



GEORGETOWN INTERNATIONAL ENVIRONMENTAL LAW REVIEW



TAKING NATURE'S RIGHTS SERIOUSLY: THE LONG WAY TO
BIOCENTRISM IN ENVIRONMENTAL LAW

Susan Emmenegger
Axel Tschentscher

Volume VI: Issue 3
Summer 1994
Pages 545-742

ARTICLES

Taking Nature's Rights Seriously: The Long Way to Biocentrism in Environmental Law

SUSAN EMMENEGGER*
AXEL TSCHENTSCHER**

I. INTRODUCTION	546
II. FROM ANTHROPOCENTRISM TO NON-ANTHROPOCENTRISM IN INTERNATIONAL ENVIRONMENTAL LAW	550
A. The First Stage: Environmental Protection as Self- Interest of the Present Generation	552
1. Human Self-Interest in the Treaties	552
2. The Theoretical Background of Self-Interested Pro- tection	555
a. Utilitarianism	556
b. Human Rights Theory	559
B. The Second Stage: Adding the Intergenerational Dimen- sion	562
1. Future Generations and Sustainability in the Treaties	562
2. Intergenerational Equity	566
C. The Third Stage: The Emerging Non-Anthropocentric Paradigm and Nature's Own Rights	568

* Associate Thomas Ré & Partners, New York; LL.M. Cornell University; Lic.iur Fribourg University (Switzerland); Bologna University (Italy).

** Wissenschaftlicher Mitarbeiter, Hamburg University (Germany); LL.M. Cornell University; Law Degree, Hamburg University.

The authors extend their appreciation to the Rotary International Foundation and particularly districts 1990 and 1800 for being supported as Ambassadorial Scholars.

1. Intrinsic Value in the Treaties	568
2. From Intrinsic Value to Non-Anthropocentrism	571
3. Advantages of the Nature's Rights Approach Over the Duties Towards Nature Approach	572
III. PROBLEMS OF NON-ANTHROPOCENTRIC PARADIGMS AND TAK- ING NATURE'S RIGHTS SERIOUSLY	576
A. Biocentrism as the Relevant Non-Anthropocentric View	576
B. Does Biocentrism Render the Protection of Nature "Un- natural"?	579
C. The Content of Nature's Rights	581
IV. PRACTICAL IMPLICATIONS OF TAKING NATURE'S RIGHTS SERI- OUSLY	584
A. Nature's Rights – Finding a New Balance	585
B. Representation of Nature – Legal But Not Political	586
1. Legal Representation	587
2. Political Representation	588
C. Supportive Action for Nature – The Restoration Move- ment	589
V. CONCLUSION	591

I. INTRODUCTION

Do we have an obligation to preserve and restore nature? Are there moral rights of nature? Should we acknowledge legal rights of nature? These questions have caused a vivid discussion among legal and philosophical scholars. Some authors propose that *de lege ferenda*,¹ i.e., as a recommendable future state of the law, we should award natural entities their own

1. Research and publications are often explicitly restricted to or focusing on the perspective *de lege ferenda* or *de constitutione ferenda*, i.e., as a recommendable future state of constitutional law. See e.g. Hartmut Kuhlmann, *Aufnahme der Mitgeschöpflichkeit ins Grundgesetz?*, 45 JURISTEN ZEITUNG 162, 174-5 (1990)(arguing for an amendment of the German Constitution to give the legislator the power to acknowledge nature's own rights legally, i.e. nature's rights *de constitutione ferenda*), P. SALADIN & C.A. ZENGER, RECHTE KÜNFTIGER GENERATIONEN 12, 87 (1988); JÖRG LEIMBACHER, DIE RECHTE DER NATUR, 260, 395 (Frankfurt am Main 1988). But see SALADIN & ZENGER, *supra*, at 63, 81 (searching for some implicit rights in the positive law).

rights.² This article will reach beyond such a position, arguing that *de lege lata*, i.e., as a matter of present law, the roots of the nature's rights approach already exist in a number of international environmental instruments. Our main thesis is that international environmental instruments show a step by step development towards acknowledging nature's rights in a biocentric perspective.

To support the first part of our thesis, section II. contains an analysis of a number of international environmental instruments and related views of environmental ethics.³ Language and scope of these legal documents reveal a development consisting of three different stages, ranging from a purely anthropocentric vision (protecting nature for the good of presently living humans) to encompassing the interests of future generations⁴ and finally to acknowledging an intrinsic value of nature.⁵ This development marks a

2. For the nature's rights approach, see Christopher D. Stone, *Should Trees Have Standing? – Toward Legal Rights For Natural Objects*, 45 S. CAL. L. REV. 450, 456 (1972)[hereinafter *Should Trees Have Standing?*](“I am quite seriously proposing that we give legal rights to forests, oceans, rivers and other so-called ‘natural objects’ in the environment – indeed, to the natural environment as a whole.”)(footnote omitted) and the revisions C. Stone, *Should Trees Have Standing? Revisited: How Far Will Law And Morals Reach?* 59 S. CAL. L. REV. 1 (1985)[hereinafter *Trees Revisited*]; Laurence H. Tribe, *Ways Not To Think About Plastic Trees: New Foundations for Environmental Law*, 83 YALE L.J. 1315, 1343 (1974)(“Affording legal rights to endangered species and threatened wilderness areas might thus be regarded as a convenient technique”); Roger W. Galvin, *What Rights for Animals? A Modest Proposal*, 2 PACE ENV. L. REV. 245, 253 (1985). JÖRG LEIMBACHER, *DIE RECHTE DER NATUR* 27 (Basel and Frankfurt 1988); Heinrich Freiherr von Lersner, *Gibt es Eigenrechte der Natur?*, 7 Neue Zeitschrift für Verwaltungsrecht 988, 992 (1988)(stating that nature's own rights should be acknowledged independently of moral arguments); G. Frank, *Vom Umweltschutz zum Mitweltrecht*, 104 Deutsches Verwaltungsblatt 693, 699 (1989)(arguing that the development towards nature's rights can best be achieved by extended standing of “altruistic” legal representatives); Kuhlmann, *supra* note 1, at 162, 174-5 (arguing for an amendment of the German Constitution); Myrl L. Cuncan, *The Rights of Nature: Triumph for Holism or Pyrrhic Victory?*, 31 WASHBURN L. J. 62, 70 (1991). *But see* P. S. Elder, *Legal Rights for Nature: The Wrong Answer to the Right(s) Question*, 22 OSGOOD HALL L. J. 285, 291 (1984)(arguing that an anthropocentric approach can provide the same protection of nature); Kersten Heinz, *Eigenrechte der Natur. Lichtblick oder Irrlicht für einen verstärkten rechtlichen Schutz der Natur?*, 29 Der Staat 415, 438 (1990)(refusing the nature's rights approach because of uncertainties and inconsistencies of this approach in the ethical and in the legal realm); James L. Huffman, *Do Species and Nature Have Rights?*, 13 THE PUBLIC LAND L. REV. 51, 75 (“Biocentric rights claims fail because they must be asserted by humans and enforced by humans.”)

3. The term international environmental instrument designs both environmental treaties which are binding on the signatory parties and declarations or proclamations which do not formally bind the parties.

4. For the rights of future generations, see generally Edith Brown Weiss, *Our Rights and Obligations to Future Generations for the Environment*, in 85 AM. J. INT'L L. 198 (1990); ELISABETH GIESSER, *RECHTE KÜNFTIGER GENERATIONEN, RECHTE DER NATUR, VORSCHLAG ZU EINER ERWEITERUNG DER ALLGEMEINEN ERKLÄRUNG DER MENSCHENRECHTE* (1990); RESPONSIBILITIES TO FUTURE GENERATIONS, ENVIRONMENTAL ETHICS (E. Partridge ed. 1980); SALADIN & ZENGER, *supra* note 1, at 15. First attempts to protect the interests of future generations led to the draft of a “Declarations Of The Rights Of Future Generations,” including specific formulations for the protection of a viable environment for humans yet to come. *See id.* at 46.

5. There are two distinct classes of arguments, arguments regarding nature as instrumentally valuable because it is useful for humans and arguments regarding nature as intrinsically valuable independent of human interest. *See* Michael J. Glennon, *Has International Law Failed the Elephant?*,

change of the predominant paradigm⁶ in international environmental law. It is an important first step in taking nature's rights seriously.

Finding nature's rights acknowledged legally is quite different from claiming such rights on the basis of ethical considerations. Thus, the development in international environmental law sheds a new and exciting light on the discussion: we can now look at the changes in the law and utilize the environmental ethics debate⁷ to give these changes meaning, instead of drawing from environmental ethics to propose them in the first place. Environmental ethics remains crucial for providing us with the means to evaluate the extent to which we should protect the newly acknowledged rights.⁸ Therefore, arguments of the ethical discussion must be reconsidered in the light of the newly established position that environmental law already acknowledges the rights of nature. Section III presents different approaches in non-anthropocentric environmental ethics and focuses on

84 AM. J. INT'L L. 1, 7 (1990). To say that a thing is a good intrinsically is to value it "not because of any antecedents (that God made it) or consequences (that because of it people will be more happy or more virtuous)." See Stone, *Trees Revisited*, *supra* note 2, at 52.

6. The conception of humankind's relation to nature depends upon whatever theory we have with regard to the natural order and our place in it. See JOHN RAWLS, *A THEORY OF JUSTICE* (1971). This theory then becomes our environmental paradigm when we think about nature. A paradigm shift, therefore, includes a re-evaluation of our relationship with the rest of nature.

The theory of paradigm shifts as a sequence of events leading to major changes (revolutions) in scientific knowledge dates back to the work of Thomas Kuhn. Kuhn uses paradigms as a framework to describe and analyze world views and their effects on people's conceptualization and information processing. THOMAS S. KUHN, *THE STRUCTURE OF SCIENTIFIC REVOLUTIONS* 111-35 (2d ed. 1970). Our environmental paradigms include how we see our relationship to nature, if and how we control nature, and whether we limit our actions because of nature. Paradigm shifts as opposed to other shifts of perspective are multidimensional, i.e., affect different areas of society, knowledge, and value at the same time. See Richard Routley, *Roles and Limits of Paradigms in Environmental Thought and Action*, in *ENVIRONMENTAL PHILOSOPHY* 260-293, 271, 275, 278 (Robert Elliot & Arran Gare eds. 1983). In other words, to realize the peace with nature, changes are necessary in all areas of thought. KLAUS MICHAEL MEYER-ABICH, *WEGE ZUM FRIEDEN MIT DER NATUR. PRAKTISCHE NATURPHILOSOPHIE FÜR DIE UMWELTPOLITIK*, 11 (München 1986)[hereinafter FRIEDEN].

7. Ethics deals mainly with what humans ought to do regarding each other. See MEYER-ABICH, FRIEDEN, *supra* note 6, at 70. Environmental ethics represent the part of environmental philosophy which discusses how we should act concerning nature. "[S]ets of principles, which would guide our treatment of wild nature, constitute an environmental ethic in the most general sense." Robert Elliot, *Environmental ethics*, in *A COMPANION TO ETHICS* 284, 285 (Peter Singer ed. 1993). For environmental ethics at large, see generally MICHAEL ZIMMERMAN, *ENVIRONMENTAL PHILOSOPHY, FROM ANIMAL RIGHTS TO RADICAL ECOLOGY* (1993); PETER S. WENZ, *ENVIRONMENTAL JUSTICE* (1988); J. Baird Callicott, *The Search For an Environmental Ethic*, in *MATTERS OF LIFE AND DEATH* 420 (Tom Regan ed., 2nd ed. 1986).

8. In the context of the ethical discussion, there is a first draft of a "Declaration Of The Rights Of Nature" with 10 points protecting humans, animals, plants, and elements. The declaration acknowledges the special responsibility of humans as representatives of all interests and formulates criteria for equal protection of natural entities. See MEYER-ABICH, FRIEDEN, *supra* note 6, at 190-1. The declaration can be formulated as a constitutional provision. See Klaus Michael Meyer-Abich, *Mensch und Natur: Herausforderung für die Rechtspolitik. Rechte der natürlichen Mitwelt in einer Rechtsgemeinschaft der Natur*, in *MENSCHENGERECHT* 173, 174 (Herta Däubler-Gmelin & Wolfgang Adlerstein eds., Heidelberg 1986).

those which fully acknowledge nature's own rights⁹, thus taking nature's rights seriously. In sharp contrast to the concept of *Stone* and *Meyer-Abich*,¹⁰ we conclude that biocentrism is the relevant new paradigm in environmental law, protecting animals and plants as right-holders but leaving non-living natural entities and compounds without protection if such protection does not derive indirectly from their function as a natural habitat for living beings.¹¹

Finally, section IV. describes the legal consequences of the nature's rights approach as the new rationale for environmental policy.¹² Its main focus will be on how nature can be represented in the political and legal realm, and on how society can resolve the problems arising out of a potential conflict between the interest of humankind and the interests of nature. If nature has its own rights, it has its own legal existence in certain areas, not unlike corporations or other legal entities. Taking nature's rights seriously thus calls, for instance, for a different perspective in the damage assessment of environmental accidents. Finally, recognizing nature's rights raises the question whether nature is entitled to supportive action¹³ to compensate for the damage it has suffered and to create a viable, fairly competitive future for our ecosystem.

In summary, taking nature's rights seriously is a paradigm shift in international environmental law whose present expressions reveal only the tip of an iceberg. So far, the legal acknowledgement of nature's intrinsic value construes no more than the legal background for application and

9. "There is a variety of competing, including partly overlapping, environmental ethics." Elliot, *supra* note 7, at 285.

10. These authors favor the extension of the nature's rights concept to non-living entities. See Stone, *Should Trees Have Standing?*, *supra* note 2, at 45 ("I am quite seriously proposing that we give legal rights to forests, oceans, rivers and other so-called 'natural objects' in the environment."); Stone, *Trees Revisited*, *supra* note 2, at 47 (explaining why disinterested entities like stones or rivers – and also species – should also get legal and moral consideration); MEYER-ABICH, FRIEDEN, *supra* note 6, at 182-9 (arguing that the same status should be given to living and non-living entities and compounds of nature).

11. See *infra* notes 177 to 194 and accompanying text.

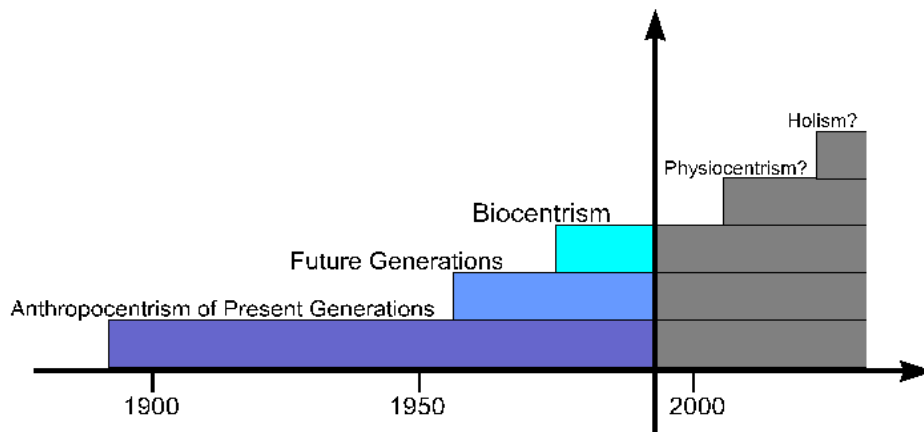
12. See Tribe, *supra* note 2, at 1326 ("Beyond Human Wants: A New Rationale for Environmental Policy"). See also the revision of the initial article in WHEN VALUES CONFLICT: ESSAYS ON ENVIRONMENTAL ANALYSIS, DISCOURSE AND DECISIONS 61-91 (Laurence H. Tribe et. al. eds. 1976).

13. The idea of supportive action draws on the concept of affirmative action in that it looks to counterbalance past injustice imposed on nature. We try to avoid the term "affirmative" for two reasons. First, the term is used in the minority rights debate about equality of beings in one species – humankind – rather than in the context of equality of different species. Second, supportive action transcends the idea of "affirmative duties" as used in environmental law of the United States of America. Such "affirmative duties" pursue the conservation and restoration of endangered species without any specific non-anthropocentric background. See *Conner v. Andrus* 453 F.Supp. 1037 (W.D. Tex. 1978)(holding that the Fish and Wildlife Service has an affirmative duty to conserve endangered species); *Carson-Truckee Water Conservancy District v. Clark* 549 F.Supp. 704 (D. Nev. 1982)(holding that the Secretary of the Interior has an affirmative duty to develop a program for restoring an endangered species of fish to non-threatened population levels).

interpretation of international law. The formulation of detailed rights of nature in enacting this new legal dimension is yet to come.

