measures taken must at least be based on plausible scientific assumptions and that a merely speculative risk is not sufficient.[218] A balancing must take place between the environmental concern and economic and/or societal interests.[219]

The principle of sustainable development requires that while seeking to remedy existing environmental problems, the sources of those problems be influenced. The environmental costs and benefits should also be equitably shared between and within countries as well as between present and future generations. Also development and environmental concerns should be integrated, and accordingly the problems linked to poverty addressed in addition to the problems connected to global environmental change. A balancing between these different interests shall take place in the application of the principle. This balancing is, however, a bit more complex than the one carried out in connection with the precautionary principle. It involves, in addition to a balancing between developed and developing countries and a balancing between different interests in developed countries, a balancing between the benefit incurred from the use of a resource – or an industrial activity, for instance – and the benefit possible to incur in the future (an intergenerational balancing).[220]

In the context of climate change and measures to mitigate it, the nature of the problem opens the possibility for the joint implementation of commitments that has been concretised into the three mechanisms. As the location of most greenhouse gas emissions is of no importance – they have no local effects – allowing spatial flexibility does not lead to problems of so-called hot-spots.

[217] Melkas 2001 p. 33 and the references therein.
[218] Melkas 2001 p. 34; Rehbinder 1995 pp. 25-26.
[219] See Melkas 2001 pp. 35-38, 42; Perrez 2000 pp. 289-291; de Sadeleer 2002 p. 297.
[220] See Melkas 2001 pp. 41-43; see also Perrez 2000 pp. 285-286.

This aspect has met with the goal of cost-effectiveness in the climate regime and, more specifically, in the flexibility mechanisms. Cost-effectiveness is a criterion and a goal generally attached to certain policy instruments, such as permit trading, and usually is understood as requiring that (environmental policy) measures be taken where they are cheapest[221]. It has been considered as inherently connected to the mechanisms[222]. It has been understood as striving to allow economically the integration of different interests, such as environmental protection and social policy. Part and parcel thereof is the spatial flexibility brought about – emission reductions may be made where they are cheapest. Thus emissions would not be reduced in equal number everywhere. This way cost savings would be possible and resources saved for other ends, such as national social policies. Or alternatively, more resources would be left for more ambitious environmental policies.

The idea of cost-effectiveness is consistent with the notion of integration of environmental protection and development or, more widely, economic concerns. It seeks to make the two compatible – in this context – by requiring cost-minimisation without compromising the aims of the policies.[223] The problem with this, according to Pallemaerts, is that integration easily leads to the subordination of environmental protection to the development or economic interests.[224] We would no longer adopt environmental policies merely for the sake of the environment, but because it is simultaneously economically beneficial, or at least allows cost-savings. The question arises, whether we will then end up adopting environmental policies only when cost-savings are available.

Besides this, cost-effectiveness seems inviting to increasing casuistry, as it is flexible as a standard. Casuistry, then, favours managerialism, which may be seen to be problematic from a democratic legitimacy point of view. On the other hand, as has been explained above, casuistry is more open to pluralism and allows more easily different solutions. To ensure some consistency of interpretations and to contribute to the coherence of law – local or total – one then needs to turn to principles.

[221] This is the way cost-effectiveness is understood in this study.
[222] I addressed cost-effectiveness in my third and fourth articles, see Melkas 2007a; Melkas 2007b.
[223] Cost-effectiveness is yet another feature of the post-modern phase of the law, see Kuokkanen 2002 pp. 299, 309.
[224] See Pallemaerts 1993 pp. 16-19. On the emergence of the integration of environmental and development concerns, see Kuokkanen 2002 pp. 340-341.

Considering the amount of recognition cost-effectiveness has received in the applicable documents (the Convention, the Protocol, the relevant COP- and COP/MOP-decisions) – not to mention the rest of the volume of international environmental law – the attention paid to it in designing climate policies seems disproportionate. This does not mean, however, that the use of cost-effectiveness as a criterion would not be completely legitimate when there is latitude to choose between different measures, just as well as the use of any other criteria, such as national social policy demands. But cost-effectiveness cannot override the other accepted principles, concepts and criteria for environmental policies, such as the principles also discussed in this study, in decision making. Rather, a balance needs to be struck between different factors.[225]

Cost-effectiveness also cannot, as I have concluded in two of my previous articles[226], be taken as the leading goal of the flexibility mechanisms, or the leading goal of the measures undertaken within the climate regime. It has not been mentioned in the rules concerning the mechanisms that can be found in the Protocol and several decisions of the COP and the COP/MOP. It has been mentioned in Article 3 concerning the leading principles of the climate regime, but primarily as a counterbalance to the precautionary principle.

In "Sovereignty and Equity" I found out that the principle of equity has presented itself in environmental policy and law primarily in two forms, intragenerational equity and intergenerational equity. The first refers to equity among people living at the same time (e.g. equity among states), and the latter to equity between different generations – securing the possibilities of future generations to the use of the environment. Intergenerational equity is a central component of the principle of sustainable development.

Differential treatment and the principle of common but differentiated responsibility have been important manifestations of intragenerational equity, especially in the climate regime.[227] They have previously mainly been used to make distinctions between developing and developed

[225] See Melkas 2007b p. 275.
[226] See Melkas 2007a; Melkas 2007b.
[227] Cullet 1999 pp. 169-170; see also Melkas 2002 p. 122. Other instruments of equity within the climate regime would be the financial mechanism, technology transfer and the flexibility mechanisms.

countries. However, the climate regime makes distinctions even among developed countries, the Convention by categorising the developed states parties into Annex I and Annex II states, and the Kyoto Protocol by listing those states that have undertaken emission reduction commitments in its Annex B and differentiating even those obligations state-by-state.[228]

As for the implementation of these principles in applying the Kyoto mechanisms, it seems that common but differentiated responsibility serves mainly as an underlying idea guiding and directing the rights and obligations under the Convention, the Protocol and related documents. It is, thus, not directed at states implementing their commitments under the Kyoto Protocol at the domestic level, but rather at the international community striving for agreement on new standards of protection. As for the others, in the application of all of them a balancing operation of some kind is in order both in issuing international rules concerning the mechanisms as well as in implementing them nationally. In the application of sustainable development this balancing needs to take into account more interests than the application of, say, the precautionary principle. If these need to be applied simultaneously, the balancing exercise becomes even more multidimensional. Not only will then economic interests (e.g. the price of the measure vis-à-vis the economic feasibility of e.g. an industrial activity) and environmental protection (e.g. the reduction of carbon dioxide emissions by means of, say, converting a power plant using coal into one using wood) be weighed against one another, but also the interests of different states involved – especially developing versus developed – as well as the interests of the yet undefined future generations. This underlines the need to strike a balance between different interests in operation in the case at hand, a decision which can only be made *in casu*. This also underlines the need to operationalise sustainable development, to write it into the treaty obligations and implementing laws.