II. FROM ANTHROPOCENTRISM TO NON-ANTHROPOCENTRISM IN INTERNATIONAL ENVIRONMENTAL LAW

To support our thesis that there is a step by step development in international law, this section presents an analysis of international environmental instruments. Classifying the instruments according to whose interest is protected, we can distinguish three stages of development.¹⁴ In the first stage, immediate human self-interest is the primary reason for the protection of the environment. In the second stage, this immediate interest enlarges to encompass the interests of future generations and thereby recognizes the intergenerational dimension of the protection of nature. In the third stage, the anthropocentric approach is transcended by the recognition of an intrinsic value of nature, i.e. a value independent of human interest. All three stages symbolize a steady increase of complexity in international law. This relationship between time and complexity can be displayed as follows:



14. *Meyer-Abich* pursues a similar way of classifying anthropocentric and non-anthropocentric views according to whose interest is protected. He classifies world-views in eight steps according to the extent to whom one gives consideration: 1) to oneself, 2) to the family, 3) to a people, 4) to present generations, 5) to future generations, 6) to sentient beings, 7) to living beings, or 8) to everything. See MEYER-ABICH, FRIEDEN, *supra* note 6, at 23. Cf. also LEIMBACHER, *supra* note 1, at 79 (describing the approach and also naming the first step egocentric, the third chauvinistic, and the sixth buddhistic). In this article, the seventh step will be called biocentrism and the eighth physiocentrism or holism depending on how "everything" is being considered. See *infra* notes 177 to 194 and accompanying text.

Every new stage adds to the complexity of international environmental law: even though the beginning of each stage can be ascribed to a certain period in time, all of said stages continue to be part of present international environmental instruments. Thus, with each stage, a new dimension is added to existing rationales which remain fully applicable. This means that an instrument of the third stage might protect nature's interest by acknowledging its intrinsic value, while simultaneously pursue the interest of future and present generations of humans. In the future, we may even find evidence of new stages transcending the biocentric perspective which is – according to our main thesis – the focus of contemporary international environmental law.¹⁵

The classification of international instruments into different stages however, does not suffice to support our thesis of a development towards acknowledging nature's rights. The thesis requires that the instruments which inform the different steps be explained in such a way to give them a meaning which transcends their immediate motive and reaches a more general level of rationales. Such a level is achieved by using environmental ethics as the most general concept for the relationship between humans and their natural environment.¹⁶ The methodology of analyzing environmental law rationales in the light of ethics has been called "deep level enquiry."¹⁷ In the present context, it allows us to see how each stage is linked to one or more ethical perspectives.¹⁸ Therefore, we will add to the analytical description of each stage the general rationales comprised in one or more ethical approaches supporting it. This linking of the three stages to environmental analysis will then become the analytical basis for the final part of our main

15. For examples of non-anthropocentric paradigms beyond biocentrism see *infra* notes 177 to 203 and accompanying text.

16. For a definition, see *supra* note 7. For Ethics as the theories about how to act rightly and to do the good, see generally HENRY SIDGWICK, *THE METHODS OF ETHICS* (1966); RICHARD B. BRANDT, *A THEORY OF THE GOOD AND THE RIGHT* (1979); R.M. HARE, *MORAL THINKING* (1980); R. M. HARE, *MORAL THINKING: ITS LEVELS, METHOD AND POINT* (1981). The fundamental practical questions of ethics are What ought I to do? and How ought I to live? PETER SINGER, *A COMPANION TO ETHICS* xi (1993). Environmental ethics answers these questions by classifying an interaction with the nonhuman world as "right" when it tends to preserve the integrity, stability, and beauty of the biotic community, and "wrong" when it tends otherwise. See ALDO LEOPOLD, *A SAND COUNTY ALMANAC* 225 (1949).

17. See Indira Hakalingam Carr, *Saving the Environment – Does Utilitarianism Provide a Justification?*, 12 *LEGAL STUDIES* 92 (1992)[hereinafter *Environment & Utilitarianism*].

18. These perspectives are either anthropocentric or non-anthropocentric. Since non-anthropocentric environmentalism is frequently called "deep ecology," the distinction between anthropocentric and non-anthropocentric approaches is the one between "shallow" and "deep" ecology. See Elder, *supra* note 2, at 285. For the seven normative principles of deep ecology, see Arne Naess, *The Shallow and the Deep, Long-Range Ecology Movement. A Summary*, 16 *INQUIRY* 95 (1973).

thesis, which states that the development observed in legal instruments means acknowledging nature's rights in a biocentric perspective.¹⁹

A. THE FIRST STAGE: ENVIRONMENTAL PROTECTION AS SELF-INTEREST OF THE PRESENT GENERATION

With the advent of international environmental law in the late 19th century, environmental protection based on humankind's immediate self-interest gave rise to a first wave of environmental instruments. A primary purpose pursued by those instruments was to maximize nature's resources in view of their exploitation. The need for protective measures became international whenever exploitation threatened natural resources beyond state borders, particularly in the case of high-sea fishing, whaling, and hunting of migratory birds. Approaches to maximize resource exploitation have rightfully been assigned to the ethical perspective of utilitarianism, exposing them to the general criticism and limitations commonly associated with utilitarian rationales. A second purpose pursued by first stage treaties was to ensure the physical and mental well-being of the population of the signatory states, especially in the light of the health hazards caused by extensive international pollution. This form of protection adds a human rights perspective to utilitarian rationales. Yet first stage instruments always retain their characteristic limitation as pure anthropocentrism, even though they extend beyond the principle of utility.

1. Human Self-Interest in the Treaties

As early as 1875, Austria/Hungary and Italy signed a Declaration for the Protection of Birds Useful to Agriculture.²⁰ In 1900, a Convention Designed to Ensure the Protection of Various Species of Wild Animals which are Useful to Man or Inoffensive was ratified.²¹ Early environmental documents were thus clearly designed to serve the interest of humankind.²² The driving force behind this first wave of international instruments was the recognition that the conservation of nature was in the common interest of all humans. Said interest aimed both at the protection of the physical and mental well-being of humans²³ and at securing the long-term exploitation of

19. See *infra* notes 177 to 203 and accompanying text.

20. Declaration for the Protection of Birds Useful to Agriculture, Nov. 5 and Nov. 29, 1875, Aus./Hung.-Italy, 4 MARTENS NOUVEAU RECUEIL 289. Cf. also Convention for the Protection of Birds Useful to Agriculture, March 19, 1902, 102 B.F.S.P. 969.

21. Convention Designed to Ensure the Conservation of Various Species of Wild Animals which are Useful to Man or Inoffensive, Mar. 19, 1900, 30 MARTENS NOUVEAU RECUEIL 430.

22. See Stone, *Trees Revisited*, *supra* note 2, at 9 (referring to the traditional subject matter of legal and moral thinking as CNPP's - Contemporary Normal Proximate Persons).

23. Environmental instruments which relate to the protection of human health are the following:

resources.²⁴ This rationale did not change much in the following decades. The language used in conventions establishing national parks, for instance, is indicative of the anthropocentric perspective underlying the first stage instruments. The Convention Relative for the Preservation of Fauna and Flora in their Natural State²⁵ terms national parks areas "set aside for ... the *benefit, advantage, and enjoyment of the general public*."²⁶ Other conventions refer directly to the mutual interest of the signatory parties in the development and proper utilization of the resources of a certain area, such as the Agreement for the Establishment of a General Fisheries Council for the Mediterranean of 1949.²⁷ The same rationale applies to the Convention

Treaty Relating to Boundary Waters Between the United States and Canada, Jan. 11, 1909, U.K.-U.S., 36 Stat. 2448 ("[water] shall not be polluted on either side to the injury of health or property of the other."); United Nations General Assembly Resolution 2398, Dec. 3, 1968, G.O.A.R., 23rd. session, suppl. No. 18, p.2, *reprinted in* I INTERNATIONAL PROTECTION OF THE ENVIRONMENT 99 (Bernd Rüster & Bruno Simma eds.) [hereinafter Rüster & Simma] ("Concerned about the consequent effects of [pollution] on the condition of man, his physical, mental and social well-being."); Stockholm Declaration of the United Nations Conference on the Human Environment, U.N. Doc. A/CONF. 48/14 (1972), 11 I.L.M. 1416 (1972), 67 DEPT. STATE BULL. 116 (1972) [hereinafter Stockholm Declaration], Principle 7 ("all States shall take possible steps to prevent pollution of the seas by substances that are liable to create hazards to human health...").

24. Conventions which explicitly mention the interest of mankind as underlying rationale are numerous. The following Conventions serve as examples: Convention for the Protection of Migratory Birds, Aug. 16, 1916, U.K.-U.S., 39 Stat. 1702, *reprinted in* IV Rüster & Simma, *supra* note 23, at 1638, 1639 ("Many of these species are of great value as a source of food or in destroying insects which are injurious to forests and forage plants on the public domain, as well as to agricultural crops ..."); International Convention for the Protection of Birds, Oct. 18, 1950, 638 U.N.T.S. 186 ("[I]n the interest of science, the protection of nature and the economy of each nation, all birds should as a matter of principle be protected."); Convention On The Prevention Of Marine Pollution By Dumping of Wastes and Other Matter, 29 Dec., 1972, 26 U.S.T. 2403, 1046 U.N.T.S. 120 ("Recognizing that the marine environment and the living resources which it supports are of vital importance to all nations ..."); Convention for the Protection, Preservation and Extension of the Sokeye Salmond Fisheries of the Fraser River System, May 26, 1930, U.S.-Can., 148 U.N.T.S. 306 [hereinafter SOKEYE CONVENTION] ("[T]he protection, preservation and extension of the sokeye salmond is of common concern to the United States of America and to the Dominion of Canada ...").

25. Convention Relative to the Preservation of Fauna and Flora in their Natural State, Nov. 8, 1933, 172 U.N.T.S. 242.

26. *Id.* (*emphasis added*). See also Convention on Nature Protection and Wild Life Preservation in the Western Hemisphere, Oct. 12, 1940, 56 Stat. 1354, 161 U.N.T.S. 194 ("The expression National Park shall denote: Areas established for the protection and preservation of superlative scenery, flora and fauna of national significance which the general public may enjoy and form which it may benefit when placed under public control.").

27. Agreement for the Establishment of a General Fisheries Council for the Mediterranean, Sept. 24, 1949, 121 U.N.T.S. 98 ("[H]aving a mutual interest in the development and proper utilization of the resources of the Mediterranean and contiguous waters ..."). See also Convention Concerning Fishing In the Waters Of The Danube, Jan. 29, 1958, 538 U.N.T.S. 90 ("[H]aving a common interest in the rational utilization and expansion of the stocks of fish in the River Danube ..."); International Convention for the Conservation of Atlantic Tunas, May 14, 1966, 637 U.N.T.S. 64 ("Considering the mutual interest in the populations of tuna and tuna-like fishes found in the Atlantic Ocean, and designing to cooperate in maintaining the populations of these fishes at levels which will permit the maximum sustainable catches for food and other purposes ...").

for the Regulation of Whaling of 1931,²⁸ which had as its primary objective the health of the whaling industry rather than the health of whales.²⁹

The attitude of contracting parties to the environment is best described as an assertion of the unlimited right to exploit natural resources. This right they derived and still derive from their status as sovereign nations.³⁰ – The International Convention for the High Seas Fisheries of the North Pacific Ocean³¹ is exemplary in its statement that the Contracting parties are "acting as sovereign nations in the light of their rights under the principles of international law and custom to exploit the fishery resources of the high seas."³² The Signatory Parties chose to exercise it with restraint out of recognition that it could hurt their long term economic interest to over-exploit their resources.³³ The fact that a great number of early environmental

28. Convention on the Regulation of Whaling, Sep. 24, 1931, 49 Stat. 3079, 155 U.N.T.S. 349 [hereinafter 1931 Whaling Convention].

29. See William Roy Vallance, *The International Convention For Regulation of Whaling and the Act of Congress giving Effect to its Provisions*, 31 AM. J. INT'L L. 112 (1937). The author was Assistant Legal Adviser of the State Department at the time ratification was before the Senate. Vallance states that the expert committee who submitted the report on regulating the whaling industry to the Council of the League of Nations "unanimously agreed that it would be possible to help the whaling industry by means of an international convention." *Id.* 113. Another revealing source of the rationale behind the 1931 Whaling Convention is the Report of the Special Committee of the United States Senate on Conservation and Wild Life Resources, 73rd Cong., 2d Sess., *quoted in* Vallance, *supra*, at 114 [hereinafter WHALING REPORT] ("Purpose of the Convention. ... The main object of the draft Convention before the Second Committee is to secure the adoption by the greatest possible number of countries of certain rules to prevent, *in the interest of the whaling industry itself*, the destruction of a source of wealth available to all.") (emphasis added). Others point out that the hunting and fishing industries realized that their collective profits depended upon the availability of sizable numbers of whales which would prevent costly and time consuming efforts of capturing the animals. See Antonio D'Amato & Sudhir K. Chopra, *Whales: Their Emerging Right To Life*, 85 AM. J. INT'L L. 21, 30 (1991).

30. Cf. Edith Brown Weiss, *International Environmental Law: Contemporary Issues and the Emergence of a New World Order* 675 GEORGETOWN L.J. 81 (1992-93) ("[Prior to 1950:] Relevant international agreements were based on unrestrained national sovereignty over natural resources"). For contemporary examples of the first stage's dimension in environmental instruments see The Rio Declaration on Environment and Development, June 13, 1992, U.N. Doc. A/CONF.151/5/Rev.1 (1992), 31 I.L.M. 874 [hereinafter *Rio Declaration*] ("Principle 2: States have ... the sovereign right to exploit their own resources ..."); Adoption of Agreements on Environment and Development: Non-Legally Binding Authoritative Statement of Principles for a Global Consensus on the Management, Conservation and Sustainable Development of All Types of Forests, June 13, 1992, U.N. Doc. A/CONF.151/6/Rev.1 (1992), 31 I.L.M. 881 [hereinafter *UNCED Forest Principles*] ("Principles/Elements 2(a): States have the sovereign and inalienable right to utilize, manage and develop their forests in accordance with their development needs ..."). – The strong orientation of the latter statement towards resource maximization has led to its unofficial name "Chain-Saw Charter." Cf. THE EARTH SUMMIT: THE UNITED NATIONS CONFERENCE ON ENVIRONMENT AND DEVELOPMENT (UNCED) 115 (Stanley P. Johnson & Günther Handl eds., 1993) [hereinafter *Earth Summit*].

31. International Convention for the High Seas Fisheries of the North Pacific Ocean, May 9, 1952, 4 U.S.T. 380, 205 U.N.T.S. 67.

32. *Id.*

33. See D'Amato & Chopra, *supra* note 29, at 30. See also International Convention for the High Seas Fisheries of the North Pacific Ocean, *supra* note 31, pmb1. ("[I]t will best serve the common interest of mankind, as well as the interest of the Contracting Parties, to ensure the maximum sustained productivity of the fishery resources"); Agreement on Fishing and Conservation of

treaties concern the restraint on exploitation of fisheries seems no coincidence. It was probably in this field of activity that nations first realized that their extensive hunting practice had considerably downsized the number of the hunted species.³⁴ Certain environmental treaties such as the Convention for the Protection, Preservation and Extension of the Sokeye Salmond Fisheries of the Fraser River System³⁵ explicitly concede that the supply of certain species has been greatly depleted in recent years, asserting that it is in the mutual interest of both countries that this source of wealth be restored and maintained.³⁶ In conclusion, this first stage of environmental instruments demonstrates that the preservation and conservation of nature derives its *raison d'être* from the recognition that it is in humankind's own vital interest to take steps in order to protect the environment it inhabits.

2. The Theoretical Background of Self-Interested Protection

Within the first stage of international environmental instruments, we can distinguish one group of rationales supporting maximal exploitation of natural resources, and another group supporting human protection from environmental pollution. As the following subsections will show in detail, we can link the first of these to utility maximizing as expressed by utilitarianism³⁷, and the second to protecting humans as expressed by human rights theory. The following subsections critically examine how these approaches relate to international law and why they are strictly limited to anthropocentric viewpoints.

Living Resources, Dec. 12, 1968, Braz.-Uru., *reprinted in* VII Ruster & Simma, *supra*, note 23, at 3207 ("Considering the need to safeguard the living resources of the sea ... against wasteful exploitation which will render difficult the renewal of such resources ..."); Convention On The Prevention Of Marine Pollution By Dumping of Wastes and Other Matter, *supra* note 24, pmbl. ("Mindful that the ecological equilibrium and the legitimate uses of the sea are increasingly threatened by pollution ..."); Convention Concerning Fishing in the Waters of the Danube, *supra* note 27, pmbl. ("Recognizing the need for cooperation in working out a scientific basis for intensive augmentation of the stocks of fish and the regulation of fishing ...").

34. See WHALING REPORT, *supra* note 29, at 114-5 ("The steady growth of this industry in the last few years, thanks to improvements in equipment and techniques, has resulted in an ever larger annual increase in the number of *balaenoptera* killed. Estimates obtained from various sources show that, for several years past, the number taken has varied from 25,000 to 30,000 each season! ... Past experience shows the necessity of making an effort to prevent the extinction of the species which are chiefly hunted by modern whalers. ... In view of the fact ... that certain species of whales are already practically extinct, it will be realized that those species which it is still profitable to capture are exposed to serious danger.")

35. SOKEYE CONVENTION, *supra* note 24, pmbl.

36. *Id.* ("[Recognizing] that the supply of this fish has been greatly depleted and that it is of importance in the mutual interest of both countries that this source of wealth shall be restored or maintained ...").

37. Cf. Carr, *Environment & Utilitarianism*, *supra* note 17, at 92-93.

a. Utilitarianism

The assertion of an unlimited right to exploit nature is in keeping with the notion of "utilizing" nature. Utilitarian rationales can easily explain the self-interested resource exploitation in the first stage of environmental instruments with the principle of utility. This principle "approves or disapproves of every action whatsoever, according to the tendency which it appears to have to augment or diminish the happiness of the party whose interest is in question."³⁸ Typical expressions of utilitarian rationales in the treaties are the following: "promote the peaceful uses of the seas and oceans [and] the equitable and *efficient utilization of their resources*"³⁹, "protect the marine environment of the wider Caribbean region *for the benefit and enjoyment*" of humans⁴⁰, "conservation ... with a view to ensuring their optimum *utilization*"⁴¹, and in view of "the *supply requirements* of consuming members."⁴²

Classical utilitarianism, founded by Jeremy Bentham and aspiring to the greatest happiness of the greatest number of currently living humans, is represented in these formulations of "utilization" and "benefit."⁴³ Modern utilitarianism comes in different forms but all forms evaluate actions or decisions in relation to the general human welfare.⁴⁴ If, for example, wealth

38. JEREMY BENTHAM, AN INTRODUCTION TO THE PRINCIPLES OF MORALS AND LEGISLATION 11-12 (J.H. Burns & H.L.A. Hart ed. 1970)(1789). For a general appraisal of utilitarianism in the context of environmental law see Carr, *Environment & Utilitarianism*, *supra* note 17, at 94-101.

39. United Nations Convention on the Law of the Sea, Dec. 10, 1982, pmbl., UN Doc. A/CONF.62/122, *reprinted in* UNITED NATIONS ENVIRONMENT PROGRAMME, 2 SELECTED MULTILATERAL TREATIES IN THE FIELD OF THE ENVIRONMENT 165 (Iwona Rummel-Bulska & Seth Osafo eds. 1991)(emphasis added)[hereinafter MULTILATERAL TREATIES].

40. Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region, Mar. 24, 1983, pmbl., (emphasis added), 22 I.L.M. 244 (1983); *reprinted in* MULTILATERAL TREATIES, *supra* note 39, at 258; II/A INTERNATIONAL PROTECTION OF THE ENVIRONMENT (SER. 2ND) 39, 41 (Bernd Rüster & Bruno Simma eds. 1991)[hereinafter Rüster & Simma 2nd].

41. International Tropical Timber Agreement, Nov. 18, 1983, pmbl. (emphasis added), UNCTAD DOC TD/TIMBER/11, *reprinted in* MULTILATERAL TREATIES, *supra* note 39, at 271; IV/A Rüster & Simma, *supra* note 40, at 87, 89.

42. *Id.* (emphasis added).

43. For Bentham's role as the founder of the English Utilitarian School of Philosophy, see DAGOBERT D. RUNES, DICTIONARY OF PHILOSOPHY 52 (1983). See generally ALASDAIR MACINTYRE, *Reformers, Utilitarians, Idealists*, in A SHORT HISTORY OF ETHICS 227, 232 (1966)(about utilitarianism). The "greatest happiness for the greatest number" is the core formula of Benthamism. See RUNES, *supra*, at 52; RODERICK FRAZIER NASH, THE RIGHTS OF NATURE: A HISTORY OF ENVIRONMENTAL ETHICS 23 (1989). For the leading principle of utility see BENTHAM, *supra* note 38, at 11-12 ("The principle of utility is the foundation of the present work: ... By the principle of utility is meant that principle which approves or disapproves of every action whatsoever, according to the tendency which it appears to have to augment or diminish the happiness of the party whose interest is in question: or, what is the same thing in other words, to promote or to oppose that happiness.").

44. See DAVID LYONS, ETHICS AND THE RULE OF LAW 111 (1984).

maximization works as the motor for human welfare production⁴⁵ then animals count only insofar as they enhance wealth.⁴⁶ Thus, the utilitarian approach to natural resource management relies heavily on an environmental ethic that uses the anthropocentric paradigm.⁴⁷ The same paradigm applies to animal patents and other uses of nature made subject to the forces of economic markets.⁴⁸ To some extent, utilitarian rationales also support protection of animals against human cruelty because such cruelty might affect the nature of humans and thereby change the way humans deal with each other.⁴⁹ Notwithstanding this limited form of animal protection, we can state more generally that utilitarianism is anthropocentric because it assumes the superiority of human interest over the interest of other entities of nature, a view that is rightfully called "species chauvinism".⁵⁰

In the pure form,⁵¹ utilitarianism accepts neither an objective, nonempirical interest of humans in the preservation of nature⁵² nor an interest of

45. See RICHARD POSNER, *THE ECONOMICS OF JUSTICE* 74 (1983).

46. See POSNER, *supra* note 45, at 76.

47. For natural resource management and how the anthropocentric approach becomes obvious there, see generally PAUL J. CULHANE, *PUBLIC LANDS POLITICS, INTEREST GROUP INFLUENCE ON THE FOREST SERVICE AND THE BUREAU OF LAND MANAGEMENT* (1981); A.R. DRENGSEN, *BEYOND ENVIRONMENTAL CRISIS, FROM TECHNOCRAT TO PLANETARY PERSON* (1989); W. FOX, *TOWARD A TRANSPERSONAL ECOLOGY, DEVELOPING NEW FOUNDATIONS FOR ENVIRONMENTALISM* (1990).

48. In February 1993, after a self-imposed moratorium, the U.S. Government has restarted the granting of patents for genetically engineered animals. See Edmund L. Andrews, *U.S. Resumes Granting Patents on Genetically Altered Animals, Emphasis Is Now on Medicine Rather Than Food*, N.Y. TIMES, Feb. 3, 1993, at A1, D5.

49. See Stone, *Trees Revisited*, *supra* note 2, at 12 (arguing that cruelty towards animals threatens to rub off).

50. See Antonio D'Amato, *Do We Owe a Duty to Future Generations to Preserve the Global Environment?*, 84 AM. J. INT'L L. 190 (1990), at 195; Carr, *Environment & Utilitarianism*, *supra* note 17, at 97 ("Bentham's formulation of community reeks of chauvinism."). See generally Richard Routley & Val Routley, *Human Chauvinism and Environmental Ethics*, in ENVIRONMENTAL PHILOSOPHY 96-189, 136 (Don Mannison et. al. eds. 1980)(on species chauvinism).

51. There have always been utilitarians who go beyond the humancentric viewpoint and acknowledge the moral equality of sentient beings. The most famous position is expressed in Bentham's word, "the question is not, Can they *reason?* nor, Can they *talk?* but Can they *suffer?*". BENTHAM, *supra* note 38, at 282-3 n.b. Utilitarianism in this form, although still anthropocentric in its rationales, worked as the founding force behind the non-anthropocentrism called zoocentrism. See Kuhlmann, *supra* note 1, at 163.

Bentham's utilitarianism, however, gives only support to first stage environmental instruments. See also the detailed statement of Carr, *Environment & Utilitarianism*, *supra* note 17, at 101-02: "An examination of who constitutes the greatest number in Bentham's account however shows that at best it can justify only the interest of the current generation ... As far as taking the interest of future generations into account is concerned his principle of utility does not make provisions for this. ... As far as taking the interest of beings other than humans into account are [*sic.*] concerned once again utilitarianism does not have the necessary conceptual machinery to provide a justification. ... It follows that utilitarianism cannot support the variety of interests that environmental legislation seems to have taken into account."

52. Passmore denies that the psychological value of wilderness felt by some is a general need of humans. See JOHN PASSMORE, *MAN'S RESPONSIBILITY FOR NATURE* 109-110 (1974). Utilitarianism also typically does not encompass the avoidance of suffering. Some theorists, however, translate the protection of animals from suffering in a subjective interest of some humans not to witness or know

future generations.⁵³ The actual interest, want, and need of presently living humans, providing for their happiness, is all that counts.⁵⁴ Thus the preservation of national parks becomes a calculation of countervailing interests of humans wanting to enjoy nature while exploiting the land's resources at the same time.⁵⁵ Only as long as the balance tips in favor of enjoyment, humans have a right and duty to protect the parks.⁵⁶ Otherwise, they are morally empowered and even duty bound in the interest of all humans to destroy the present state of nature and utilize all resources for more productive means.⁵⁷ A similar utilitarian argument leads to the thesis that the only effective protection for a species is to fully expose it to the demands of the market, including private ownership.⁵⁸

The strict limitations of utilitarian rationales in the environmental context can be exemplified by reference to the field of natural resource valuation.⁵⁹ Since utilitarianism is closely related to cost-benefit analysis,⁶⁰ the evaluation of utility frequently involves expected-value calculations.⁶¹ Expected-value calculations compare the estimated magnitude of damage resulting from an environmental problem multiplied by the probability that the damage will occur with the costs of preventing or reducing it.⁶² Such calculations face an unsolvable problem of evaluating natural values, since we cannot know what is going to be useful in the future.⁶³ In addition to the

about it. See Louis B. Schwartz, *Morals, Offenses and the Model Penal Code* 63 COLUMBIA LAW REVIEW 673 (1963).

53. There are some exceptions among the utilitarians. Jeremy Bentham, for example, declared: "The day *may* come, when the rest of the animal creation may acquire those rights which never could have been withheld from them but by the hand of tyranny." BENTHAM, *supra* note 38, at 282-283 n.b.

54. For happiness as the core element of Benthamism, see *supra* note 43.

55. See MILTON FRIEDMAN, CAPITALISM AND FREEDOM 31 (1961).

56. This market model for environmental protection frequently fails to take all relevant factors of the evaluation into account (market failure, externalities, free rider syndrome). See Glennon, *supra* note 5, at 6 ("Stated in traditional economic terms, the ivory market represents a classic case of market failure.").

57. This can lead to the approach that tries to maximize public recreation in the environment, especially in public national parks. See WENZ, *supra* note 7, at 25; see generally JOSEPH L. SAX, MOUNTAINS WITHOUT HANDRAILS (1980) (regarding the concept of national parks).

58. See Woodlief, *Banning Ivory Imports Is Counterproductive*, WASH. POST, June 9, 1989, at A26 (holding that private ownership of elephants and other endangered species is the only effective protection available).

59. See generally RAYMOND J. KOPP & V. KARRY SMITH, VALUING NATURAL ASSETS: THE ECONOMICS OF NATURAL RESOURCE DAMAGE ASSESSMENT (Washington 1993); Frank B. Cross, *Values Attributable to Natural Resources*, 42 VAND. L. REV. 269 (1989).

60. "[In Benthamism,] Ethics becomes a matter of calculation of consequences." RUNES, *supra* note 43, at 52.

61. See Edith Brown Weiss, *Developments in the Law: International Environmental Law*, 104 HARV. L. REV. 1484, 1530-34 (1991); Robert E. Goodin, *Ethical Principles for Environmental Protection*, in ELLIOT & GERE, *supra* note 6, at 3-20, 4.

62. The expected-value calculation is a regular cost-benefit calculation modified by an estimation rather than a measurement of the benefits. Compare WEISS, *supra* note 61, at 1632-1636.

63. See Stone, *Should Trees Have Standing?*, *supra* note 2, at 490. Glennon expresses another facet of this problem: "Who can say, on the day the last elephant dies, that the human race will ever again be the same?" Glennon, *supra* note 5, at 43.

problem of factual evaluation,⁶⁴ the reality that market value alone is not an appropriate measure for all goods⁶⁵ complicates the expected value calculation considerably. Furthermore, introducing the loss of recreational use, aesthetic value, and other nonmaterial human interests in preservation in the formula⁶⁶ still confines this approach to the human interest in nature's utility at the lowest costs.⁶⁷ Facing these problems, utilitarian rationales regularly arrive at the conscious subjugation of nature in the superficially calculated interest of humanity, thereby creating one of the most obvious examples for the "paradigms of exploitation".⁶⁸

In summary, utilitarian rationales are closely linked to instruments of the first stage, even showing in the language of self-interested provisions about resource maximization. Utilitarianism further appears as the leading principle of all attempts to evaluate natural resources. It has been and will always be an important way of expressing humankind's interest in using the natural environment for economic purposes. The principle of utility, however, is strictly limited to anthropocentric viewpoints, relying on human self-interest as the paramount criterion for environmental protection. It therefore cannot work as a rationale for more recent stages of environmental law.

b. Human Rights Theory

Utilitarianism alone is insufficient as an explanation for all rationales of the first stage. It would allow exposing a small number of humans to nearly unlimited health hazards caused by environmental pollution as long as these "disadvantages" are outweighed by strong economic benefits for a large number of others. Some environmental instruments of the first stage, however, show a tendency towards effectively protecting humans from health hazards without making such protection conditional upon utility calculations. Human rights theory is the ethical approach that best explains the motive for anti-pollution regulations⁶⁹. Protecting nature from pollution

64. Evaluations are dependent upon the time when the usage of resources and/or the scientific research for protective measures takes place. See Weiss, *supra* note 61, at 1541.

65. Cf. Anderson, *The Ethical Limitations of the Market*, 6 *ECON. & PHIL.* 179, 202-03.

66. See Weiss, *supra* note 61, at 1531.

67. See, e.g., *Note Cost of Wood Products – Loss of Timber Jobs Isn't the Only Factor*, *THE SEATTLE TIMES*, July 30, 1990, at A11 ("[I]t is possible to quantify the cost of preserving old-growth forests. Spotted owls, federal law, and environmental ethics notwithstanding, the consumer can then make the decision: Is saving the remaining old growth worth the extra 50 cents a plank on that new deck?").

68. See Peter A. Y. Gunter, *The Big Thicket*, in *PHILOSOPHY AND ENVIRONMENTAL CRISIS* 117-136, 129-136 (William T. Blackstone ed. 1974).

is one of the most important purposes in international environmental law: "Aware of the risk of damage to human health,"⁷⁰ or "on the basis of an assessment of the safety and health hazards,"⁷¹ or because of "the potentially harmful impact on human health,"⁷² pollution is limited or avoided.

The right to life and the freedom to live in a healthy environment is an aspect represented in human rights theory. Human rights theory acknowledges that the capacities for rationality and freedom lead to certain rights that individual humans have simply by being human - rights that are pre-societal, equal, unalterable, unconditional, universal and inalienable.⁷³ The natural right to bodily integrity gives humans a right to a livable environment⁷⁴ and thus a claim against any pollution that seriously affects their health.⁷⁵ Such a claim finds support in Article 25 of the Declaration of Human Rights,⁷⁶ which states that "[E]veryone has the right to a standard of living adequate for the health and well-being of himself and his family."⁷⁷

The right to live in a pollution-free environment might not be a human right of the first generation, i.e., one against direct bodily harm as experienced in murder or torture.⁷⁸ It might also not be among the second generation of human rights as "political" right to free thought, assembly, and speech.⁷⁹ But it is, as a necessary prerequisite of life as such, among

69. See generally W. Paul Gormley, *The Legal Obligation of the International Community to Guarantee a Pure and Decent Environment: The Expansion of Human Rights Norms*, 3 GEORGETOWN INT. ENV. L. REV. 85 (1990); Stephen C. McCaffrey, *A Human Right to Water: Domestic and International Implications*, 5 GEORGETOWN INT. ENV. L. REV. 1 (1992-93).

70. Basle Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal, Mar. 22, 1989, 28 I.L.M. 657; reprinted in MULTILATERAL TREATIES, *supra* note 39, at 449.

71. Convention Concerning Safety and Health in Construction, June 18, 1988, art. 3, reprinted in MULTILATERAL TREATIES, *supra* note 39, at 440, 441.

72. Vienna Convention for the Protection of the Ozone Layer, Mar. 22, 1985, pmbl., 26 I.L.M. 1526; reprinted in MULTILATERAL TREATIES, *supra* note 39, at 301.

73. See JOHN LOCKE, TWO TREATISES OF GOVERNMENT § 87 (1689); William T. Blackstone, *Ethics and Ecology*, in PHILOSOPHY AND ENVIRONMENTAL CRISIS, *supra* note 68, 16-42, 30; Joel Feinberg, *Human Duties and Animal Rights*, in ON THE FIFTH DAY: ANIMAL RIGHTS AND HUMAN ETHICS 59-60 (Richard Knowles Morris, Michael W. Fox eds. 1978).

74. See BLACKSTONE, *supra* note 73, at 32.

75. See Elder, *supra* note 2, at 294 (relating environmental protection to the duty of decision-makers to respect humans right to life, liberty and the security of the person).

76. Universal Declaration of Human Rights, GA Res. 217A (III), U.N. Doc. A/810 (1948) [hereinafter Human Rights Declaration].

77. *Id.*, art. 25.

78. The terminology about different "generations" of human rights is far from consistent. As a first generation we classify all norms protecting the physical survival of humans. Cf. Gormley, *supra* note 69, at 100. The right to life becomes directly involved in cases of man-made catastrophic pollution like Bhopal, Chernobyl, and Valdez. See *id.*, at 111-12.

79. These are sometimes counted among the first generation rights. See, e.g., Gormley, *supra* note 69, at 100-02. This is correct if one looks exclusively at the instruments stating them. It does not explain however that this second group was internationally acknowledged later than the first group.

the third generation human rights, i.e., a right to whatever is required for sustaining human existence in dignity.⁸⁰ Therefore, we can attribute anti-pollution regulations to human rights in a broader sense.⁸¹

Human rights theory also gives an anthropocentric explanation for provisions attempting to avoid the suffering of animals, such as: "movement shall not be restricted in such a manner as to cause it [an animal] unnecessary suffering or injury,"⁸² or "methods which as far as possible spare animals suffering and pain should be uniformly applied."⁸³ Since human dignity includes the capacity for empathic feelings, the human rights approach can extend to protecting all sentient beings. If human dignity is impaired by cruelty towards animals, humans have the right to act on behalf of the animals and evoke their protection by national and international courts.⁸⁴ Finally, human rights theory can encompass to some extent⁸⁵ the interests of future generations since the right to procreation⁸⁶ would be meaningless without a correlating claim to a viable ecosystem for the next generation.