All three mechanisms rely on the existing categorisations of the states parties adopted in the climate regime. The role of equity is smallest in emissions trading, where also the internationally agreed rules are scarcest, and the greatest in the CDM, which is also the most regulated of the three. However, as there is no established differentiation within the group of non-Annex I states[229] adopted in the Convention or the Protocol, the realisation of equity as a

[228] See Melkas 2002 pp. 122-124.
[229] Developing countries.

substantive equality of some kind within that group is left to be determined *in casu*. This takes place by means of decision making within and among the participant states concerning individual projects, with only a few guidelines provided by the internationally adopted rules. Thus, substantive equality of states will ultimately be defined at the project level.[230] In this decision making *in casu*, principles may serve as steering elements, and create coherence.

In "Overview" I also addressed the polluter pays principle, although it has not been mentioned in the Convention or in the Protocol. My intention was to find out whether it would have relevance within the climate regime as customary law. I concluded that the polluter pays principle may be regarded as customary law within the OECD countries, due to the extensive OECD practice (even if non-binding as such), but not beyond that group of countries. I also found out that quite like in the application of e.g. the precautionary principle and sustainable development, a balancing of different interests is needed to determine the extent of applying the polluter pays principle in practice as well. This entails, again, a balancing of first and foremost economic interests against the interests of environmental protection.[231]

Yet another type of balancing, that needs to be brought up here is balancing between different principles. It is in the nature of principles that they, unlike rules, are not of an either – or nature, but can be, and should be, applied simultaneously, by means of balancing[232]. When making decisions concerning actual climate policy measures (e.g. the use of the flexibility mechanisms, or individual projects in the JI and the CDM) and applying the principles in the process, a balance needs to be struck between different applicable principles. This determination is also made *in casu*. This balance should then show in the rules adopted for e.g. the flexibility mechanisms, as the balance between the applied principles operationalised into concrete rules, obligations, or at least guidelines. This conclusion then applies both to the rules adopted at the international level, as well as the implementing measures adopted nationally. It

[230] See Melkas, 2007b.
[231] See Melkas 2001 p. 50.
[232] See e.g. Dworkin 1977 pp. 72, 76. Suffice it to point out here that what Dworkin has stated on the issue is part of a wider discussion – but to get more deeply into this discussion is beyond the scope of this study. See also Tuori 2002 p. 180, according to whom the general doctrines play a role in this context by involving "an anticipatory position" on conflicts between different principles and by suggesting a *prima facie* order of preference between principles and counter-principles.

is, however, worth keeping in mind that the wording of Article 12 of the Kyoto Protocol seems to require that sustainable development be accorded greater weight than other principles[233].

All these balancing exercises that are needed in designing and implementing climate policies make reference to the process of deformalisation of the law and increasing casuistry. The presence of a special regime in the context creates a need for continuous negotiation and redefinition of commitments and forms of co-operation. These, in turn, call for taking the goal set out in Article 2 to the Convention into account and the application of the guiding principles listed in Article 3 to the Convention in order to, *inter alia*, avoid excess unpredictability in the development of the law within the climate regime and the implementation of the commitments. Hence the goal and the principles could provide a similar safety net that was referred to above concerning general international law within the particular context of the climate regime.

Furthermore, the unarticulated, *de facto* purpose of the mechanisms is a redistribution of burdens to be undertaken by states on an *ad hoc* basis. Quite like burden distribution in the first place, also this redistribution needs criteria. In the case of emissions trading it seems clear that the decisive criterion is cost-effectiveness – as there is less need for equity and fairness considerations, as all the participants are developed countries, cost-savings may well gain priority, besides emission reductions. The same applies to JI, although overall clauses concerning the economies in transition have also been made. As opposed to this, in the CDM the decisive criterion for the redistribution of burdens is equity, which means that fairness among states is a factor to be taken into account.[234] Thus, for instance technology, capital and know-how will need to be transferred.

3.2 General International Law and the Flexibility Mechanisms

As has been stated above, special regimes are regimes under international law. Thus, they rely on the concepts and structure of international law, and also the general principles of

[233] See Kyoto Protocol, Art. 12 (2). See also Melkas 2007b p. 268.
[234] See Melkas, 2007b *passim*.

international law apply. This means that also international law as a whole may have relevance to special regimes.

The application of general international law may become necessary e.g. in a case of gaps in the regime itself. In a case to which no decisive applicable rule may be found within the special regime, recourse may be sought from other parts of the international legal system, first and foremost general international law. General international law may also have interpretative value – the interpretation of the applicable rules will need to ensure their compatibility with each other and with general international law. A justification for this use of general international law may be that special regimes are often, perhaps mostly, constructed in an objective-oriented and problem-based manner[235], which then may lead to uncertainty and unpredictability in the functions and development of the regime. Thus, recourse to general international law may serve as a stabilising factor, in a similar manner as the recourse within the particular context of the climate regime to the goal and guiding principles of that regime. Most important for this study has been the part played by international treaty law, especially as set out in the Vienna Convention on the Law of Treaties, which guides, *inter alia* the interpretation of treaties. The importance of this field is highlighted especially by the fact that it is largely based on customary law.

Sovereignty and equity are examples of principles that have wider relevance in international law than just in the environmental context, and that define the role occupied by and latitude allowed for states. State sovereignty is the principle underlying the Climate Convention, the Kyoto Protocol and all the related documents that have been produced by the Conference of the Parties to the Convention or the meeting of the Parties to the Protocol – these have, after all, been produced by the community of states. State sovereignty has also been specifically mentioned in the Preamble to the Convention as "the principle of sovereignty of states in international co-operation to address climate change", as has been the sovereign right of states to exploit their natural resources pursuant to their own environmental and developmental policies, provided they do not cause damage to the environment of other states or to areas beyond the limits of national jurisdictions[236]. Also the methods of reducing emissions have

[235] See also Shelton 2000 p. 12.
[236] See Preamble, paras. 8 and 9.

largely been left up to the states, with certain limitations. Such limitations are e.g. supplementarity concerning the use of the flexibility mechanisms, and the different conditions set on the use of the mechanisms in the applicable rules.[237]

It seems that within the field of international environmental law the latitude produced by state sovereignty has become narrower than before and, perhaps, in many other fields of international law. The increasing interaction between national and international legal systems in that field, as well as the emergence of principles emphasising the general interests of all humankind, such as sustainable development and the precautionary principle, are sources of these limitations and testify on them. Behind this is the fundamental lack of suitability of state sovereignty for dealing with pollution issues and environmental problems in inter-state relations.[238]

This is especially visible within the climate regime. The agreements and rules within the regime are negotiated by states represented by officials from the ministries or other competent authorities dealing with the substantive subject matter. They are drafted in such a technical and detailed manner, albeit at the same time incorporate compromises, that the domestic implementation of the rules may turn out to be difficult and easily create a conflict with other national legislation, constitutions even.

Furthermore, within the project based flexibility mechanisms, JI and CDM, significant decisions that have an effect on the fulfilment of their international commitments by states are – in the case of the JI may be – taken by expert organs, the Accredited Independent Entities (AIEs) and the Designated Operational Entities (DOEs). In addition to this, the latitude of states in determining their own measures is limited by the introduction of such open-ended and

[237] See Melkas 2002 p. 119; even within the flexibility mechanisms, however, the decision whether or not to participate in the projects or trading is left to the discretion of the states themselves; see also Melkas 2007a pp. 9-11; Melkas 2007b pp. 267-270.

[238] See Koskenniemi 2005b pp. 9-12, who discusses the simultaneously over-inclusive and under-inclusive nature of state sovereignty, and the need for a functional analysis of sovereignty, proposed by Perrez 2000 pp. 175-242, that would seek to "maximize the goal for which sovereignty is functional, i.e. the welfare of the state and its citizens". This would entail a search for material justifications for sovereignty, instead of formal ones; Perrez 2000 pp. 239-240. This has been seen in government networks: They erase "the domestic/international divide", and "the point is precisely to penetrate national sovereignty", although this is not completely without problems, see Slaughter 2000 p. 201. On over- and under-inclusiveness of rules, see also Kelman 1987 p. 40.

flexible standards as principles, which means that the extent to which a state manages to realise its own interests may vary from one case to another.

It has also been pointed out that the organisations built around framework conventions and the like, with their conferences of the parties, supervisory organs etc., contribute to this transfer of sovereignty from states to the international community. There is a possibility that this phenomenon would bring with itself an increase in the use of majority decision making.[239] This possibility will, however, only become reality if states will allow it to in the relevant international legal instruments.[240] This state of affairs seems to have been taken even further in the context of the flexibility mechanisms, especially by the internationally authorised powers granted to the Accredited Independent Entities and the Designated Operational Entities that employ significant roles in the JI and the CDM.[241]

Equity, on the other hand, has served as a counterbalance of some sort to strict interpretations of sovereignty, and entailed a balancing between environmental protection (climate policy measures) on one hand and human needs and interests on the other. It has been recognised both in the UNFCCC and in the Kyoto Protocol, and a practical application has occurred in the common but differentiated responsibilities, which is one of the leading principles in the Convention.[242] It has been evidenced e.g. by the burden-sharing of the Protocol, as well as the organisation of the CDM. In fact, it is the underlying rationale of the CDM, as the primary goal of the CDM is sustainable development in the developing countries.

In "Form and Substance" and "Equitable as Equal" the principle of sovereign equality of states and its compatibility with cost-effectiveness (and vice versa) were discussed, and that discussion reflected against the rules concerning the flexibility mechanisms, in the former article emissions trading and in the latter JI and CDM. Sovereign equality has been considered to be a consequence of state sovereignty. It has been seen as implying a strict equality between states in their international undertakings, similar treatment to all subjects of the law,

[239] See Sands 2000 pp. 397-398.
[240] Following Brunkhorst's line of thinking: "…the independence of global law from states … is growing simultaneously with its dependence on states … and *vice versa*", see Brunkhorst 2002 pp. 683-684.
[241] See Melkas 2007a pp. 11-13; Melkas 2007b pp. 270-273.
[242] See Melkas 2002 p. 125.

reciprocity of obligations as well as the capacity for equal legal rights and equal duties.[243] Strict equality and reciprocity have been moderated, during the past few decades, by considerations of equity and justice, and as a more concrete manifestation of these, the principle of common but differentiated responsibility[244].

This has allowed differentiation based on *de facto* differences in states' positions due to e.g. economic or developmental differences. It has also introduced a substantive equality as far as the actual substantive obligations in a treaty go, and left the strict equality rule to serve mainly as a procedural rule – equality of states in decision making. This has also been reflected in the flexibility mechanisms – emission reduction burdens (that have already been differentiated) may be redistributed (this applies to all three mechanisms), but the possibility to influence the outcomes of the decision making processes (participation in the first place, the contents of the projects etc.) belongs to the parties equally.[245] How equal the burden distribution between two or more parties, in fact, is, depends on the parties to the individual trade or project. Hence, removing all inequalities does not seem to be the goal, but merely providing the states parties with a possibility to influence their burdens after the initial distribution.

Considerations of substantive equality have been included in many parts of the rules concerning the CDM projects. These considerations include the requirement of the equitable distribution of CDM projects, and the requirement that CDM projects contribute to the sustainable development of the developing host countries. In JI and ET these considerations have less of a role, although it may still be said that they also include an element of substantive equality by opening a possibility for states to influence their burdens. But the decisive criterion for substantive equality within these two is likely to be cost-effectiveness rather than equity, as all the participants are developed states.

[243] Melkas 2007a pp. 15-17; Melkas 2007b pp. 277-278; see also Cullet 2003 pp. 22-23; Shearer 1994 pp. 99-100; Jennigs & Watts 1996 pp. 339-340; Vattel 1758 II, ch. 12, § 172, 158; Declaration on Principles of International Law Concerning Friendly Relations and Co-operation among States in Accordance with the Charter of the United Nations, GA Res. 2625 (XXV) (1970).

[244] This has also happened within the field of human rights, see e.g. Human Rights Committee: General Comment, CCPR/C/21/Rev.1/Add.6, reproduced in 34 ILM 839 (1995) para. 17; see also Simma & Pulkowski 2006 p. 527.

[245] See Melkas 2007a; Melkas 2007b. Kelman 1987 p. 60 brings this up as a phenomenon of law also more generally when discussing standards (as opposed to rules): "Standards assume that factual inequality trumps formal equality, that one has to see whether one's trading partners can *actually* take care of themselves - -".

It seems obvious that the use of the flexibility mechanisms will entail a significant amount of decision making *in casu*. This casuistry, on the one hand, will facilitate the taking into account of aspects such as justice, fairness or cost-effectiveness. On the other hand, it poses a risk to the coherence and consistency of the regime – and here reference to the discussion above on the coherence of law can be made. So, in this respect, the flexibility mechanisms, as well as the entire climate regime, are genuine manifestations of post-modernity in law[246].

[246] See e.g. Koskenniemi 2007 p. 10, according to whom "most law with universal scope refrains from rule-setting and instead calls for 'balancing' the interests with a view of attaining 'optimal' results to be calculated on a case-by-case basis". The issue of balancing is approached from a different angle by Nollkaemper 1996 pp. 88-89, who calls these obligations – rules or principles – *contextual obligations*, as they require the interpreter to take into account and strike a balance between many different societal interests.

4. Kyoto Protocol Flexibility Mechanisms and the State – Conclusions

In this study I have attempted to paint a picture of a new type of regulatory approach to global environmental problems, notably that of international environmental law and, more specifically, of the framework created by the United Nations Framework Convention on Climate Change. International law represents the most promising means in existence to tackle and overcome these problems – but it is also not without problems.