A major weakness of the human rights approach is that instances of pollution or cruelty to animals are not always congruent with human concerns. Take the following case: A chemical substance known to lead to the extinction of a certain species of fish is dumped into a river. The human water purification system is not visibly impaired by the additional chemical substance in the water and the recreational use of the river remains unaltered. The fishermen do not exploit this particular species. Under these circumstances, the human interest in acting against the pollution is only marginal. Consider, on the other hand, the interest of nature. In

80. This group also encompasses economic, social, and cultural rights as stated by the International Labor Organization (ILO). Cf. Gormley, *supra* note 69, at 102.

81. Cf. Dinah Shelton, *Human Rights, Environmental Rights, and the Right to Environment*, 28 STANFORD J. INT'L L. 103, 104 (1991) ("Some theorists suggest that environmental issues belong within the human rights category, because the goal of environmental protection is to enhance the quality of human life."). Apart from strong cases of life-threatening pollution, a human right to a healthy environment is still an "emerging" international right, i.e., one "in the process of evolution." Gormley, *supra* note 69, at 97, 105. It can sometimes be inferred from explicitly stated human rights. See McCaffrey, *supra* note 69, at 7-12.

82. European Convention for the Protection of Animals Kept for Farming Purposes, Mar. 10, 1976, art. 4, par. 1, EUROP. T.S. No.87, reprinted in MULTILATERAL TREATIES, *supra* note 39, at 51.

83. European Convention for the Protection of Animals for Slaughter, May 10, 1979, pmbl., reprinted in MULTILATERAL TREATIES, *supra* note 39, at 70.

84. See Elder, *supra* note 2, at 291-295 (arguing that the extension of environmental protection is a matter of impact assessment).

85. The extent is limited because the right to procreate only protects the generation immediately following the present one.

86. The right to procreate is considered a human right under international law. See Human Rights Declaration, *supra* note 76, art. 16, para. 1, at 74 ("Men and women of full age, without any limitation due to race, nationality or religion have a right to marry and found a family."). The U.S. Supreme Court elevated the right to procreate in *Skinner v. Oklahoma*, 316 U.S. 535, 536 (1942) (framing of the legal question as a "sensitive and important area of human rights" by Justice Douglas).

the eyes of nature, the damage is a considerable and central one, since the extinction of that species means an irretrievable loss of a component of the river's ecosystem. Thus, the pollution of the river might kill the fish but not harm the fisherman (or any other human for that matter) and human interest offers too weak a justification for taking protective actions.

Similar shortcomings occur in the suffering category. If animal protection depends on the empathic feelings of humans, there is a risk that protection will be strongest where our relation with a species is most developed. Thus, domesticated animals would be the ones to profit from a more thorough protection.⁸⁷ This problem is already evidenced by legal instruments that "bear[] in mind that pet animals have a special relationship with man."⁸⁸

In summary, in our attempt to demonstrate that international environmental instruments show a step by step development towards non-anthropocentrism, we found utilitarianism and human rights as the ethical perspectives informing the first step. Both ethical concepts are restricted to purely anthropocentric considerations and extend this consideration only to the interest of the present generation of humans. Utilitarianism and human rights theory together provide a comprehensive rationale for the first stage purposes of maximizing natural resources and protecting humans from pollution. They cannot, however, explain any instruments caring for the interest of future generations. Therefore, such instruments are leaving the scope of the first stage.

B. THE SECOND STAGE: ADDING THE INTERGENERATIONAL DIMENSION

An intergenerational dimension of environmental instruments builds the second stage in our main thesis of a step by step development. It adds complexity to international environmental law by going beyond the limited first stage scope of present generation provisions. As before, we can link this development to a theoretical background in environmental ethics.

1. Future Generations and Sustainability in the Treaties

A gradual shift of focus in the field of multilateral environmental instruments took place in the 1970's. As mentioned in the introductory sentences of this section, the development is not perfectly linear in chronological terms. All stages have fore runners and late bloomers. However, the

87. Criteria for feelings of associations are for example: Are they cute? Are they repulsive, offensive, annoying? Is their behavior disgusting? How big are they? Snakes and spiders would get little protection on that basis.

88. European Convention for the Protection of Pet Animals, Nov. 13, 1987, pmbl., EUROP. T.S. No. 125; *reprinted in* MULTILATERAL TREATIES, *supra* note 39, at 403 [hereinafter Pet Animal Convention].

increasing reference to the intergenerational dimension of the effort to protect the environment stated in environmental documents of that period allows ascribing the beginning of the second stage to this period.

The duty of the present generation to future generations to "preserve the diversity and quality of our planets life-sustaining environmental resources"⁸⁹ mentioned in various international instruments⁹⁰ has been termed an "emerging norm of customary international law".⁹¹ Adding the intergenerational dimension signals a departure from the pure version of anthropocentrism. Nevertheless, the approach of these treaties remains species-chauvinistic: the protection of nature remains subordinated to the interests of humankind.⁹²

A good example for the change of rationales underlying international environmental instruments are the Whaling Conventions, which were ratified in 1931,⁹³ and 1946,⁹⁴ respectively. Whereas the 1931 Convention was clearly intended to protect the whaling industry⁹⁵, the 1946 Convention on the Regulation of Whaling reveals a new conservationist philosophy in its Preamble: "It is in the interest of the nations of the world to *safeguard for future generations* the great natural resource represented by the wale

89. See Antonio D'Amato, *supra*, note 50, at 190.

90. Convention on International Trade in Endangered Species of Wild Fauna and Flora, Mar. 6, 1973, 27 U.S.T. 1087, 993 U.N.T.S. 243, *reprinted in* BUNDESGESETZBLATT II [BGBl. II] 773 (1975)(F.R.G.); V Rüster & Simma, *supra* note 23, at 2228 ("RECOGNIZING that wild fauna and flora in their many beautiful and varied forms are an irreplaceable part of the natural systems of the earth which must be protected for this and the generation to come"); Convention for the Protection of the Mediterranean Sea, Feb. 16, 1976, pmbl., 15 I.L.M. 290 ("[T]he Contracting Parties are fully aware of their responsibility to preserve the marine environment of the Mediterranean Sea area as a common heritage for the benefit and enjoyment of present and future generations."); Convention on the Conservation of Migratory Species of Wild Animals, June 23, 1979, pmbl., para. 2, 19 I.L.M. 15; XXIII Rüster & Simma, *supra* note 23, at 1 ("AWARE that each generation of man holds the resources of the earth for future generations and has an obligation to ensure that this legacy is conserved and, where utilized, is used wisely;").

91. D'Amato, *supra* note 50, at 190.

92. See D'Amato, *supra* note 50, at 196 (maintaining that the Right of Future Generations approach is "too dependent upon finding an articulate link to the improvement of the *human* condition"). This argument has been rejected by Brown Weiss, *supra* note 4, at 198. Weiss argues that intergenerational equity is an equity "with regard to the care and use of the planet, which is explicitly rooted in the recognition that the human species is part of the natural system." *Id.* 199 n.3. Yet the author goes on to say that "this implies great respect for the natural system of which we are part, but it *does not imply that all other living creatures are or should be treated equally.*" *Id.* (emphasis added). Since Weiss rejects the idea that non-human species have a prima facie equal right to survival, it is difficult to read the notion of anthropocentrism out of her approach. To view the protection of natural objects as the protection of unborn generations is to see things "the homocentric way". See Stone, *Should Trees Have Standing?*, *supra* note 2, at 475.

93. 1931 Whaling Convention, *supra* note 28.

94. Convention on the Regulation of Whaling, Dec. 2, 1946, 62 Stat. 1716, 161 U.N.T.S. 72, (hereinafter 1946 Whaling Convention).

95. See *supra* note 28 and accompanying text.

stocks".⁹⁶ The Charter for Economic Rights and Duties of States⁹⁷ also includes this broader vision of the scope of environmental protection by providing that "the protection, preservation and enhancement of the environment for the *present and future generations* is the responsibility of all States ..."⁹⁸

The most comprehensive document in the context of "fairness towards future Generations"⁹⁹ is the Stockholm Declaration of the United Nations Conference on the Human Environment.¹⁰⁰ This Declaration sets forth a set of "common principles to inspire and guide the peoples of the world in the preservation and enhancement of the human environment."¹⁰¹ Although not of formally binding character,¹⁰² the Declaration was hailed as "the first acknowledgement by the community of nations of new principles of behavior and responsibility which must govern their relationship in the environmental era."¹⁰³ The set of principles set forth in the Declaration starts with a provision that "man ... bears a solemn responsibility to protect and improve the environment for *present and future generations*"¹⁰⁴ and subsequently asserts that "the natural resources of the earth ... must be safeguarded for the benefit of present and future generations through careful planning and management."¹⁰⁵ Also, the duty to protect humankind's environment for the sake of future generations has found expression in the Resolution of the United Nations General Assembly 35/8 which proclaims the historical responsibility of States for the preservation of nature for present and future generations.¹⁰⁶ Most recent expressions of future

96. 1946 Whaling Convention, *supra* note 94, at 72 (emphasis added).

97. Charter for Economic Rights and Duties of States, G.A. Res. 3281, 29 U.N. GAOR, 29th Sess., Supp. No. 31, at 50, U.N. Doc A/9631 (1975), 14 I.L.M. 251 (1975).

98. *Id.* (emphasis added).

99. For the fairness of the future generation approach, see generally EDITH BROWN WEISS, IN FAIRNESS TO FUTURE GENERATIONS: INTERNATIONAL LAW, COMMON PATRIMONY AND INTERGENERATIONAL EQUITY (1989).

100. Stockholm Declaration, *supra* note 23, at 1416 (emphasis added).

101. Louis B. Sohn, *The Stockholm Declaration on the Human Environment*, 14 HARV. INT'L L.J. 423 (1973)(footnote omitted).

102. In the questionnaire sent to the Preparatory Committee by the Secretary General of the United Nations (U.N. Doc. A/CONF.48/PC/WG.1/CPR.4, Add. 1 and 2) the Committee's view on the legal effect of the Document was that "by its very nature, the Declaration should not formulate legally binding provisions" U.N. Doc A/CONF.48/PC/9, para. 33., *quoted in* Sohn, *supra* note 101, at 426. The Statute of the International Court of Justice names three sources of international law: treaties, international custom, and general principles of law. Statute of the International Court of Justice, Art. 38, T.S. No. 933 (1945).

103. Debate of the Second Committee of the General Assembly of the United Nations, see Sohn, *supra* note 101, at 432.

104. Stockholm Declaration, *supra* note 23, at 1416 (emphasis added).

105. *Id.* (emphasis added).

106. Historical Responsibility of States for the Preservation of Nature for Present and Future Generations, G.A. Res. 35/80, U.N. GAOR, 35th Sess., Supp. No. 48, at 15, U.N. Doc A/35748 (Oct. 30, 1980).

generations protection can be found in the Rio Declaration and related documents of the Earth Summit.¹⁰⁷ Finally, all instruments speaking of "sustainability", "sustainable development", or "sustainable use" are expressing a concern for the interest of future generations since "sustainable use" means maintaining nature's potentials to also meet the needs of future generations.¹⁰⁸

All the aforementioned treaties suggest that we have to look beyond the immediate interest of the present generation. By including the interests of future generations, these treaties have enlarged the range of interests to be taken into account and therefore enhanced the protective potential of multilateral instruments aiming at environmental protection. Yet they do not transcend the anthropocentric approach to environmental protection. The central document in this context, the Stockholm Declaration, leaves no doubt in its preamble that what matters is the welfare of humankind. The Declaration proclaims:

[M]an is both creature and molder of his environment, which gives him physical sustenance and affords him the opportunity for intellectual, moral, social and spiritual growth. In the long and tortuous evolution of the human race on this planet a stage has been reached when, through the rapid acceleration of science and technology, man has acquired the power to transform his environment in countless ways and on an unprecedented scale. Both aspects of man's environment, the natural and the man-made, are essential to his well-being and to the enjoyment of basic human rights – even the right to live itself.¹⁰⁹

107. See generally *Earth Summit*, *supra* note 30. *Rio Declaration*, *supra* note 30, principle 3 ("The right to development must be fulfilled so as to equitably meet developmental and environmental needs of present and future generations."); Report of the Intergovernmental Negotiation for a Framework Convention on Climate Change on the Work of the Second Part of Its Fifth Session, Held at New York From 30 April to 9 May 1992, Distr. General A/AC.237/18 (Part II)/Add.1 15 May 1992, reprinted in *Earth Summit*, *supra*, at 59 [hereinafter *Climate Change Report*] ("Recalling the provisions ... on protection of global climate for present and future generations of humankind"); United Nations Environment Programme Convention on Biological Diversity 5 June 1992, reprinted in *Earth Summit*, *supra*, at 82 [hereinafter *Biodiversity Convention*] ("Determined to conserve and sustainably use biological diversity for the benefit of present and future generations.").

108. See *Biodiversity Convention*, *supra* note 107, article 2 ("'Sustainable use' means the use of components of biological diversity in a way and at a rate that does not lead to the long-term decline of biological diversity, thereby maintaining its potential to meet the needs and aspirations of present and future generations."); *UNCED Forest Principles*, *supra* note 30, principles/elements 5.(a) ("... land tenure arrangements which serve as incentives for the sustainable management of forests."); *Rio Declaration*, *supra* note 30, principle 1 ("Human beings are at the centre of concerns for sustainable development.").

109. Stockholm Declaration, *supra* note 23, at 1416.

The Working Group which drafted this first paragraph of the Preamble¹¹⁰ noted the following points:

- Man is the nucleus of all efforts to preserve and enhance the environment,
- Man's life is affected by his environment which in turn is affected by his activities,
- The maintenance of a safe, healthy and wholesome environment is indispensable to man's well-being and to the full enjoyment of his basic human rights, including the right to life itself,¹¹¹

Thus, the intergenerational dimension offered by the future generations approach clearly remains within the boundaries of anthropocentrism. For "sustainability" as the new term for future generations protection, the Rio Declaration explicitly states that "Human beings are at the centre of concerns for sustainable development"¹¹², thereby formulating the core belief of anthropocentrism that humans are the measure of all things. Still, regarding our overall thesis of a step by step development we can hold that acknowledging the interest of future generations as a relevant factor in environmental law opens a new stage. Where before only present needs were considered, future generations protection calls for a new kind of interpretation of environmental instruments in the light of long-term effects. Thus, international environmental law becomes intergenerational where it used to be sociocentric.

2. Intergenerational Equity

Both the natural resource management and the animal protection based on utilitarian grounds, and the avoidance of animal suffering and the pollution management of human rights theory focus on the interest of the present generation. But what is the anthropocentric ethic behind international instruments that speak of "the benefit of all concerned, including future generations,"¹¹³ of protection "for the benefit and enjoyment of future generations,"¹¹⁴ or of recognizing "the importance of natural

110. U.N. Doc A/CONF.48/PC.12, Annex I, at 1 (1971), see Sohn, *supra* note 101, at 436.

111. *Id.*

112. *Rio Declaration*, *supra* note 30, principle 1.

113. Regional Convention for the Conservation of the Red Sea and Gulf of Aden Environment, Feb. 14, 1982, pmbl., *reprinted in* MULTILATERAL TREATIES, *supra* note 39, at 144 (emphasis added).

114. Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region, Mar. 24, 1983, pmbl., *supra* note 40 (emphasis added); Convention for the Protection, Management and Development of the Marine and Coastal Environment of the Eastern African Region, Jun. 21, 1985, pmbl., *reprinted in* MULTILATERAL TREATIES, *supra* note 39, at 324; Convention for the Protection of the Natural Resources of the South Pacific Region, Nov. 24, 1986,

resources for ... *future generations*?"¹¹⁵ The adequate approach in environmental ethics to reflect these notions is the *principle of intergenerational equity*, mainly expressed in John Rawls's theory of justice.¹¹⁶

Rawls's assumes that only such principles can be just which treat the generations equally.¹¹⁷ Societies have to acknowledge the necessity of an environmental reserve whose scope is to preserve a fair amount of natural resources for future generations. This approach, which establishes "intergenerational equity",¹¹⁸ requires modesty of mankind not only as a matter of how much nature is preserved (quantitative aspect), but also as a matter of biodiversity (qualitative aspect),¹¹⁹ since present generations cannot know how useful specific existing resources will be in the future.¹²⁰ Still, intergenerational equity cannot extend to a non-anthropocentric preservation of nature: be it the present or the future generations, humankind remains the measure of all things and it is humankind's interest which will determine the extent of environmental protection.¹²¹

pmbl., 26 I.L.M 38, at 41; *reprinted in* MULTILATERAL TREATIES, *supra* note 39, at 372.

115. Asean Agreement on the Conservation of Nature and Natural Resources, July 9, 1985, pmbl., *reprinted in* MULTILATERAL TREATIES, *supra* note 39, at 343 (emphasis added).