State sovereignty is one of the core concepts and principles of international law that has crucial significance also within regimes, including the climate regime. The freedom that states enjoy due to and within the limits set by state sovereignty has gone through limitations within the past few decades within international environmental law. These limitations, at a more general level, have been due to the increasing interaction between national and international legal systems, the emergence of principles emphasising the general interests of humankind, such as sustainable development and the precautionary principle, as well as the increase in the significance of experts in different fields. In principle, states do still enjoy a large freedom to determine the means and forms employed to fulfil their treaty obligations under the climate related treaty law. In practice, however, different non-state actors have increasing influence as to the substance of the law, and the rights and obligations of those involved. Thus, even if the states retain the formal power of decision, the substantive contents of the regulation increasingly come from other actors.

Within the framework of the mechanisms, limitations to states' freedom have been set by the formalities in connection with the different kinds of exchange of emission units, as well as the requirement of supplementarity concerning the use of the flexibility mechanisms, and the different conditions set on the use of the mechanisms in the applicable rules. The role of experts is especially visible within JI and the CDM, where expert organs with a mandate from the international organs of the climate regime (the Accredited Independent Entities and the Designated Operational Entities) carry out functions relating to the fulfilment by states of their

commitments under the Kyoto Protocol. In fact, the extent of the benefit available to states from JI and CDM projects is determined *ex post facto* by these expert organs.[247]

Furthermore, the presence of a regime necessitates in accordance with the principle of integration a contextual interpretation of its provisions, i.e. the taking into account of all the applicable rules and principles adopted within the system. In the context of the climate regime this refers first and foremost to the Climate Convention, but also to other parts of the regime – the Protocol, the decisions of the COP and the COP/MOP etc. Specific norms must, thus, be read against other relevant norms in a mutually supportive light. True, this type of "reading" may well entail e.g. casuistry and structural bias. But interpretation of norms is always necessary, regardless of how detailed they are. Principles may serve to limit discretion in these cases, and in this way limit the mentioned risks.

Clearly, what has been said about special regimes here, also applies to the climate regime and the application of the different parts of that regime as well. Especially significant in this respect are the provisions of the Vienna Convention on the Law of Treaties concerning interpretation of treaties, e.g. the requirements that a treaty shall be interpreted in the light of its object and purpose and that agreements relating to the treaty between the parties to the treaty in connection with the conclusion of the treaty belong to the context for the purpose of interpretation of the treaty, and as such shall be taken into account in interpretation. Accordingly, in the application of the provisions included in the decisions of the COP and the COP/MOP the provisions of the Convention and the Protocol, as well as the other related decisions have to be taken into account. This is especially significant considering Articles 2 and 3 of the Convention, which in practice lay out the value basis, justification and goals of the climate regime. Even if the binding nature of especially Article 3 seems contestable due to its conditional wording together with its location in a framework convention, these provisions still have been adopted and approved of by the states parties by consensus.

The role of principles within international environmental law echoes the shift from modern to post-modern law. Principles facilitate finding agreement between different interest groups by means of the flexibility they entail, and represent a more discursive and co-operative approach

[247] See Melkas 2007a; Melkas 2007b.

to law that has replaced the classical legal imperative, the command-and-control approach, which has been supplemented by new forms of involvement of non-state entities.[248] In addition to this, what is even more relevant is the reflection of the value basis of the law and the connection to morality that principles entail.

Principles are also conducive to legal pluralism by creating possibilities for the existence of different values and perceptions by means of the flexibility necessary for the balancing of different interests, and, thus, open up possibilities for a more pluralistic law. The flexibility, furthermore, allows principles to serve as the glue of the system, ensuring some degree of coherence, and thus enhancing legal certainty and predictability. Even if we may have very different rules, and sets of rules, for different situations, there is still a combining element in principles. By this support of some common values principles could also make the use of the mechanisms more consistent, coherent and predictable by providing some basic assumptions as to which way the decision making concerning the mechanisms is going to go. What are the international rules (should there be changes to them) as well as the national instruments going to look like? How will the practice be formed?

The increasing casuistry referred to above, inherent in regimes and principles, is a feature of the post-modern international environmental law. As most law with a universal scope refrains from rule-setting, different balancing operations have become more and more common – law is indeed in a process of deformalisation. An example is provided by the principles within the climate regime: Balancing may take place between different principles (which to apply, whether to apply several simultaneously, to what extent shall the application take place etc.) or between different interests within the confines of one principle (e.g. environmental vs. economic interests in the precautionary principle). What concrete questions these balancing operations really seek to answer depends on the case at hand. These questions should be answered by policy makers along the way in transposing the international level regulation, e.g. the implementation rules of the flexibility mechanisms, into their national legal systems.

As for the role of the non-state entities, their position is neither equal nor equivalent to that of states, although a possibility of participation is often reserved to them within e.g. special

[248] See de Sadeleer 2002 pp. 246-247.

regimes, and, indeed, the parties that are actually engaging in the activities governed by special regimes frequently are private entities (multinational corporations, banks, consultancies).[249] At a general level, it seems that whereas the formal decision-making power still belongs to states, the *de facto* power to determine the substantive contents of the law and to influence the rights and obligations of those involved has shifted to these non-state entities – NGOs, epistemic communities, firms etc. Besides this somewhat hidden and perhaps unintended shift of power, the climate regime accords significant powers concerning the implementation of the flexibility mechanisms to certain non-state entities, notably those known as the Accredited Independent Entities and Designated Operational Entities.

Changes in the state's role and position within international law has been anticipated and perceived for some time already[250]. On the surface it seems that international law-creation within the particular framework of the climate regime still takes largely place along the lines of negotiation and agreement between sovereign states, but the substance of the norms created is often provided or at least strongly influenced by the expertise of different background actors. If this observation is taken as a starting point of the discussion we must conclude that there is indeed a gap considering the possibilities to (politically) contest the results, as – as has been pointed out above – the expertise of the background actors often provides the frame for political debates and decisions. Thus, this reduces the *de facto* power of the formal decision makers to influence the actual substantive contents of the regulation, and shifts at least part of the power over the substance of the regulation to other actors, primarily different epistemic communities and experts. For this reason the conclusion made by the Permanent Court of

[249] See also Slaughter 2000 pp. 178, 193-194: "The conventional debate over globalisation and the attendant decline of State power is handicapped by this traditional conception of states and state institutions. In fact, the state is not disappearing; it is disaggregating into its component institutions. The primary State actors in the international realm are no longer foreign ministries and heads of state, but the same government institutions that dominate domestic politics: administrative agencies, courts, and legislatures. The traditional actors continue to play a role, but they are joined by fellow government officials pursuing quasi-autonomous policy agendas. The disaggregated State, as opposed to the mythical unitary State, is thus hydra-headed, represented and governed by multiple institutions in complex interaction with one another abroad as well as home."