116. *See* RAWLS, *supra* note 6. For other proponents of the future generations approach, see OBLIGATION TO FUTURE GENERATIONS (R.I. Sikora & Brian Barry eds. 1978); D. Clayton Hubin, *Justice and Future Generations*, 6 PHILOSOPHY AND PUBLIC AFFAIRS 79 (1976); Edwin Delattre, *Rights, Responsibilities and Future Generations*, 82 ETHICS 254-58 (1972); Martin Golding, *Obligations to Future Generations*, 56 MONIST 85-99 (1972); Peter S. Wenz, *Ethics, Energy Policy and Future Generations*, 5 ENVIRONMENTAL ETHICS 195-209 (1983). The restriction of the use of resources in the interest of future generation is also rooted in the principles of Islam. *See* ISLAMIC PRINCIPLES FOR THE CONSERVATION OF THE NATURAL ENVIRONMENT 13 (B. Kader et. al. eds., 1983). The Judeo-Christian tradition, on the other hand, might have contributed to the current ecological crisis. *See* the discussion in Tribe, *supra* note 2, at 1332-4.

Other authors than Rawls frame the issue as the rights of "unborn" or "future" generations. *See* Joel Feinberg, *The Rights of Animals and Unborn Generations*, in PHILOSOPHY AND ENVIRONMENTAL CRISIS, *supra* note 68, at 42 ("[I]t makes sense to speak of the rights of unborn generations against us, and ... we might well say that future generations do have rights correlative to our present duties toward them."); Brian Barry, *Circumstances of Justice and Future Generations*, in OBLIGATIONS TO FUTURE GENERATIONS 243 (Richard Sikora & Brian Barry eds. 1978); *Idem*, *Justice Between Generations*, in LAW, MORALITY AND SOCIETY 275 (P. M. S. Hacker & J. Raz eds. 1977). There are many practical problems with the future generations argument. *See* WEISS, *supra* note 61, at 1540; EDITH BROWN WEISS, IN FAIRNESS TO FUTURE GENERATIONS 22 (1989).

117. *See* RAWLS, *supra* note 6, at 23. Rawls restricts his theory to the human sphere, even though he mentions that cruelty to animals and the destruction of species "can be a great evil". *Id.*, at 512. However, the principle of intergenerational equity can easily be extended to our relation to nature. The connection between justice and generational equity is also drawn by Feinberg. *See* FEINBERG, *supra* note 116, at 43 ("But from the perspective of our remote descendants [protecting our environment] is basically a matter of justice, of respect for their rights.").

118. *See* WEISS, *supra* note 61, at 1540 (using this fitting term for Rawls' approach).

119. The future generations argument favors preservation over any irrevocable change of the natural environment. *See* WENZ, *supra* note 7, at 25.

120. *Cf.* WEISS, *supra* note 61, at 1540. The anthropocentrism of the intergenerational equity criterion cannot, however, explain why the suffering of non-humans should be avoided.

121. *See* Tribe, *supra* note 2, at 1335-6, 1336 ("The only entities that can 'count' in a calculus of end-maximization, whether utilitarian or contractarian, are those entities that possess their own systems of ends or at least the capacity to experience pleasure and pain, ...")(citation omitted). *Cf. also* Rio Declaration, *supra* note 30, principle 1 ("Human beings are at the centre of concerns for sustainable development.").

Accordingly, intergenerational equity can explain environmental provisions reaching beyond the interest of currently living humans, but it cannot give meaning to protection of nature's own interest independent of humankind's needs and wants. Relating this to our overall thesis, we can state that the second stage of development is transcended when non-anthropocentric views enter the realm of international environmental instruments. This leads to our third stage, the nature's rights approach.

C. THE THIRD STAGE: THE EMERGING NON-ANTHROPOCENTRIC PARADIGM AND NATURE'S OWN RIGHTS

1. Intrinsic Value in the Treaties

The assertion of nature's intrinsic value made its entry into the law-making process of multilateral environmental instruments only recently.¹²² By proclaiming that nature has a value which is independent of human interests, these multilateral instruments use a very different kind of argument¹²³ and thereby express a paradigm shift in environmental law.¹²⁴ The conceptual difference between recognizing non-anthropocentric value and evaluating all other kinds of anthropocentric values is best expressed in the following introductory sentence of the Biodiversity Convention: "Conscious of the intrinsic value of biological diversity and of the ecological, genetic, social, economic, educational, cultural, recreational and aesthetic values of biological diversity and its components, ... [we have] agreed as follows: ...".¹²⁵ This passage not only draws a clear line between intrinsic value of nature on the one hand, and all kinds of anthropocentric values on the other, but also puts non-anthropocentrism first, thereby emphasizing its importance as a new approach. For these reasons, we take intrinsic value recognition as a distinctive third stage for our overall thesis about a step by step development of international environmental instruments.

In 1982, the General Assembly of the United Nations adopted the World Charter for Nature including the provision that "*every form of life is unique, warranting respect regardless of its worth to man.*"¹²⁶ With this

122. Convention on the Conservation of European Wildlife and Natural Habitats, Sep. 19, 1979, EUROP. T.S. No. 104 (contains a first mention of nature's intrinsic right).

123. Arguments for the intrinsic value of nature are a class of arguments completely different from arguments for the instrumental value founded on the usefulness of nature for humankind. See Glennon, *supra* note 5, at 7.

124. For the definition of paradigm and the meaning of paradigm shift, see *supra* note 6.

125. *Biodiversity Convention*, *supra* note 107, preamble (emphasis omitted).

126. World Charter for Nature, G.A. Res. 37/7, U.N. GAOR, 37th Sess., Supp. No. 51, pmb., para. 3(a), at 17, U.N. Doc. A/37/51 (1982) (emphasis added)[hereinafter World Charter for Nature], *reprinted in* 22 I.L.M. 455 (1983); Ruster & 2nd, *supra* note 40, at 21, 24.

statement, the Charter asserts the uniqueness of every form of live and nature's existence as an end in and of itself. The calls for protecting living nature without the prospective gain that humankind derives from an intact ecosystem has found a voice in a number of recent environmental treaties and declarations. By relying on nature's intrinsic value, these instruments modify the traditional international framework for ensuring nature's protection.

The first multilateral treaty giving rise to the assertion of a non-anthropocentric basis for environmental protection is the Convention on the Conservation of European Wildlife and Natural Habitats.¹²⁷ This convention speaks of an "intrinsic value of nature,"¹²⁸ thus suggesting that there is no mandatory link between environmental integrity and human needs. Also, the formulation is not limited to living nature: nature as such, including all non-living elements of natural habitats, is acknowledged as intrinsically valuable.

The most important document in this third category, however, is the World Charter for Nature.¹²⁹ The Charter is the result of a seven year long effort to draw a set of "principles of conservation by which all human conduct affecting nature is to be guided and judged."¹³⁰ The Charter was adopted by 111 - 1 votes, the United States being the only country not to endorse its proclamation.¹³¹ The World Charter for Nature proclaims that "every form of life is unique, warranting respect regardless of its worth to man."¹³² In their commentary to the World Charter for Nature, Burhenne and Irwin state that these phrases define the relationship between mankind and the rest of nature as one including responsibilities of humans towards their environment.¹³³

The World Charter for Nature consistently avoids the term "environment", using the term "nature" instead. This new human-independent terminology is in itself a reference to non-anthropocentrism and reinforces the new line of thought which transcends the anthropocentric approach.¹³⁴

127. *See supra*, note 122.

128. *Id.*

129. World Charter for Nature, *supra* note 126.

130. WOLFGANG BURHENNE & WILL A. IRWIN, THE WORLD CHARTER FOR NATURE / LA CHARTE MONDIALE DE LA NATURE PREFACE (1986).

131. *Id.* at 16.

132. World Charter for Nature, *supra* note 126, pmb1.

133. *Id.*

134. *Cf.* BURHENNE & IRWIN, *supra* note 130, at 130. "Nature" means created world in its entirety. *See* WEBSTER'S THIRD INTERNATIONAL DICTIONARY OF THE ENGLISH LANGUAGE 760 (unabridged ed., Philip Babcock Gove ed. 1986). "Environment" are all surrounding conditions. *See id.*, at 1508. Therefore, environment always needs a related subject which is environed; in this case humans. Nature, in contrast, is defined without such reference to humankind. Accordingly, it is a more suitable term for instruments with a non-anthropocentric approach.

The Charter stipulates that the principles set forth "shall be reflected in the law and practice of each state, as well as at the international level",¹³⁵ thereby making it clear that the recognition of an intrinsic value of nature and the duties of mankind deriving from it are to constitute a new general approach both on the international and the national level.

The World Charter for Nature was proclaimed by the General Assembly of the United Nations. General Assembly resolutions are not formally binding, since they do not constitute a formal source of law within the traditional categories of sources of international law.¹³⁶ Yet few would deny the importance and formative influence of General Assembly resolutions in the development of international law.¹³⁷ In fact, General Assembly resolutions are seen as an "expression of common interests and the 'general will' of the international community."¹³⁸ It is also worth noting that the General Assembly adopted the World Charter for Nature in the form of a solemn declaration, the same as used for the Universal Declaration of Human Rights. This gives it a special standing on the platform of international law. It is not only "a moral code of behavior in human relationship with nature"¹³⁹ but also a document that forms part of the "law of the United Nations"¹⁴⁰ and which is being invoked by tribunals.¹⁴¹ Furthermore, it plays an important role in giving evidence of an *opinio iuris* in customary international law, thus laying the foundation for a universally valid claim for the recognition of an intrinsic value of nature.¹⁴²

Summarizing the analysis in this section, we can state that international documents relating to the protection of the environment have a history which is well over a hundred years old.¹⁴³ Over this period, the underlying rationale of environmental instruments has changed dramatically. From the recognition that environmental protection is necessary for the maintenance of the quality of life of the present generation these instruments have

135. World Charter for Nature, *supra* note 126.

136. See Statute of the International Court of Justice, art. 38, *supra* note 102 (The Statute recognizing three sources of international law: treaties, international custom, and general principles of law).

137. See BARRY E. CARTER & PHILLIP E. TRIMBLE, INTERNATIONAL LAW 115 (1991).

138. *Id.*

139. World Charter for Nature, *supra* note 126, at 128.

140. See IAN BROWLIE, PRINCIPLES OF PUBLIC INTERNATIONAL LAW 571 (1986).

141. *The State (Duggan) v. Tapley*, ILR 18 (1951), at 342; *Iranian Naturalization Case*, ILR 60, 204 at 207; *Right to Marry Case*, ILR 72, 295 at 298.

142. For a different *opinio juris* approach to global environmental protection which is based on the value of global environmental resources rather than the intrinsic value of nature, see Glennon, *supra* note 5, at 34-5.

143. It is difficult to establish the date on which the very first environmental treaty was ratified. XI Rueter & Simma, *supra* note 23, at 5377 reprints the Treaty Between Her Majesty the Royal Empress and Her Serenity, the Republic of Venice, Concerning the Definition of Borders, Aug. 17, 1754 (regarding the free flow of water and use for fishing) as the first environmental treaty.

evolved into devices directed at sustaining the life-support systems of the planet for the generations yet to come. The anthropocentric visions contained in these first two stages are transcended with the introduction of the intrinsic value of nature in recent environmental instruments, notably the World Charter for Nature. To acknowledge an intrinsic value of nature means humankind is no longer the sole yardstick against which the utility of environmental protection must be measured. Rather, the new approach recognizes nature as a legal entity which is entitled to a certain amount of integrity independent of human interest. This recognition is a shift in the approach towards environmental issues. It signals the emergence of a new environmental paradigm which leads to taking nature's rights seriously.

2. From Intrinsic Value to Non-Anthropocentrism

Once we acknowledge that the interest of humans is not congruent with the interest of nature as a whole,¹⁴⁴ anthropocentrism is too limited a world view to grasp the new reality.¹⁴⁵ Acknowledging an intrinsic value of nature means acknowledging the value of natural entities as such,¹⁴⁶ i.e. of animals and other so-called "natural objects."¹⁴⁷ It thereby excludes any restrictive definition of value in terms of utility for present or future generations of humans.¹⁴⁸ The newly acknowledged legal position beyond human interest we will call "nature's rights." The nature's rights approach is an extension of the historical concept of rights.¹⁴⁹ Humans are no longer seen as "apart from nature" but as "a part of nature".¹⁵⁰ Not only humans but every entity

144. See Tribe, *supra* note 2, at 1331 ("[T]he best interests of individual persons (and even of future human generations) are not demonstrably congruent with those of the natural order as a whole, even if such a congruence can be established as between individuals and the human communities in which they live.").

145. See Elder, *supra* note 2, at 286 (stating that the acknowledgment of an inherent value of natural entities is the exclusive perspective of non-anthropocentric ecologists).

146. Entities of nature are for example: Humans, children, the senile, the temporarily insane, the permanently insane, embryos, newborn, sentient animals, non-sentient animals, plants, artefact, crystals, rivers, rocks, species, ecosystems, landscapes, biosphere. See Mary Midgley, *Duties Concerning Islands*, in ELLIOT, *supra* note 6, at 166-181, 174.

147. See Stone, *Should Trees Have Standing?*, *supra* note 2, at 456.

148. The environmental crisis is caused by a misjudgment of value; protecting environmental entities because of their intrinsic value rather than utility to humans is not an academic distinction, it shows in every balancing of interests. See MEYER-ABICH, FRIEDEN, *supra* note 6, at 44, 48.

149. The earliest proponents of this approach are Clarence Morris and Christopher Stone. See Clarence Morris, *The Rights and Duties of Beasts and Trees: A Law Teacher's Essay for Landscape Architects* 17 JOURNAL OF LEGAL EDUCATION 189, 190, 191 (1964); Stone, *Should Trees Have Standing?*, *supra* note 2, at 450-501.

150. The former view can be traced back to the religious tradition in Western philosophy, the latter has its roots in the cartesianism of René Descartes, Benedict Spinoza, and Gottfried Leibniz. See Walter H. O'Briant, *Man, Nature, and the History of Philosophy*, in PHILOSOPHY AND ENVIRONMENTAL CRISIS, *supra* note 68, at 79-89. It is also closer to the American Indian view of nature. See J. Baird

of nature, carries the potential to have rights on its own. In the strict distinction of legal subjects and legal objects, natural entities are moving from the object status to the status of potential right-holders, i.e. legal subjects.¹⁵¹ Instead of being at the free disposal of humans, natural entities now gain a status that requires a specific justification for every action affecting their integrity as right-holders – they are *prima facie* non-disposable.¹⁵² The destruction of the Brazilian rain forest and the extinction of the African elephant, for example, are not only dangerous because of their effects on the global temperature and on African tourism; they are not only harmful because they diminish the diversity of the earth's wildlife and thereby will ultimately affect humankind;¹⁵³ instead, we have to see them as violations of rights – rights that belong to animals and plants as entities of nature.

3. Advantages of the Nature's Rights Approach Over the Duties Towards Nature Approach

Environmental ethics beyond anthropocentrism can focus either on the duties of humans towards nature¹⁵⁴ or on the original rights of nature.¹⁵⁵ A typical example for duties towards nature is expressed by the recognition "that man has a moral obligation to respect all living creatures."¹⁵⁶ To acknowledge duties towards entities of nature¹⁵⁷ does not necessarily mean that the beneficiaries of those duties also possess correlative rights.¹⁵⁸ We will now try to explain why the nature's rights approach is more closely connected to the notion of intrinsic value than any duties towards nature concept.

One reason bears on the experience that "there will be resistance in giving the thing rights until it can be seen and valued for itself; yet it is hard to see it and value it for itself until we can bring ourselves to give it

Callicott, *Traditional American Indian and Traditional Western European Attitudes Towards Nature: An Overview*, in ELLIOTT, *supra* note 6, at 231-259, 245.

151. See LEIMBACHER, *supra* note 1, at 35.

152. *Id.*, at 38.

153. Compare WEISS, *supra* note 61, at 1534.

154. See JOHN CHIPMAN GRAY, *THE NATURE AND SOURCES OF LAW* 43-45 (2d ed. 1963); W.D. ROSS, *THE RIGHT AND THE GOOD* 48-56 (1930).

155. Both, moral rights and moral duties are usually considered to be claims which can override purely utilitarian considerations and are therefore stronger than the anthropocentric approaches. Cf. WARREN, *The Rights of the Non-Human World*, in ELLIOT, *supra* note 7, at 109-134, 112.

156. Pet Animal Convention, *supra* note Fehler! Textmarke nicht definiert., pmb1.

157. For examples of such entities, see *supra* note 146.

158. See FEINBERG, *supra* note 116, at 45. Also, having rights does not automatically include having duties; nature cannot have duties but might nevertheless have rights. See LEIMBACHER, *supra* note 1, at 50.

rights."¹⁵⁹ In other words, rights and intrinsic value are notions we intuitively connect, attributes we tend to accord jointly or not at all. The other reason is that the nature's rights approach offers a more suitable rationale for the development in international environmental law. For instance, the nature's rights approach offers a more stringent framework than the duties towards nature approach since rights grant generalized legal competence, they are open-ended, whereas duties are broken down into specific rules of limited scope.¹⁶⁰ Also, it is often contextual interpretation which determines the application of legal provisions. Acknowledging nature's rights would make the respective natural entity a subject whereas it is merely an object of human considerations in the context of duties towards nature.¹⁶¹ Comprehensive legal protection is therefore more likely to be achieved within a rights concept than within a duties concept. Finally, the rights approach is stronger than the duties approach because it encourages the development of a new body of law.¹⁶² Similar to the development of business law for the rights of corporations, there will be a development of law for nature, with its own dynamic,¹⁶³ its separate exceptions, and its specific methodology.¹⁶⁴ Whereas the duties concept continues to revolve around humans, the nature's rights approach opens the legal system for a fresh start in the legal dealing with nature.