[250] Koskenniemi 2007 p. 16, according to whom "Lauterpacht and other inter-war lawyers were right to assume that statehood would be slowly overcome by the economic and technical laws of a globalising modernity. This is what functional differentiation in both of its forms – fragmentation and deformalisation – has done. But they were wrong to believe that this would lead into a cosmopolitan federation. When the floor of statehood fell from under our feet, we did not collapse into a realm of global authenticity to encounter each other as free possessors of inalienable rights. Instead, we fell into watertight boxes of functional specialisation, to be managed and governed by reading our freedom as the realisation of our interest. As our feet hit the ground, we found no Kantian federation but the naturalism of Pufendorf and Hobbes – powerful actors engaged in strategic games with their eye on the Pareto optimum."

International Justice in the S.S. Wimbledon case, that the right of a state to enter into limitations of its sovereignty is an attribute of that sovereignty, is currently only a part of the truth[251].

This observation is valid also within the context of the flexibility mechanisms, at least the project based mechanisms, as they rely very much on the substantive, often technical, information provided by the relevant experts.[252] Thus, the tensions between the democratic legitimacy of a special regime and the increasing reliance on expert knowledge are, indeed, real and call for a resolution of some kind. Opportunities for politically contesting the results that international law generates would need to be secured.[253]

The changes that can be seen having taken place in law have also entailed some larger problems. International environmental treaties still need to be enacted into domestic legal systems according to the forms and means provided for by national constitutions. However, they often do not contain clear, detailed or specific obligations that could without any further ado be enacted into national law. Instead, they need to be translated into more concrete obligations and procedures in protocols and decisions adopted by the organisation set up by the framework treaty. These more concrete obligations and procedures – and structures – include regulation that no longer merely stipulates an end result to be achieved, but goes further to even shaping the legal positions of individuals. The Kyoto mechanisms are a case in point. Thus, the need to realise and somehow address the diversity of political, legal and social contexts within which the policy initiatives are located[254] is indeed present in the context of the mechanisms.

[251] See PCIJ, S.S. Wimbledon, Ser. A, No. 1, 1923 p. 25.
[252] See Melkas 2007b pp. 271-273. In this respect the situation looks quite different in the case of emissions trading, see Melkas 2007a p. 13.
[253] See Kennedy 2005 pp. 8-11: Koskenniemi 2005b pp. 34-35; Koskenniemi 2007 p. 10; Slaughter 2000 p. 180.
[254] See Ch. 2.3.

LITERATURE

Abi-Saab, Georges, "Fragmentation or Unification: Some Concluding Remarks", 31 International Law and Politics (1999) pp. 919-933.

Ahn, Dukgeun, "Environmental Disputes in the GATT/WTO: Before and After *US – Shrimp* Case", 20 Michigan Journal of International Law (1999) pp. 819-870.

Beck, Ulrich, *Ecological Politics in an Age of Risk* (Polity Press, Oxford/Cambridge 1995).

Beck, Ulrich, *Riskiyhteiskunnan vastamyrkyt* (Vastapaino, Tampere 1990).

Beyerlin, Ulrich, "Different Types of Norms in International Environmental Law. Policies, Principles and Rules", Daniel Bodansky, Jutta Brunnée & Ellen Hey (eds), *The Oxford Handbook of International Environmental Law* (Oxford University Press, Oxford 2007) pp. 425-448.

Birnie, Patricia W. & Alan E. Boyle, *International Law and the Environment* (2nd ed., Oxford University Press, Oxford 2002).

Boyle, Alan, "Codification of International Environmental Law and the International Law Commission: Injurious Consequences Revisited", Alan Boyle and David Freestone (eds), *International Law and Sustainable Development. Past Achievements and Future Challenges* (Oxford University Press, Oxford 1999) pp. 61-85.

Brownlie, Ian, *Principles of Public International Law* (6th ed., Oxford University Press, Oxford 2003).

Brunkhorst, Hauke, "Globalising Democracy Without a State: Weak Public, Strong Public, Global Constitutionalism", 31 Millennium: Journal of International Studies 3 (2002) pp. 675-690.

Brunnée, Jutta, "COPing with Consent: Law-Making Under Multilateral Environmental Agreements", 15 Leiden Journal of International Law (2002) pp. 1-52.

Cameron, James & Kevin R. Gray, "Principles of International Law in the WTO Dispute Settlement Body", 50 International and Comparative Law Quarterly 2 (2001) pp. 248-298.

Cameron, James & Juli Abouchar, "The Status of the Precautionary Principle in International Law", David Freestone & Ellen Hey, *The Precautionary Principle in International Law* (Kluwer Law International, The Hague/London/Boston 1996) pp. 29-52.

Cassese, Antonio, *International Law* (2nd ed., Oxford University Press, Oxford 2005).

Charney, J.I., "Is International Law Threatened by Multiple International Tribunals", Recueil des Cours, Académie de Droit International de la Haye 1998 pp. 101-382.

Cheng, Bin, *General Principles of International Law as Applied by International Courts and Tribunals* (Grotius Publications Limited, Cambridge 1987).

Chinkin, Christine, "Normative Development in the International Legal System", Dinah Shelton (ed.), *Commitment and Compliance. The Role of Non-Binding Norms in the International Legal System* (Oxford University Press, Oxford 2000).

Cullet, Philippe, "Equity and Flexibility Mechanisms in the Climate Change Regime: Conceptual and Practical Issues", 8 Review of European Community and International Environmental Law 2 (1999) pp. 168-179.

Cullet, Philippe, *Differential Treatment in International Environmental Law* (Ashgate Publishing Ltd., Aldershot/Burlington 2003).

Dworkin, Ronald, *Taking Rights Seriously* (Duckworth, London 1977).

Ebbesson, Jonas, *Compatibility of International and National Environmental Law* (Iustus Förlag. Juridiska Föreningen i Uppsala, Uppsala 1996).

Ekroos, Ari, Anne Kumpula, Kari Kuusiniemi & Pekka Vihervuori, *Ympäristöoikeuden pääpiirteet* (WSOY Lakitieto, Helsinki 2002).

Forster, Malcolm J.C., 'The *MOX Plant* Case – Provisional Measures in the International Tribunal for the Law of the Sea', Leiden Journal of International Law, 16 (2003) pp. 611-619.

Gehring, Thomas, "International Environmental Regimes: Dynamic Sectoral Legal Systems", 1 Yearbook of International Environmental Law (1990) pp. 35-56.

Graver, Hans-Petter, "Rationality and the Development of the Law", Aulis Aarnio & Kaarlo Tuori (eds), *Law, Morality and Discursive Rationality* (Publications of the Department of Public Law, University of Helsinki D:8, Helsinki 1989) pp. 69-89.

Haila, Yrjö, "Ekologiasta yhteiskuntaan – Onko 'yhteiskuntaluonnontiede' mahdollinen?", Ilmo Massa & Rauno Sairinen (eds), *Ympäristökysymys. Ympäristöuhkien haaste yhteiskunnalle* (Gaudeamus, Helsinki 1991) pp. 49-65.

Hakapää, Kari, *Uusi kansainvälinen oikeus* (Talentum, Helsinki 2003).