The nature's rights approach, however, faces one challenge that the duties concept can avoid: the problem of subjectivity of rights, i.e., the question which entities of nature can have rights. Protagonists of the duties towards nature approach argue that to some entities of nature, stone formations, for example, rights cannot be meaningfully predicated,¹⁶⁵ because these natural entities are conceptually incapable of having rights on their own. Since parts of nature cannot have rights, nature as a whole should merely be treated as an entity which warrants certain duties towards it.

159. See STONE, *supra* note 2, at 456. Cf. also Huffmann, *supra* note 2, at 55-56 (pointing out the advantages of a rights approach over a duties approach).

160. See Stone, *Should Trees Have Standing?*, *supra* note 2, at 488; D'Amato & Chopra, *supra* note 29, at 51.

161. See Stone, *Should Trees Have Standing?*, *supra* note 2, at 488. It makes a difference if a battered wife has a tort claim against her husband, or if the case is merely treated as a failure to perform a duty. See D'Amato & Chopra, *supra* note 29, at 52. In natural-law terms: "[T]he idea of having 'rights' includes a notion of moral rights that can inform existing law or even push it in a certain direction." *Id.* at 51.

162. See Stone, *Should Trees Have Standing?*, *supra* note 2, at 489.

163. "[T]he development of a jurisprudence regarding whales is more likely if whales are perceived by courts as rights holders, just as a jurisprudence of corporate law has developed as a result of viewing corporations as legal entities entitled to sue and be sued and even to be prosecuted for corporate crime." D'Amato & Chopra, *supra* note 29, at 52.

164. D'Amato and Chopra argue that even the rules regarding the burden of proof may depend on the presence of rights instead of mere duties. See D'Amato & Chopra, *supra* note 29, at 52.

165. See FEINBERG, *supra* note 116, at 44.

According to this criticism, any non-anthropocentric approach must focus on human duties towards rather than rights of nature.

Yet the question really is: how far-reaching are legal and moral "rights"? The proponents of a restrictive view of nature's rights argue that species other than humans are not moral agents, i.e., they cannot act rightly or wrongly since they have no duties or obligations, and that these species are incapable of understanding, of claiming rights on their own, and of pressing such claims through representatives.¹⁶⁶ Implicitly, this position denies the possibility of meaningfully assigning moral and legal rights to natural objects other than fully competent humans. Such reasoning can be disproved by applying it to newborns and mentally retarded humans.¹⁶⁷ Both newborns and mentally retarded lack the capacity to act rightly or wrongly but can nevertheless have moral and legal rights.

Another line of argument, called "the interest principle",¹⁶⁸ assumes that the prerequisites of rights, representation and bonification, are only possible in the presence of interest, i.e., the compound of desires, aims, and beliefs resulting from a rudimentary cognitive awareness, and that this interest can only belong to humans or animals but not to plants, be it an individual plant or the whole species.¹⁶⁹ This argument leads to the consequence that irreversibly injured "vegetating" humans cannot have rights,¹⁷⁰ a notion that is inconsistent with any human rights approach and legal systems on the international and national level.

Restricting rights to beings who are aware of their interests would make it conceptually impossible to accord them to fetuses or newborn infants. In our legal reality, however, fetuses and newborns are treated as if they had rights, contingent upon birth and survival, because their potential to have interests requires this form of protection.¹⁷¹ This consideration leads to the most important conclusion about the capacity to have rights: There is no single formal requirement; the concept of "rights" is instrumental, i.e., it is merely a legal and moral instrument of protection.¹⁷² That is the reason why

166. Cf. FEINBERG, *supra* note 116, at 46-49.

167. See FEINBERG, *supra* note 116, at 60.

168. See NASH, *supra* note 43, at 126.

169. See FEINBERG, *supra* note 116, at 51-56; FEINBERG, RIGHTS, JUSTICE, AND THE BOUNDS OF LIBERTY 159-184 (1980).

170. Feinberg calls these rightness humans "incorrigible human vegetables". See FEINBERG, *supra* note 116, at 61.

171. See FEINBERG, *supra* note 116, at 62-66.

172. See Tribe, *supra* note 2, at 1342 ("Yet it remains true that treating a class of entities as rights-holders is consistent with regarding their protected status as a mere juristic convention. Thus, although American law has long accepted the independent status of corporations, no one would suggest today that such entities are anything but legal constructs."); Stone, *Should Trees Have Standing?, Trees Revisited*, *supra* note 2, at 39 (stating that according rights is morally adequate whenever doing so advances human welfare).

lifeless corporations can have rights.¹⁷³ In other words, whatever entity needs protection which can best be given in the form of a right will have the capacity to have rights.

It follows that, relying on their need for protection, all entities of nature are capable of having rights.¹⁷⁴ Since only rights can provide the full protection which natural entities need to guard their intrinsic value,¹⁷⁵ there is no reason why an approach beyond anthropocentrism should focus only on human duties.¹⁷⁶ The narrower concept of human duties towards nature is part of the broader concept of nature's rights anyway. Therefore, the new paradigm in international environmental law must be seen as an expression of the nature's rights approach. The paradigm shift in environmental law

Rights are instrumental to give nature protection because of its intrinsic value, but the intrinsic value itself is not instrumental. Instead, it is stated by the framers of international environmental instruments and thereby assumed. To acknowledge nature's rights on the basis of an assumed intrinsic value is not the same as arguing why it is "morally appropriate to do so". See Elder, *supra* note 2, at 288-9, 291 (referring to the idea of intrinsic values and nature's rights as "murky intuitive claims"). The intrinsic value cannot be proved and need not be proved. When our legal reality assumes the intrinsic value of nature and thereby changes the paradigm of international environmental law, questions like the one, if the concept of intrinsic values is merely an expression of "aesthetic objectivism," become meaningless. *But see* Glennon, *supra* note 5, at 7-8 nn.54-63 (trying to find persuasive arguments why intrinsic values should be assumed independent of the fact that they are assumed); Elder, *supra* note 2, 289 (questioning the moral appropriateness of the intrinsic value assumption and its expression in the nature's rights approach).

173. The personifying of modern corporations is not self-evident. It was for example an issue in the cases *Bank of the United States v. Deveaux* 9 U.S. (5 Cranch) 61 (1809) and *Trustees of Dartmouth College v. Woodward*, 17 U.S. (4 Wheat.) 518 (1819). "Throughout legal history, each successive extension of rights to some new entity has been, theretofore, a bit unthinkable." Stone, *Should Trees Have Standing?*, *supra* note 2, at 453. Nash combines humans and other species in his model of the expanding concept of rights, including English Barons (1215), American Colonists (1776), Slaves (1863), Women (1920), Native Americans (1924), Laborers (1938), Blacks (1957), and finally Nature with the endangered species act (1973). See NASH, *supra* note 43, at 7.

174. See Tribe, *supra* note 2, at 1343 ("It seems likely that contemporary observers would view the independent legal status of environmental objects in essentially the same way that they view the concept of corporate existence. Affording legal rights to endangered species and threatened wilderness might thus be regarded as a convenient technique ... - in other words, as a useful but quite transparent legal fiction."). The extension of rights to natural entities helps environmentalists to better protect nature. See ROGENE A. BUCHHOLZ, *THE GREENING OF BUSINESS, PRINCIPLES OF ENVIRONMENTAL MANAGEMENT* 65 (1993).

175. See, however, STONE, *Trees Revisited*, *supra* note 2, at 24 (stating that although rights are a fundamental way of manifesting legal concern, such concern can be implemented by other arrangements, such as legal considerateness.). However, with that notion Stone merely sets a framework which will allow deviations from the traditional rights discourse when this is warranted by the special situation of nature as a rights holder. The same result can be achieved by qualifying the content and the extent of these rights.

176. One other approach is tried apart from duties towards nature and nature's rights approach. Glennon suggests an emerging *opinio juris* that all states can rightfully expect the future enjoyment of the global environmental resource (including some of its unique elements like the elephant), thereby suffering a legally cognizable injury if another state breaks its global environmental obligation to protect such resources. See Glennon, *supra* note 5, at 34-5. Even though Glennon argues that this approach is based, among other things, on the nature's rights approach ("These considerations [regarding natural objects themselves as having legal rights] suggest the outline of a general framework" *Id.* at 34), his model is clearly anthropocentric: The state's injury counts, not the injury of nature. The same is true for Shelton's idea of a human "right to environment." See Shelton, *supra* note 81, at 105.

leads to acknowledging nature's rights not merely as a reflex of human duties, but as a legal position on its own. This acknowledgment we will call "taking nature's rights seriously."

In summary, we have completed the first part of our main thesis by arguing that international environmental instruments show a step by step development with three distinct stages. Third stage instruments acknowledge an intrinsic value of nature. Environmental ethics linked to that stage must enter the world of non-anthropocentric world-views, thereby causing a paradigm shift in environmental law. We further argued that non-anthropocentrism by merely acknowledging humankind's duties towards nature would be an insufficient rationale for the comprehensive protection intended by third stage instruments. Therefore, non-anthropocentrism linked to third stage instruments is one that acknowledges nature's rights, thus confirming our thesis that the step by step development is one towards acknowledging nature's rights, or, as we prefer to say, taking nature's rights seriously.

III. PROBLEMS OF NON-ANTHROPOCENTRIC PARADIGMS AND TAKING NATURE'S RIGHTS SERIOUSLY

So far, we have only shown that there is a step by step development of legal instruments towards acknowledging nature's rights. This does not yet cover the last part of our main thesis, stating that nature's rights are being acknowledged in a biocentric perspective. In the following subsections, we complete our argument by specifying the non-anthropocentrism of third stage instruments as biocentrism (III.A). We also defend biocentrism against a strong line of criticism calling it an unnatural world-view (III.B). Finally, nature's rights are presented in a more detailed form by specifying the content of nature's rights that results from taking nature's rights seriously (III.C).

A. BIOCENTRISM AS THE RELEVANT NON-ANTHROPOCENTRIC VIEW

Having shown that a non-anthropocentric approach best explains third stage instruments, we now have to argue why biocentrism is the relevant form of non-anthropocentrism. Interpretation of third stage instruments depends on what concrete idea of nature's rights they express. A biocentric interpretation will generally be different from, say, a holistic one. Establishing biocentrism as the relevant approach also opens the way for a more detailed description of the content of nature's rights.¹⁷⁷

177. See *infra* part III.C. Biocentric elements can also be found as part of the U.S. Endangered

Selecting the relevant non-anthropocentric approach, however, requires that an overview about available approaches be given first. Since concepts, names, and definitions of non-anthropocentric approaches with their different religious¹⁷⁸ and scientific backgrounds are ambiguous,¹⁷⁹ a comprehensive classification does not yet exist. We distinguish the different approaches according to the number of and relationship between the subjects they acknowledge as real, or (in the legal context) as rightfully interested.¹⁸⁰ Holism, for example, knows only one subject, the world, with one single interest all natural entities participate in.¹⁸¹ In its fight against "atomism," Holism or "holistic ethic,"¹⁸² assumes that the value of a compound is more than the sum of its parts.¹⁸³ Physiocentrism, as another form of non-anthropocentrism, pictures every living and non-living entity as a separate subject of intrinsic value,¹⁸⁴ thereby opening the door for more than one interest.¹⁸⁵

To find a preliminary classification of non-anthropocentric approaches, we distinguish and define four of them. The first, holism¹⁸⁶, is the non-anthropocentric view standing for unity. In holism, there is only one interested entity, the world, with only one unitary interest; situations of conflicting interests are impossible.

Opposing that view, the second approach, biocentrism, as well as the third, physiocentrism, expresses diversity.¹⁸⁷ In biocentrism, humans are

Species Act. See Huffman, *supra* note 2, at 55-57.

178. See, e.g., Martin Rock, *Theologie der Natur und ihre anthropologisch-ethischen Konsequenzen*, in ÖKOLOGIE UND ETHIK 72 (Dieter Birnbacher ed., Stuttgart 1980).

179. See, e.g., Stone, *Trees Revisited*, *supra* note 2, at 47-89 (mixing environmental paradigms with strategies to transform these world-views into legal provisions).

180. The classification employs categories of quantity as used by Kant. These are unity ("Einheit"), diversity ("Vielheit"), and totality ("Allheit (Totalität)"). Cf. IMMANUEL KANT, KRITIK DER REINEN VERNUNFT B 106-11, A 80 (2nd ed. Riga 1787 [A], 1st ed. Riga 1781 [B]).

181. Holism sees reality as a whole like a tremendous, universal, living being. See ADOLF MEYER-ABICH, NATURPHILOSOPHIE AUF NEUEN WEGEN 377 (Stuttgart 1948) ("Die Wirklichkeit als Ganzes ist ein gewaltiges universales Lebewesen."). It has close ties to Platonic realism and is opposed to mechanism and Aristotelianism. See KLAUS MICHAEL MEYER-ABICH, WISSENSCHAFT FÜR DIE ZUKUNFT, HOLISTISCHES DENKEN IN ÖKOLOGISCHER UND GESELLSCHAFTLICHER VERANTWORTUNG 83-4 (München 1988). Holism as a world view extends to experimental and theoretical natural sciences as well as social sciences. *Id.* at 89-134.

182. The "land ethic" of Aldo Leopold (*supra* note 16) is considered one of the first major works in holistic ethics. See NASH, *supra* note 43, at 122-123.

183. See GUNTER, *supra* note 68, at 130-136.

184. See KLAUS MICHAEL MEYER-ABICH, AUFSTAND FÜR DIE NATUR, VON DER UMWELT ZUR MITWELT 90 (München 1990).

185. Physiocentrism seeks the status of subjectivity for elements (ground, water, air, and fire, i.e., energy) as well as compounds (landscapes, rivers, mountains, and even artefact). See MEYER-ABICH, FRIEDEN, *supra* note 6, at 182-9.

186. See *supra* note 181 and accompanying text.

187. Biocentrism is the same as Physiocentrism as a matter of the category quantity. It differs, however, in quality, since physiocentrism also acknowledges non-living entities as inherently valuable. A different terminology is used by Kuhlmann who distinguishes zoocentrism, biocentrism and ecocentrism without taking the paradigms holism, geocentrism, and physiocentrism as separate world-views even though he mentions them. See Kuhlmann, *supra* note 1, at 163.

equal to all other living entities of nature and competition is allowed among them. Natural competition of diverse entities even includes the extinction of some species (natural selection), as long as the rules of the game are fair. The same is true for the broader concept of physiocentrism which transcends the biotic nature by encompassing non-living entities and compounds.¹⁸⁸

Finally, the fourth approach, ecocentrism, focuses on the interrelationship of entities and their environment. Ecocentrism acknowledges more than one entity but does not focus on their individuality. Ecocentrism assumes harmony of diverse entities, especially harmony between humans and other entities of nature. It looks at nature's totality, i.e., its diversity seen as unity.¹⁸⁹ Since harmony is paramount for ecocentrism, any planned disturbance of this natural harmony is prohibited and competitiveness, particularly competition of humans with nature, is seen as a destructive rather than constructive factor.

Which of these approaches provides the relevant rationale for taking nature's rights seriously? In order to answer this question, we have to look at the approaches from the perspective of humans who drafted and adopted third stage environmental instruments. Since the development of legal instruments is a matter of majority decision, the criterion is which of the approaches is most likely to be adopted by a majority of humans. This will arguably be the approach that is closest to our current anthropocentric legal system. Applying this closeness criterion, the first approach, holism, fails because the idea of unity is opposed to the strong individualistic components of our legal systems. Ecocentrism as the fourth approach fails because it assumes an extent of harmony among interested right-holders that is not in keeping with our legal systems which rely on individualism, market mechanisms, and adversarial process. Therefore, biocentrism or physiocentrism are most likely to be the non-anthropocentric approaches of choice. They combine the acknowledgment of nature's rights with the notion of competitiveness. Biocentrism and Physiocentrism establish a "marketplace of interests" among natural entities.¹⁹⁰

Deciding between the biocentric and the physiocentric approach requires a clear distinction. Biocentrism is limited to living beings (animals, plants) where physiocentrism extends to every natural entity and compound (stone formations, rivers). Here again the criterion is which of the approaches is

188. "Competition" between non-living entities is reduced to physical influence, e.g. the water that forms the stone.