Hey, Ellen, *Reflections on an International Environmental Court* (Kluwer Law International. The Hague 2000).

Higgins, Rosalyn, "Respecting Sovereign States and Running a Tight Courtroom", 50 International and Comparative Law Quarterly (2001) pp. 121-132.

Hollo, Erkki J., *Ympäristöoikeus* (Lakimiesliiton kustannus, Helsinki 1991).

Hollo, Erkki J. & Juhani K. Parkkari, ”Kansainvälisen ympäristöoikeuden rakenteesta”, Erkki J. Hollo & Juhani K. Parkkari (eds), Kansainvälinen ympäristöoikeus. (LE-Consulting Oy, Helsinki 1994) pp. 13-28.

Kelman, Mark, *A Guide to Critical Legal Studies* (Harvard University Press, Cambridge, Massachusetts/London 1987).

Kelsen, Hans, *Principles of Public International Law* (Holt, Rinehart and Winston Inc., New York/Chicago/San Francisco/Toronto/London 1966).

Kennedy, David, “Challenging Expert Rule: The Politics of Global Governance”, the Julius Stone Institute of Jurisprudence, University of Sydney. The Julius Stone Memorial Address 2004, Thursday, 17 June 2004, 27 Sydney Law Review (2005) pp. 1-24.

Kennedy, David, “The Politics of the Invisible College: International Governance and the Politics of Expertise”, 5 European Human Rights Law Review (2001) pp. 463-497.

Keohane, Robert O., *After Hegemony. Cooperation and Discord in the World Political Economy* (Princeton University Press, Princeton NJ 1984).

Keohane, Robert O., “The Demand for International Regimes”, Stephen D. Krasner (ed.), *International Regimes* (Cornell University Press, Ithaca/London 1983) pp. 141-171.

Kiss, Alexandre, “Commentary and Conclusions”, Dinah Shelton (ed.), *Commitment and Compliance. The Role of Non-Binding Norms in the International Legal System* (Oxford University Press, Oxford 2000) pp. 223-242.

Kiss, Alexandre & Dinah Shelton, *International Environmental Law* (2nd ed., Transnational Publishers Inc., Ardsley NY 2000).

Klabbers, Jan, “Non-Compliance Procedures”, Daniel Bodansky, Jutta Brunnée & Ellen Hey (eds), *The Oxford Handbook of International Environmental Law* (Oxford University Press, Oxford 2007) pp. 996-1009.

Klabbers, Jan, “Reflections on Soft International Law in a Privatized World”, Lakimies 7-8/2006 pp. 1191-1205.

Koskenniemi, Martti, “The Fate of Public International Law: Between Technique and Politics”, Chorley Lecture 2006, to be published in the Modern Law Review 1/2007.

Koskenniemi, Martti & Päivi Leino, “Fragmentation of International Law? Postmodern Anxieties”, 15 Leiden Journal of International Law (2002) pp. 553-579.

Koskenniemi, Martti, *From Apology to Utopia. The Structure of International Legal Argument* (reissue, Cambridge University Press, Cambridge 2005). (Koskenniemi 2005a)

Koskenniemi, Martti, “International Legislation Today: Limits and Possibilities”, 23 Wisconsin International Law Journal 1 (2005) pp. 61-92. (Koskenniemi 2005c)

Koskenniemi, Martti, unpublished manuscript, Bancaja Euromediterranean Courses of International Law (2005). (Koskenniemi 2005b)

Krasner, Stephen D., "Structural Causes and Regime Consequences: Regimes as Intervening Variables" in Stephen D. Krasner (ed), *International Regimes* (Cornell University Press, Ithaca/London 1983).

Kumpula, Anne, *Ympäristö oikeutena* (Suomalaisen Lakimiesyhdistyksen julkaisuja 2004, A-sarja N:o 252, 2004).

Kumpula, Anne & Määttä, Tapio, "Ekologia, yhteiskunta ja oikeus: Konstruktionistinen tulkinta luonnontieteellisen tiedon ja oikeuden suhteesta", Kaijus Ervasti & Nina Meincke (eds), *Oikeuden tuolla puolen* (Kauppakaari, Lakimiesliiton kustannus, Helsinki 2002) pp. 207-233.

Kuokkanen, Tuomas, *International Law and the Environment. Variations on a Theme* (Kluwer Law International, The Hague/London/New York 2002).

Kuusiniemi, Kari, "Kaavoitus ja ympäristönsuojelu", Ympäristöjuridiikka 3-4/1992 pp. 13-31. (Kuusiniemi 1992a).

Kuusiniemi, Kari, *Ympäristönsuojelu ja immissioajattelu* (Lakimiesliiton kustannus, Helsinki 1992). (Kuusiniemi 1992b).

Lauterpacht, Elihu (ed.), *International Law Being the Collected Papers of Hersch Lauterpacht* (Vol. 1 General Works. Cambridge University Press, London 1970).

Lindroos, Anja, "Addressing Norm Conflicts in a Fragmented Legal System: The Doctrine of *Lex Specialis*", 74 Nordic Journal of International Law 1 (2005) pp. 27-66.

Maus, Ingeborg, "The Differentiation between Law and Morality as a Limitation of law", Aulis Aarnio & Kaarlo Tuori (eds), *Law, Morality and Discursive Rationality* (Publications of the Department of Public Law, University of Helsinki D:8, Helsinki 1989) pp. 141-164.

Melkas, Eriika, "The Climate Convention and the Kyoto Protocol – an Overview of the Legal Framework for State Action", Ympäristöjuridiikka 4/2001 pp. 7-58.

Melkas, Eriika, "Emissions Trading in the Kyoto Protocol – Caught Between Form and Substance", Tilburg Foreign Law Review 14 (2007) 3, forthcoming. (Melkas 2007a).

Melkas, Eriika, "Equitable as Equal: the Kyoto Protocol Project Based Flexibility Mechanisms in an Unequal World", International Community Law Review 9 (2007) pp. 263-289. (Melkas 2007b).

Melkas, Eriika, "Sovereignty and Equity within the Framework of the Climate Regime", 11 Review of European Community and International Environmental Law 2 (2002) pp. 115-128.

Määttä, Tapio, *Maanomistusoikeus* (Suomalaisen Lakimiesyhdistyksen julkaisuja, A-sarja N:o 220, Helsinki 1999).

Nollkaemper, André, "'What You Risk Reveals What You Value', and Other Dilemmas Encountered in the Legal Assaults on Risks", David Freestone and Ellen Hey (eds), *The Precautionary Principle and International Law. The Challenge of Implementation* (Kluwer Law International, The Hague 1996) pp. 73-94.

Nuotio, Kimmo, "Onko oikeusjärjestyksen pirstoutuminen väistämätöntä?", Veli-Pekka Viljanen (ed), *Oikeudenalojen rajat ja rajattomuus* (Turun yliopisto, oikeustieteellinen tiedekunta, Turku 2002) pp. 3-24.

Oberthür, Sebastian & Hermann E. Ott, *The Kyoto Protocol. International Climate Policy for the 21st Century* (Springer Verlag, Berlin/Heidelberg/New York 1999).

Oellers-Frahm, Karin, "The Multiplication of International Courts and Tribunals and Conflicting Jurisdiction – Problems and Possible Solutions", Max Planck Yearbook of United Nations Law 5 (2001) pp. 67-104.

Pallemaerts, Marc, "International Environmental Law from Stockholm to Rio: Back to the Future?", Philippe Sands (ed.), *Greening International Law* (Earthscan Publications Ltd., London 1993) pp. 1-19.

Peel, Jacqueline, "A Paper Umbrella which Dissolves in the Rain? The Future for Resolving Fisheries Disputes under UNCLOS in the Aftermath of the Southern Bluefin Tuna Arbitration", 3 Melbourne Journal of International Law (2000) pp. 53-78.

Perrez, Franz Xaver, *Cooperative Sovereignty. From Independence to Interdependence in the Structure of International Environmental Law* (Kluwer Law International, the Hague/London/Boston 2000).

Pirjatanniemi, Elina, *Vihertyvä rikosoikeus. Ympäristökriminalisointien oikeutus, mahdollisuudet ja rajat* (Edita Publishing Oy, Helsinki 2005).

Puchala, Donald J. & Raymond F. Hopkins, "International Regimes: Lessons from Inductive Analysis", Stephen D. Krasner (ed.), *International Regimes* (Cornell University Press, Ithaca/London 1983) pp. 61-91.

Rajamani, Lavanya, *Differential Treatment in International Environmental Law* (Oxford University Press 2006).

Ranta, Jouni, *Varautumisperiaate ympäristöoikeudessa* (Helsinki 2001).

Rehbinder, Eckard, "The Precautionary Principle and the Principle of Sustainability: Their Contents, Scope of Application and Interrelationship", Ympäristöjuridiikka 3-4/1995 pp. 13-30.

Rosenau, James N., *Turbulence in World Politics* (Princeton University Press, Princeton NJ 1990).

Ross, Alf, *Laerebog i Folkeret. Almindelig Del* (2nd ed. Munksgaards Forlag, København 1946).

Ruggie, John Gerard, "International Responses to Technology: Concepts and Trends", 29 International Organisation (1975) pp. 557-583.

de Sadeleer, Nicolas, *Environmental Principles. From Political Slogans to Legal Rules* (Oxford University Press, New York 2002).

Sands, Philippe, "Environmental Protection in the Twenty-First Century: Sustainable Development and International Law", R.L. Revesz, Ph. Sands, and R. Stewart (eds.), *Environmental Law, the Economy and Sustainable Development* (Cambridge University Press, 2000) pp. 369-409.

Sands, Philippe, *Principles of International Environmental Law I Frameworks, Standards and Implementation* (Manchester University Press, Manchester/New York 1995).

Sands, Philippe, "Turtles and Torturers: the Transformation of International Law", 33 New York University Journal of International Law and Politics (2001) pp. 527-559.

Simma, Bruno & Dirk Pulkowski, "Of Planets and the Universe: Self-contained Regimes in International Law", 17 European Journal of International Law 3 (2006) pp. 483-529.

Simma, Bruno, "Self-Contained Regimes", XVI Netherlands Yearbook of International Law (1985) pp. 111-136.

Shaw, Malcolm N., *International Law*. 5th ed. (Cambridge University Press, Cambridge 2003).

Shearer, I.A., *Starke's International Law*. 11th ed. (Butterworths, London 1994).

Shelton, Dinah, "Introduction: Law, Non-Law and the Problem of 'Soft Law'", Dinah Shelton (ed.), *Commitment and Compliance. The Role of Non-Binding Norms in the International Legal System* (Oxford University Press, Oxford 2000) pp. 1-18.

Slaughter, Anne-Marie, "Governing the Global Economy through Government Networks", Michael Byers (ed.), *The Role of Law in International Politics. Essays in International Relations and International Law* (Oxford University Press, New York 2000) pp. 177-205.

Stein, Arthur A., "Coordination and Collaboration: Regimes in an Anarchic World", Stephen D. Krasner (ed), *International Regimes* (Cornell University Press, Ithaca/London 1983) pp. 115-140.

Tallgren, Immi, *A Study of the 'International Criminal Justice System'. What Everybody Knows?* (Helsinki 2001).

Tolonen, Hannu, ”Yleisten oppien rakenteesta ja merkityksestä”, Ari Saarnilehto (ed), *Juhlajulkaisu Allan Huttunen 1928 – 5/11 – 1988* (Turun yliopisto, Turku 1988) pp. 177-194.

Trouwborst, Arie, *Precautionary Rights and Duties of States* (Martinus Nijhoff Publishers, Leiden/Boston 2006).

Tuori, Kaarlo, *Critical Legal Positivism* (Ashgate Publishing Limited, Aldershot/Burlington 2002).

Tuori, Kaarlo, ”Oikeudenalajaotus – strategista valtapeliä ja normatiivista argumentaatiota”, Lakimies 7-8/2004 pp. 1196-1224.

Walser, Bryan L., “Shared Technical Decision making and the Disaggregation of Sovereignty: International Regulatory Policy, Expert Communities and the Multinational Pharmaceutical Industry”, 72 Tulane Law Review (1998) 1597-1698.

de Vattel, Emmerich, *Le Droit des Gens* (1758).

Wessels, Bernhard & Richard S. Katz, “Introduction: European Parliament, National Parliaments and European Integration”, Richard S. Katz & Bernhard Wessels (eds.), *The European Parliament, the National Parliaments, and European Integration* (Oxford University Press, Oxford 1999).

Vihervuori, Pekka, *Encyclopaedia Iuridica Fennica II. Maa-, vesi- ja ympäristöoikeus* (Suomalainen Lakimiesyhdistys, 1995).

Voigt, Christina, *Sustainable Development as a Principle of Integration in International Law. Resolving Potential Conflicts between WTO Law and Climate Change Mitigation Measures* (University of Oslo, Faculty of Law 2006).

Wolf, Rainer, “Zur Antiquiertheit des Rechts in der Risikogesellschaft”, 15 Leviathan 3 (1987) pp. 357-391.

Yamin, Farhana & Depledge, Joanna, *The International Climate Change Regime. A Guide to Rules, Institutions and Procedures* (Cambridge University Press, Cambridge 2004).

Young, Oran R., *International Cooperation. Building Regimes for Natural Resources and the Environment* (Cornell University Press, Ithaca/London 1989).

Young, Oran R., “Regime Dynamics: the Rise and Fall of International Regimes”, Stephen D. Krasner (ed), *International Regimes* (Cornell University Press, Ithaca/London 1983).

OFFICIAL DOCUMENTS

United Nations Framework Convention on Climate Change

Decision 15/CP.7 (Principles, nature and scope of the mechanisms pursuant to Articles 6, 12 and 17 of the Kyoto Protocol).