189. Cf. KANT, *supra* note 180, at B 111.

190. The term "marketplace" refers to the inherent competitiveness of the biocentric and physiocentric perspectives.

most likely to be adopted by the humans who initiated the acknowledging of an intrinsic value of nature. The context and language of third stage environmental instruments makes biocentrism the most appropriate approach. Protecting "every form of life,"¹⁹¹ trying to achieve the "survival"¹⁹² of natural entities, and conserving nature insofar as it construes "wildlife" and gives a "natural habitat"¹⁹³ indicates that living nature is the subject of intrinsic value. This view is best represented by biocentrism. Therefore, biocentrism is the relevant paradigm to rely on as a background rationale for the development of international environmental law.¹⁹⁴

B. DOES BIOCENTRISM RENDER THE PROTECTION OF NATURE "UNNATURAL"?

Acknowledging that biocentrism best explains the development towards nature's rights, we can say that taking nature's rights seriously means acknowledging a diversity of competing interests of living entities, human and non-human. But we must clarify why the inherent competitiveness of biocentrism does not render any protection of nature "unnatural" in the light of natural selection. Otherwise, a biocentric approach in international environmental law would only be a temporary one, since no development of environmental policies on the long run holds against general principles of nature.

Natural selection, i.e., the "preservation of favorable variations and the rejection of injurious variations,"¹⁹⁵ makes nature a rough place; it "is daily and hourly scrutinising, throughout the world, every variation, even the slightest"¹⁹⁶ and defines extinction of species not as a possible "accident" but as a natural event.¹⁹⁷ Nature, therefore, is just as actively killing her

191. World Charter for Nature, *supra* note 126, at 17 (emphasis added)

192. BURHENNE & IRWIN, *supra* note 130, at 131.

193. The Convention on the Conservation of European Wildlife and Natural Habitats, Sep. 19, 1979, EUROP. T.S. No. 104.

194. *Meyer-Abich* challenges every non-anthropocentrism short of physiocentrism as an act to substitute a big chauvinism by a small chauvinism, in this case human chauvinism by species chauvinism. See MEYER-ABICH, FRIEDEN, *supra* note 6, at 183. But even if the more comprehensive protection of non-living entities in physiocentrism would be the preferable approach ethically, we cannot decide for it in this context, i.e. as a background rationale for the present law, because there is not yet any instrument that explicitly acknowledges an intrinsic value of non-living entities. Therefore, non-living entities (water, ground, air, fire; landscapes, elements, artefact) derive protection only indirectly as a necessary environmental condition for the viability of living entities (humans, animals, plants).

195. CHARLES DARWIN, THE ORIGIN OF SPECIES BY MEANS OF NATURAL SELECTION 131 (J.W. Burrow ed., England: Penguin Books 1968)(1859).

196. DARWIN, *supra* note 195, at 133.

197. See DARWIN, *supra* note 195, at 153 ("[I]t follows that as each selected and favored form increases in number, so will the less favored forms decrease and become rare. Rarity ... is the precursor of extinction.").

creatures as she is involved in maintaining bio-diversity; she is involved in "struggle, conquest, and domination."¹⁹⁸ How can we arguably give every living natural entity rights if nature itself does not warrant the existence of such entities? Is there a biocentric middle way allowing for a combination of competition and protection, or does the nature's rights approach always mean "Down with the survival of the fittest" as Elder argues?¹⁹⁹

Two answers are available to this critical question of Darwinism. The first is hidden inside the natural selection approach itself. Natural selection "will always act with extreme slowness,"²⁰⁰ species will have time to adapt to natural modifications of their habitat. These are the rules of a fair natural game that gives every species the opportunity to adapt or perish. This self-regulative framework collapses when one species, humankind, purposefully imposes radical change on nature; we tend "to extend our wills over things, to objectify them, ... , to manipulate them."²⁰¹ An unrestricted imposition of human will on nature distorts the slow process of natural selection in a way that is quite different from any change caused by other living compounds. The beneficial effect of natural selection cannot work if there is no time for variations to develop.²⁰² Taking nature's rights seriously is a remedy for the intrusion of humankind. In the biocentric perspective, nature's rights do not guarantee the existence of every species forever; they give a right to existence under fair conditions of natural competition. The nature's rights approach, therefore, is not opposed to Darwinism, but supports it by readjusting the preconditions of "natural" selection.

The second answer to the question if nature's rights are "unnatural" relies on the function of rights as described in the previous section.²⁰³ Since rights are instrumental, they do not necessarily reflect anything "natural." Generally speaking, what "ought to be" is conceptually independent of what "is". To acknowledge nature's rights has a protective effect, yet

198. Stone, *Should Trees Have Standing?*, *supra* note 2, at 494 (referring to Darwinism).

199. See Elder, *supra* note 2, at 289.

200. DARWIN, *supra* note 195, at 152.

201. Stone, *Should Trees Have Standing?*, *supra* note 2, at 495.

202. Cf. DARWIN, *supra* note 195, at 153 ("Nothing can be effected, unless favorable variations occur, and variation itself is apparently always a very slow process."). It might be true that "people are a part of nature, and in manipulating the environment to their own ends have simply proven to be better suited for survival." Elder, *supra* note 2, at 289. But this manifestation of power does not construe an argument that nature does still work under these human-made conditions, that such "natural selection" is still "natural"; indeed, the growing rate of destruction and extinction indicates the contrary. The U.S. General Accounting Office reported in 1989, that the rate of extinction rose to more than one species per day and could soon rise to one species per hour. 202 THE BOSTON GLOBE, Jan. 30, 1989, at 28. This is no longer the natural selection Elder refers to. See Elder, *supra* at 289 ("Over the eons of natural processes, ninety-nine percent of species have already become extinct.").

203. See *supra* note 171 and accompanying text.

it does not have to be "natural protection." Instead of being something pre-social like a "law of nature," taking nature's rights seriously is a man-made remedy for the inadequacy of anthropocentric environmental law to acknowledge the intrinsic value of nature. This approach merely corrects the distorted perspective of anthropocentrism which is no longer able to explain the reality of international environmental law.

Summarizing, the biocentric version of the nature's rights approach embodies the best foundation for non-anthropocentric paradigms in international environmental law. The paradigm shift towards acknowledging intrinsic value of nature leads directly to taking nature's rights seriously. If taken biocentrically, the protection inherent in the nature's rights approach entails no contradiction to our Darwinist understanding of nature as a process of selection.

C. THE CONTENT OF NATURE'S RIGHTS

To say that nature has its own rights does not give us a viable guideline in deciding when and to what extent nature's rights should prevail over countervailing rights of individual humans.²⁰⁴ In a first step it is necessary to define the content of those rights. Although non-human life forms do have significant rights, these rights are not precisely the same as those of human beings,²⁰⁵ because the logical foundations of the rights of plants, non-sentient animals, sentient animals, and humans differ according to their respective difference in nature.²⁰⁶ Human dignity requires extensive liberties, including the freedom of thought and speech, freedom to contract,²⁰⁷ and freedom to engage in political participation – liberties, which are not warranted by the characteristic of any other natural entity.²⁰⁸

The basic right that is common to all living entities of nature and warranted by its intrinsic value is the right to existence,²⁰⁹ i.e., the right to survive as a species or an individual living being.²¹⁰ This right derives from

204. MEYER-ABICH, FRIEDEN, *supra* note 6, at 48. For an example of such "counterclaims" in the context of whaling, see D'Amato & Chopra, *supra* note 29, at 54.

205. See Stone, *Should Trees Have Standing?*, *supra* note 2, at 457 ("[T]o say that the environment should have rights is not to say that it should have every right we can imagine, or even the same body of rights as human beings have.").

206. See Warren, *supra* note 155, at 110.

207. The freedom to contract as any other property related liberty cannot be attributed to animals because they cannot have duties. See FEINBERG, *supra* note 73, at 45-59, 56.

208. See WARREN, *supra* note 155, at 115.

209. See LEIMBACHER, *supra* note 1, at 27, 106-11.

210. The right to existence is a right of the individual not of the species, but it is, other than Feinberg suggests, not independent from the species; the greater the danger of extinction for the whole species, the greater is the right to life of each individual. Compare FEINBERG, *supra* note 73, at 67. See also D'Amato & Chopra, *supra* note 29, at 51 (regarding the whales' right to life); LEIMBACHER, *supra* note 1, at 27 (defining the right to existence as the claim to be there and to keep

the fact that the struggle for continuing existence – the "impulse to self-preservation"²¹¹ – is part of all living entities of nature. The right encompasses all freedoms which are necessary for a natural existence, e.g. the freedom to move, eat, and procreate.²¹² It also results in the protection of the non-living habitat, but the non-living habitat is only protected indirectly in the biocentric perspective; living beings, not stones or rivers, are the only right-holders.²¹³ Since the natural existence of living beings differs significantly, so do the respective rights of these natural entities.²¹⁴

The other basic right that is common to all sentient species is the right to life without unnecessary suffering.²¹⁵ This right derives from the natural

the current character; "*Da-Sein*" and "*So-Sein*"). See also MEYER-ABICH, FRIEDEN, *supra* note 6, at 23 (putting the consideration of individual beings and species into the same steps of his classification of paradigms); Huffman, *supra* note 2, at 58-65 (distinguishing the biocentric rights of (1) individual members of a species, (2) the species as such, (3) the ecosystem in which the species lives, and (4) holistic nature).

211. See FEINBERG, *supra* note 73, at 65.

212. The legal right to exist encompasses the necessary ecosystem - the "critical habitat". See NASH, *supra* note 43, at 177; Public Law 93-205, 87 *U.S. Statutes at Large*, 884 (hereinafter Endangered Species Act). For further information about the Endangered Species Act, see STEVEN L. YAFFEE, PROHIBITIVE POLICY, IMPLEMENTING THE FEDERAL ENDANGERED SPECIES ACT (1982); RICHARD TOBIN, THE EXPENDABLE FUTURE, U.S. POLITICS AND THE PROTECTION OF BIOLOGICAL DIVERSITY (1990); KATHRYN A. KOHM, BALANCING ON THE BRINK OF EXTINCTION, THE ENDANGERED SPECIES ACT AND LESSONS FOR THE FUTURE (1991). The current version of the act provides for an Endangered Species Committee, a seven-member panel of Cabinet-level officials, that can and does grant exemptions. See *Inquiry Ordered in Owl Decision*, N.Y. TIMES, Feb. 12, 1993, at A16 (reporting that an exemption granted in 1992 for 13 timber sales in western Oregon would be reinvestigated). The "stringent rules" of the Act are sometimes avoided by agreements between environmental organizations and building industry. See Robert Reinhold, *Tiny Songbird Poses Big Test For U.S. Environment Policy*, N.Y. TIMES, Mar. 16, 1993, at A1, A18 (reporting the advantages of an agreement for the preservation of the gnatcatcher and the driving force of species-listing petitions). See also Jon R. Luoma, *Listing of Endangered Species Said to Come Too Late to Help, Many Populations are Too Small When Protection Begins*, N.Y. TIMES, Mar. 16, 1993, at C4 (reporting an immense backlog of about 3,600 species that are candidates for listing).

213. But see Stone, *Should Trees Have Standing?*, *supra* note 2, at 45 ("I am quite seriously proposing that we give legal rights to forests, oceans, rivers and other so-called 'natural objects' in the environment."); Stone, *Trees Revisited*, *supra* note 2, at 47 (explaining why disinterested entities like stones or rivers – and also species – should also get legal and moral consideration); MEYER-ABICH, FRIEDEN, *supra* note 6, at 182-9 (arguing that the same status should be given to living and non-living entities and compounds of nature).

214. See Stone, *Should Trees Have Standing?*, *supra* note 2, at 457-8 ("[T]o say that the environment should have rights is not to say ... that everything in the environment should have the same rights as every other thing in the environment."). This, and not our compassionate feelings, entitles some species to greater protection than others. But see Glennon, *supra* note 5, at 8 n.63 (refusing to accept the proposition that any one species is more worthy of protection than some other).

215. For the animal rights movement which long since promoted this position, see CAROLINE CLOUGH, ANIMAL WELFARE HANDBOOK, GUIDE TO ANIMAL WELFARE AND ANIMAL RIGHTS (1993); Lori Gruen, *Animals*, in A COMPANION TO ETHICS, *supra* note 7, at 343; JOAN NORDQUIST, ANIMAL RIGHTS, A BIBLIOGRAPHY (1991); TOM REGAN & PETER SINGER, ANIMAL RIGHTS AND HUMAN OBLIGATIONS (2d ed. 1989); R.G. FREY, RIGHTS, KILLING AND SUFFERING (1983); TOM REGAN, ALL THAT DWELL THEREIN, ANIMAL RIGHTS AND ENVIRONMENTAL ETHICS (1982). The first important work in this area was the first edition of PETER SINGER, ANIMAL LIBERATION (2d ed. 1990). For proponents of opposite positions, see for example MICHAEL J. FOX, THE CASE FOR ANIMAL EXPERIMENTATION 88 (1986)(reasoning that animals are not members of the moral community and that humans may use them as means to their ends).

equality of humans and other sentient beings regarding their capacity to feel pain, an equality that is even acknowledged by some utilitarians.²¹⁶ The right not to suffer corresponds to the right of humans that their empathic feelings for other sentient beings be respected. Thus, sentient being's rights are acknowledged easier than the rights of non-sentient nature.²¹⁷ Since sentient beings differ in their ability to feel pain, the content of the right to life without suffering differs from species to species.²¹⁸

It has to be conceded that the biocentric "marketplace of interests"²¹⁹ poses new problems for the balancing of conflicting rights. A virus that is deadly for humans, for example, has nevertheless an intrinsic value as a part of nature,²²⁰ its extinction is not "natural" but has to be justified.²²¹ In other words, "to exterminate it is relatively right, but inseparable from an absolute wrong."²²² Even though such cases where nature's rights conflict with human's rights will not necessarily be decided in favor of nature and against human interests, the nature's rights approach offers a new potential for jurisprudential argumentation. As pointed out earlier, the nature's rights approach as represented in the acknowledging of an intrinsic value of nature in international environmental documents will open a completely new field of law similar to the development of business law for the rights of corporations.²²³

216. See PETER SINGER, *ANIMAL LIBERATION: A NEW ETHICS FOR OUR TREATMENT OF ANIMALS* 9 (1975); BENTHAM, *supra* note 38, at 282-283 n.b.

217. See Tribe, *supra* note 2, at 1343 ("At least so long as we remain within empathizing distance of the objects whose rights we seek to recognize, it seems reasonable to expect the acknowledgment of such rights to be regarded as more than fictitious. Thus, protecting cats and dogs from torture on the basis of their right not to be mistreated seems less jarring conceptually than protecting a forest from clear-cutting on the theory that the threatened trees have an inherent 'right to life.'"). See, e.g., Elder, *supra* note 2, at 290 ("[W]hales, dolphins, apes or fruit flies ... we can kill them for food and even experiment with them as long as they are not caused to suffer unduly.").

218. Some animals, for example whales and elephants, feel pain not only as a physiological but also as a psychological phenomenon when, for example, members of their family are killed. See Glennon, *supra* note 5, at 4 n.38.

219. See *supra* note 190 and accompanying text.

220. One of the new insights of lawmakers is that no matter how small a species, it may still have great importance. Cf. Weiss, *supra* note 30, n. 114-15 and accompanying text ("The new Biological Diversity Convention focuses on the conservation of ecosystems and habitats in full recognition that many of the species that should be conserved are microorganisms or other species about which we know little or nothing.").

221. A statement, however, that every species deserves protection goes too far. *But see* Glennon, *supra* note 5, at 30 ("It is now possible to conclude that customary international law requires states to take appropriate steps to protect endangered species.") who later questions the practical relevance of that far-reaching conclusion, *id.* at 32 ("It thus appears doubtful that a customary norm concerning the elephant or any other endangered species can yet play any significant role in its protection.")(citation omitted).

222. See PAUL WEISS, *MAN'S FREEDOM* 257 (1950).

223. Cf. D'Amato & Chopra, *supra* note 29, at 52 (stating that such a development is possible).

IV. PRACTICAL IMPLICATIONS OF TAKING NATURE'S RIGHTS SERIOUSLY

Having shown that taking nature's rights seriously is already present in international environmental law, we now need to focus on the practical implications of this non-anthropocentric paradigm. Making nature a subject of rights transcends the realm of international environmental law because a biocentric extension of the concept of rights warrants that every area of the law that involves living entities needs a reconstruction from a human interest perspective to the new biocentric "marketplace of interests" perspective that includes a multitude of rightholders. Accordingly, the nature's rights approach seriously challenges the adequacy of current decision-making process with regard to any human action which has an impact on nature. It implies that the validity of such actions is assessed by taking into account two competing interests instead of one dominant and one subordinate interest. The question thus becomes one of balancing. For instance, there will be the right of humans to ensure survival by exploiting fisheries of the High Seas and the right of nature to remain untarnished, and non will, a priori, weigh heavier than the other. In each case we must define the contents of the two rights asserted and balance the countervailing interests they represent. We first discuss the balancing approach and outline how rights of different species can be defined (IV.A).

Taking nature's rights seriously also leads to the questions Who is entitled to assert a right? and How will the entitled entity claim the right? Although part of the traditional rights discourse, these questions are more pressing in the context of nature's rights because nature has no prima facie means to voice its interests in society. For nature, this set of questions becomes one of legal and political representation. The section about representation will show that the problem of both legal and political representation can be solved within the existing political and legal framework. If nature has its own rights, it has an own legal existence in certain areas, not unlike a corporation or other legal entity. These models allow us to outline the practical implications of taking nature's rights seriously (IV.B).

Under a biocentric perspective, taking nature's rights seriously also leads to a different assessment of the exploitative activities of humans. Making nature a rightholder means that human entrepreneurship and natural exploitation face new limits in the form of an environmental damage assessment which is non-anthropocentric. So far, environmental damages have been calculated on the basis of the harm done to humans. Under the "marketplace of interests" perspective, however, the damage claim will be assessed from nature's point of view. Yet the issue of nature's rights goes beyond mere damage assessment. So far, nature has greatly suffered from

the human impact. If we are to take nature's rights seriously, we must consider the issue of supportive action plans²²⁴ designed to compensate for the historical disadvantage nature has suffered in terms of the protection of its interests (IV.C).

A. NATURE'S RIGHTS – FINDING A NEW BALANCE

Recognition that all natural entities share a right of survival and that sentient animals have a claim that their suffering be avoided²²⁵ provides us with the "bargaining chips" in the balancing of nature's and humankind's interests. Nature's rights differ from our rights in content, but they also differ within the various categories of nonhuman entities. Whales and elephants, for instance, are recognized to have social and intellectual capacities which make them highly susceptible to harm inflicted to them or to their family members.²²⁶ Accordingly, the right of these species to a live free of suffering extends further than the same right of other species which lack the named capacities.

The differentiations with regard to content and extent of rights accorded to natural entities calls for a balancing process on a case to case basis.²²⁷ A decision affecting the protection of whales will not use the same interests as balancing factors as would a decision affecting a deadly virus. In a conflict of interest between whales and humans, we must consider the whales's right to exist as a species, including their right to live according to their natural disposition (sufficient room to swim, eat, procreate without interference of whale watcher boats), and their right to avoid painful loss of family members. We must take into account humankind's right to survival, including the right to live according to its natural disposition (hunting) and its right to pursue an economic activity (living off hunting). If in such a case the facts show that a certain whale species is on the verge of extinction, that the killing of a whale will cause great pain among his community, and that human survival is neither threatened by a ban on the specific whale species nor is there a lack of alternative hunting grounds, the balancing process leads to a vested right of whales against whale hunting.

The balancing procedure has quite a different outcome if the issue presented is the conflict of interest between humankind and a deadly virus. The virus is *a priori* a holder of rights as is the group of humans threatened

224. For the term 'supportive action' see *supra* note 13.

225. See *supra* part III.C.

226. See Glennon, *supra* note 5.

227. Regulations which allow no balancing can lead to serious problems, e.g. in the snail darter case. See NASH, *supra* note 43, at 178.

by it. In order to determine the outcome of that conflict it is thus necessary to define and examine the interests at stake. In this case, we need to consider the human interest in survival, the interest in the live of its individual members, and its right to avoid suffering. these interests are most likely to outweigh the virus' interest in mere existence. Conceding that these are easy cases, a much tougher group of questions relates to the respective weight of species survival versus individual survival. Will the right of a virus to survive "as a species" weigh heavier than the right to life of a few "individual" humans? Can we discount some human deaths for the intrinsic value of the virus? Similar questions occur when animals are harmful to human agriculture. May we try to extinct these animals? The answer depends on which non-anthropocentric paradigm we adopt.²²⁸ In Ecocentrism, harmony of humans and nature is paramount and any planned disturbance of this natural harmony is prohibited.²²⁹ In Biocentrism, on the other hand, humans are equal to nature and competitiveness is allowed, including the extinction of some species, as long as the rules of the game are fair.²³⁰

B. REPRESENTATION OF NATURE – LEGAL BUT NOT POLITICAL

The balancing procedure described above assumes that nature's voice is actually heard when the countervailing interests are weighted against each other. But who will take up nature's voice, and where should nature be allowed to make use of it? The "who" refers to the legal representation of nature and translates into a third party standing issue (B.1). The "where," on the other hand, refers to nature as a participant in the political process (B.2).

The legal aspect of nature's representation does not differ much from the conceptual issues which arise in the context of the representation of other non-traditional right holders, such as corporations or municipalities. Therefore, we can draw from the solutions found in those cases to arrive at a model for the representation of nature. Yet why be confined to damage control by granting nature its "day in court," when damage could be prevented by assigning nature a voice in the legislative decision-making? For this, we must not only take into account the possibility of such representation under the biocentric perspective, but we must also look at the basic structure of our political system. Specifically, we must examine the rules which govern the participation in the legislative process in general and

228. For the different paradigms, see *supra* note 6.

229. See *supra* note 189 and accompanying text.

230. Cf. *supra* notes 177 to 203 and accompanying text.

determine whether, with regard to these rules, nature should have a right of political representation.

1. Legal Representation

Making nature a holder of rights entails that nature, much like an individual, can take recourse to the legal system when these rights are violated.²³¹ The legal representation of nature seems to face similar conceptual problems as the representation of future generations:²³² we tend to think of the holder of rights as a living being who is able to represent him or herself in person. Yet this traditional conception has long been abandoned. The legal system has accorded rights to entities such as corporations, trusts, municipalities, and even ships.²³³ What we witness, therefore, is a successive extension of rights to non-human entities. The distinction between holders of rights and non-holders of rights does not follow a pre-established scheme, but is the result of a legal convention. To recognize that nature has rights too is therefore possible within the existing legal framework. Justice William O. Douglas states in his dissent in the *Sierra Club v. Morton* case how inanimate objects can be parties in litigation.²³⁴

A corporation, for instance, has a board of directors who act on its behalf. Representation of nature is possible by instituting a guardianship of nature, similar to the system used for children and mentally incompetent adults who are also unable to represent themselves in the legal realm.²³⁵ An intermediary step in this direction occurred in the *Palia* case.²³⁶ There, the Sierra Club brought action for the *Palia* (an endangered species) under the

231. See Stone, *Should Trees Have Standing?*, *supra* note 2, at 458-9. Cf. SALADING & ZENGER, *supra* note 1, at 107-17 (formulating a differentiated framework for legal representation of future generations). For the legal standing of non-governmental organizations in international environmental law, see David Scott Rubinton, *Toward a Recognition of the Rights of Non-States in International Environmental Law*, 9 PACE ENV. L.R. 475, 494 (1992)(describing growing opportunity to participate but lack of absolute right to standing).

232. Cf. WEISS, *supra* note 61, at 1542.

233. See Stone, *Should Trees Have Standing?*, *supra* note 2, at 452.

234. "Inanimate objects are sometimes parties to litigation. A ship has a legal personality, a fiction found useful for maritime purposes. The corporation ... is a 'person' for purposes of the adjudicatory processes So it should be as respects valleys, alpine meadows, rivers, lakes The river, for example, is the living symbol of all the life it sustains or nourishes - fish, aquatic insects, water ouzels, ... and all other animals, including man, who are dependent on it or who enjoy it for its sight, its sound, or its life. The river as plaintiff speaks for the ecological unit of life that is part of it." *Sierra Club v. Morton*, 405 U.S. 727, 741 (1972)(dissenting Justices were Douglas, Blackmun, and Brennan).

235. See Gregory S. Kavka & Virginia Warren, *Political Representation for Future Generations*, in ELLIOT, *supra* note 6, at 21-39, 21.

236. *Palia v. Hawaii Department of Land and Natural Resources* 471 F. Supp. 985 (1979).

Endangered Species Act.²³⁷ The Court held that nonprofit corporations and nonprofit associations committed to protecting and preserving wildlife have standing to sue in their own names under the Endangered Species Act when seeking protection for an endangered species. Thus, it is conceptually possible that courts grant standing to "friends of nature" in suits concerning the protection of a species. To implement such an approach, we must institutionalize the "friends of nature" phenomena in the form of a guardianship for nature and the subsequent action on nature's own behalf. The standing question would not show any major practical difference to the one discussed in the *Palia* case. Thus, it is possible to give nature its own standing through representation by a guardian without any fundamental changes in the present legal framework.²³⁸

2. Political Representation

Since nature's interests can be determined, it is not farfetched to suggest that nature be a participant in the political process as well.²³⁹ This would lead to a system where the number of congressional representatives of a state would not only depend on the number of humans living there but also on the totality of nature that has to be represented.²⁴⁰ Political representation through special trustees would ultimately lead to a biocentric perspective in the legislative process at large. It is one of the ways the new paradigm of taking nature's rights seriously could be projected on the level of Nation-States. There are, however, difficulties with this proposal. Why should nature have its own representation although other groups whose interests are affected (e.g. children, deceased, and foreigners) do not have separate representation. One could argue that, unlike children or the deceased, nature is not linked to the existing system of parliamentary representation through the family ties of the constituents.²⁴¹

This line of argument, however, is not persuasive: the effect of family ties

237. Endangered Species Act, *supra* note 212, para. 1531 et seq.

238. Questions which must be solved to apply the guardian approach are for example: Can environmental groups identify themselves as guardians with legal standing? What if different guardians, for example in different states or different cases, follow different goals in their litigation? Is any new group bound by *res judicata*? See Stone, *Should Trees Have Standing?*, *supra* note 2, at 470.

239. Compare KAVKA & WARREN, *supra* note 235, at 24-25. Note that the political representation of nature does not face the same challenges as the same quest in the context of future generations. The uncertainties about the wants of future generations make it difficult to account for them. See Stone, *Trees Revisited*, *supra* note 2, at 47-9. The characteristics of living non-human entities entail a much more narrow range of interest as would be the case for humans. We can identify these interests as the interest in self-preservation and avoidance of suffering, whereas the possible wants of future generations present a much more complex array of interests.

240. See Stone, *Should Trees Have Standing?*, *supra* note 2, at 487 ("It strikes me as a poor idea that Alaska should have no more congressmen than Rode Island ...").

241. See KAVKA & WARREN, *supra* note 235, at 26-33.

on political decision-making is more than uncertain, and the fact simply is that our democratic system does not acknowledge every form of affection as sufficient for direct representation; foreigners and entities of nature are only represented indirectly through empathic or instrumental considerations of citizens.²⁴² There is no reason why nature's rights should encompass a claim for direct representation while not even all humans are granted political participation to that extent.²⁴³

C. SUPPORTIVE ACTION FOR NATURE – THE RESTORATION MOVEMENT

In the name of progress, humankind has erased forests, polluted rivers, depleted species, and harmed the atmospheric equilibrium. Recognizing that nature's rights need to be taken seriously raises two questions: Is the traditional damage assessment for environmental accidents still adequate under the biocentric paradigm? Should we remedy the past impairment of nature's rights by supportive action plans on its behalf?

Biocentrism is a two-way street. It allows for competing interests in both directions, opening the door for nature's interests in many spheres traditionally reserved to human concerns. In the context of environmental damages, biocentrism warrants a change in perspective with regard to damage assessment. Traditionally, environmental damages have been calculated on an anthropocentric basis, i.e., on the basis of the infringement on the physical or mental integrity of humans or on their status as property holders.²⁴⁴ As shown previously, what nature would perceive as irreparable damage to one of its ecosystems does not necessarily translate into a cognizable human concern. Recognizing nature's independent existence calls for a non-anthropocentric damage assessment, i.e., a damage assessment which acknowledges that nature can suffer original harm and will allow for redress when such harm occurs. The proposal that this be accomplished through a system of guardianship for nature who would ensure that nature be the prime beneficiary of any damage payments has been discussed at length elsewhere.²⁴⁵

242. See KAVKA & WARREN, *supra* note 235, at 26-33.

243. This does not preclude a political society from voluntarily adopting provisions for the political representation of nature, e.g. the participation of non-state actors in the deliberation for international environmental treaties. See WEISS, *supra* note 61, at 1601-1603.

244. Cf. Stone, *Should Trees Have Standing?*, *supra* note 2, at 461-2 ("What does not weigh in the balance is the damage to the stream, its fish and turtles and 'lower' life. So long as the natural environment is rightness, these are not matters for judicial cognizance. ... The third way in which the common law makes natural objects rightness has to do with who is regarded as the beneficiary of a favorable judgment. Here, too, it makes a considerable difference that it is not the natural object that counts in its own right.").

245. See Stone, *Should Trees Have Standing?*, *supra* note 2, at 466 ("If there were indications that under the substantive law some redress might be available on the land's behalf, then the guardian

Environmentally damaging behavior has a long dark history which renders the mere reaction to current environmental disputes a laudable but insufficient effort in taking nature's rights seriously. Thus the idea of turning from preservation to restoration, a path many environmental activists are currently pursuing.²⁴⁶ Restoration bears on the idea that nature should have the chance to recover and once again become the viable and fairly competitive ecosystem it once was. Supportive action is related to the concept of affirmative action for past discrimination. Affirmative action refers to efforts to rectify the continuing effects of past discrimination, as distinct from simply ceasing to discriminate.²⁴⁷ Accordingly, supportive action refers to efforts to rectify continuing effects of past disregard of nature's rights, rather than simply acknowledging these rights. The restoration movement can be seen as part of the broader supportive action concept. For instance, restoration programs aim at transplanting threatened plants or breed animals in captivity and set them free in release areas in order to compensate for a developer's destruction of the land.²⁴⁸

Supportive action rationales will also support calls for a tilt in the balance of interests, thus arriving at the conscious subordination of a countervailing but equal human interest to the interest of nature. This can be done by creating a legal presumption in favor of the rights of nature when such a controversy arises. Take the case of the captive breeding and release of cougars in Florida. There is an interest of the landowners to use the land free of the dictate by the government²⁴⁹. There is also nature's interest in the preservation and re-integration of one of its species in its natural habitat. In such a situation, it is conceivable that the legal presumption come into play, shifting the burden of proof to the landowner who will have to show that his property interests outweigh the countervailing interests of nature.

Supportive action plans are congruent with the newly acknowledged

would be entitled to raise the land's rights on the land's behalf ... "). *Id.* at 481-2 ("Natural objects ... would be the beneficiaries of legal awards."). *Id.* at 478 (suggesting that environmental damages which are independent of any commercial value could be calculated on the basis of making the environment whole somewhere else).

246. See Larry B. Stammer, *Environmental Activists Shifting From Preservation to Restoration*, L.A. TIMES, Jan. 17, 1988, at 3 (describing that the "Restoring the Earth" conference of the University of California which attracted 800 participants announced the beginning of a new phase in environmental activism).

247. Richard A. Posner, *The Bakke Case and the Future of "Affirmative Action"*, 67 CAL. L. REV. 171, 187 (1979).

248. William K. Stevens, *Botanists Conceive Comebacks For Threatened Plants*, N.Y. TIMES, May 11, 1993, at C1. Stevens also mentions the dangers of these transplantations, stating that "ecologists fear that other native plants could be crowded out if an endangered species is introduced outside its natural range or if an ecosystem is manipulated to favor it over other species." *Id.*

249. Catharine Skipp, *Cougars Enlisted in Effort to Save the Florida Panther*, N.Y. TIMES, May 11, 1993, at C4.

biocentric paradigm. A central tenet of biocentrism is that the rules of competition be fair. Yet so far the rules of the environmental game have heavily favored human interests, making any potential challenge by nature an easy winner. Engaging in supportive action to correct distorted outcomes resulting from unfair rules is consistent with the fairness principle inherent in the biocentric paradigm. Thus, supportive action plans become a possible avenue within the biocentric approach when waiting for nature to recover is not sufficient to remedy lingering effects of past injustice.²⁵⁰

V. CONCLUSION

Our main thesis is that international environmental instruments show a step by step development towards acknowledging nature's rights in a biocentric perspective. This thesis can be supported by an analysis of international environmental instruments and their classification according to whose interest is protected. This leads to three stages of development. In the first stage, immediate human self-interest is the primary reason for the protection of the environment. In the second stage, this immediate interest enlarges to encompass the interests of future generations and thereby recognizes the intergenerational dimension of the protection of nature. Finally, third stage instruments transcend the anthropocentric approaches of the past by acknowledging an intrinsic value of nature.

Linking the different stages to environmental ethics in what has been called "deep level enquiry," shows how first stage instruments reflect rationales of utilitarianism and human rights theory. Second stage instruments can best be understood as expressing a conception of intergenerational equity. Third stage instruments, however, acknowledge an intrinsic value of nature. Environmental ethics linked to that stage must enter the world of non-anthropocentric world-views, thereby indicating a paradigm shift in environmental law. Third stage instruments express non-anthropocentrism in a way that leads to acknowledging nature's rights rather than merely accepting humankind's duties towards nature. This is what we call taking nature's rights seriously.

Among many different non-anthropocentric approaches, biocentrism is the one informing third stage instruments and therefore the development of international environmental law in general. In biocentrism, humans are equal to all other living entities of nature and competition is allowed among them. Natural competition of diverse entities even includes the extinction of some species (natural selection), as long as the rules of the game are fair.

250. Cf. Kent Greenawalt, *The Unresolved Problems of Reverse Discrimination*, 67 CAL. L. REV. 87, 127 (1979)(speaking of "lingering effects of discrimination against earlier generations" as a prerequisite for legitimate affirmative action).

Nature's rights in a biocentric perspective can be assigned a specific content and a balancing procedure to accommodate competing interests between humans and other living entities of nature. Further practical implications of taking nature's rights seriously include organizing legal and political representation of nature, correcting damage assessment under a "marketplace of interests" perspective, and developing supportive action plans to compensate for the historical disadvantage nature has suffered in terms of the protection of its interests. None of these challenges are trivial, but none are insurmountable either.

Altogether, the development of international environmental instruments towards acknowledging nature's rights in a biocentric perspective might give us a first idea of how environmental law both internationally and nationally tends to grow into a framework for taking nature's rights seriously.