Decision 24/CP.7 (Procedures and mechanisms relating to compliance under the Kyoto Protocol).

Decision 2/CMP.1 (Principles, nature and scope of the mechanisms pursuant to Articles 6, 12 and 17 of the Kyoto Protocol).

Decision 3/CMP.1 (Modalities and procedures for a clean development mechanism as defined in Article 12 of the Kyoto Protocol).

Decision 4/CMP.1 (Guidance relating to the clean development mechanism).

Decision 5/CMP.1 (Modalities and procedures for afforestation and reforestation project activities under the clean development mechanism in the first commitment period of the Kyoto Protocol).

Decision 6/CMP.1 (Simplified modalities and procedures for small-scale afforestation and reforestation project activities under the clean development mechanism in the first commitment period of the Kyoto Protocol and measures to facilitate their implementation).

Decision 7/CMP.1 (Further guidance relating to the clean development mechanism).

Decision 9/CMP.1 (Guidelines for the implementation of Article 6 of the Kyoto Protocol).

Decision 10/CMP.1 (Implementation of Article 6 of the Kyoto Protocol).

Decision 11/CMP.1 (Modalities, rules and guidelines for emissions trading under Article 17 of the Kyoto Protocol).

Decision 13/CMP.1 (Modalities for the accounting of assigned amounts under Article 7, paragraph 4, of the Kyoto Protocol).

Intergovernmental Panel on Climate Change

Report of the Intergovernmental Panel on Climate Change. Working Group I: The Physical Science Basis of Climate Change. (IPCC 2007)

International Law Commission

Report of the Working Group on Long-Term Programme of Work: "Risks Ensuing from Fragmentation of International Law" by Gerhard Hafner, ILC (LII)/WG/LT/L.1/Add.1 (25 July 2000) pp. 321-339. (Hafner 2000)

Preliminary Report: Fragmentation of International Law: Difficulties Arising from the Diversification and Expansion of International Law. Study on the "Function and Scope of the Lex Specialis Rule and the Question of 'Self-Contained Regimes'", Addendum, by Martti Koskenniemi, Chairman of the Study Group, ILC(LVI)/SG/FIL/CRD.1/Add.1, 4 May 2004. (Koskenniemi 2004).

Preliminary Report: Fragmentation of International Law: Difficulties Arising from the Diversification and Expansion of International Law. Study on the "Function and Scope of the Lex Specialis Rule and the Question of 'Self-Contained Regimes'" by Martti Koskenniemi, Chairman of the Study Group, ILC(LVI)/SG/FIL/CRD.1, 7 May 2004. (Koskenniemi 2004).

Report of the Study Group of the International Law Commission "Fragmentation of International Law: Difficulties Arising from the Diversification and Expansion of International Law" by Martti Koskenniemi, Special Rapporteur, UN Doc. A/CN.4/L.682, 13 April 2006. (Koskenniemi 2006).

United Nations

Declaration on Principles of International Law Concerning Friendly Relations and Co-operation among States in Accordance with the Charter of the United Nations, GA Res. 2625 (XXV) (1970).

United Nations Covenant on Civil and Political Rights, Human Rights Committee: General Comment, CCPR/C/21/Rev.1/Add.6
34 ILM 839 (1995) (2 November 1994).

ILC Draft Articles on State Responsibility, GA Res. 56/83 (12 December 2001), Annex.

World Trade Organisation

United States – Restrictions on Imports of Tuna
Panel Report DS29/R.

United States – Standards for Reformulated and Conventional Gasoline
WT/DS2/AB/R, 29 April 1996.

European Communities – Measures Concerning Meat and Meat Products (Hormones)
WT/DS26/AB/R, 13 February 1998.

United States – Import Prohibition of Certain Shrimp and Shrimp Products
WT/DS58/AB/R, 12 October 1998

Korea – Measures Affecting Government Procurement
WT/DS163/R, 19 June 2000.

International Court of Justice

Case Concerning United States Diplomatic and Consular Staff in Tehran
ICJ, General List No. 64, 24 May 1980.

Gabčikovo-Nagymaros Dam Case (Hungary v. Slovakia)
ICJ, 25 September 1997.

Oil Platforms Case (Islamic Republic of Iran v. United States of America)
ICJ, 6 November 2003.

Permanent Court of International Justice

S.S. Wimbledon
PCIJ, Ser. A, No. 1, 1923. (pp. 11-14).

International Tribunal for the Law of the Sea

MOX Plant
List of cases: No. 10, 3 December 2001.

European Court of Human Rights

Loizidou v. Turkey
App no 40/1993/435/514, ECHR 1996-VI

McElhinney v. Ireland
App no 35763/96, ECHR 2001-XI

Al-Adsani v. the United Kingdom
App no 35763/97, ECHR 2001-XI

Bankovic *et al.* (Grand Chamber Decision as to the admissibility)
App no 52207/99, ECHR 2001-XII.

Iran – US Claims Tribunal

Amoco International Finance Corporation v. Iran
Iran – US C.T.R., vol. 15, 1987-II, No. 56 (14 July 1987).

Arbitral Awards

Différend concernant l'accord Tardieu-Jaspar (Belgium v. France) (1 March 1937)
UNRIAA, vol. III p. 1702 pp.

Trail Smelter (United States of America v. Canada)
(16 April 1938) Reports of International Arbitral Awards III 1905-1937
(11 March 1941) Reports of International Arbitral Awards III 1938-1981.

Saudi-Arabia v. ARAMCO
ILR vol. 27 (1963) p. 117 pp.

Dispute Concerning Access to Information under Article 9 of the OSPAR Convention (Ireland v. United Kingdom) (Permanent Court of Arbitration, Final Award 2 July 2003)
ILR vol. 126 (2005) p. 334 pp.

TREATIES

Convention on the Ban of the Import into Africa and the Control of Transboundary Movement and Management of Hazardous Wastes Within Africa (Bamako Convention) 1991
30 ILM (1991) 775.

Convention on Long-Range Transboundary Air Pollution 1979
United Nations, *Treaty Series*, vol. 1302 p. 217.

Convention on the Protection of the Marine Environment of the Baltic Sea Area 1992
http://www.helcom.fi

Kyoto Protocol to the United Nations Framework Convention on Climate Change 1997
United Nations, *Treaty Series*, Reg. No. 30822.

Statute of the International Court of Justice.
http://untreaty.un.org

Treaty establishing the European Community.
http://europa.eu.int

United Nations Convention on the Law of the Sea (UNCLOS) 1982
United Nations, *Treaty Series*, vol. 1833 p. 3.

United Nations Framework Convention on Climate Change (UNFCCC) 1992
United Nations, *Treaty Series*, vol. 1771 p. 107.

Vienna Convention on the Law of Treaties 1969
United Nations, *Treaty Series*, vol. 1155 p. 331.

Vienna Convention on the Protection of the Ozone Layer 1985
United Nations, *Treaty Series*, vol. 1513 p. 293.