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The Common Heritage of Mankind in International Law: A Great Past but No Future?

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Abstract

This paper addresses the Common Heritage of Mankind (CHM) with respect to marine and outer space resources, in light of relevant treaties. Possible developments concern internationally, the drafting of a special regulation on the conservation and sustainable use of marine biodiversity of areas beyond national jurisdiction and, nationally, newly-adopted regulations on the commercial use of space resources. CHM's current role is unclear because of many important political and legal developments. CHM appears to have found new roots in international environmental law and human rights law. However, this approach may not be effective in practice. The paper concludes that while CHM has a great past, its future looks less promising. There are limited prospects of implementation, or of a broadened scope of application. According to some scholars, non-consolidation of CHM in international law is primarily due to the predominance of a 'legal positivistic' approach taken by jurists, and the excessive weight accorded to the will of the states in the making of international law. In the author's view this argument is not entirely convincing, especially if its underlying idea is that further CHM achievements are only possible by drastically changing the fundamentals of international law.

Keywords: Common Heritage of Mankind, International Law, UNCLOS, Convention on Biological Diversity, the Area, International Seabed Authority

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1. History of CHM in International Law

The CHM concept dates from the second half of the twentieth century. The core content of the CHM legal concept is that interests and benefits with regard to certain areas and resources whose conservation is essential to human beings are vested in humankind as a whole, including future generations. The CHM concept was embedded in the 'Declaration of Principles governing the Seabed

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and the Ocean Floor, and the Subsoil Thereof, beyond the Limits of National Jurisdiction,¹ and it was designed to promote a New International Economic Order (NIEO), which the UNGA inaugurated in the post-colonial era, with input of newly independent countries.² According to the ‘Charter of Economic Rights and Duties of States’ adopted by the UNGA in 1974, the recognition that the deep seabed resources are a common heritage of humankind is one of the states’ common responsibilities towards the international community.³ States were thus encouraged to regard the CHM as the guiding principle on managing resources in areas beyond national jurisdiction, in the same way that the principle of permanent sovereignty applies to natural resources in state territory.⁴

Article 11 of the ‘Moon Agreement’ of 1979,⁵ which declared the Moon and its natural resources the CHM, was the first treaty to use the concept. The United Nations Convention on the Law of the Sea (UNCLOS) of 1982⁶ went further, establishing in Part XI a CHM regime for the seabed and ocean floor and subsoil thereof, beyond the limits of national jurisdiction (the ‘Area’) and its mineral resources. The Implementing Agreement of 1994⁷ introduced some modifications concerning, inter alia, the institutional arrangements, costs and transfer of technology, and thus making the regime of the Area more widely acceptable to developed countries.

These treaty provisions represent the most significant evidence of the CHM concept. The meaning of ‘common heritage of mankind’ under general international law is subject to different interpretations. Within the definition of the CHM are certain elements. These are: (a) non-appropriation; (b) peaceful purposes and benefit sharing; (c) freedom of research; (d) environmental protection; and, (e) a common management regime by *ad hoc* international mechanisms, including, for example, through an intergovernmental organisation (IGO).⁸ The coexistence of these five components makes it possible to distinguish the CHM from *res communes omnium*, such the high seas, in respect of which, similarly, state appropriation by claims of sovereignty or by any other means is not allowed. Customarily, the high seas are free for use by all states, except for any act that might interfere with other states’ freedom.⁹ These principles are reflected in the Convention on the High Seas (CHS)¹⁰ and

1 UNGA Res 2749 (XXV) (12 December 1970).

2 Declaration on the Establishment of a New International Economic Order, UNGA Res 3201 (S-VI) (1 May 1974) UN Doc A/RES/S-6/3201.

3 UNGA Res 3281 (XXIX) (12 December 1974) art 29.

4 Permanent Sovereignty over Natural Resources, UNGA Res 1803 (XVII) (14 December 1962).

5 Agreement Governing the Activities of States on the Moon and Other Celestial Bodies (adopted 5 December 1979, opened for signature 18 December 1979, entered into force 11 July 1984) 1363 UNTS 3 (Moon Agreement).

6 United Nations Convention on the Law of the Sea (adopted 10 December 1982, entered into force 16 November 1994) 1833 UNTS 396 (UNCLOS).

7 Agreement relating to the Implementation of Part XI of the United Nations Convention on the Law of the Sea (adopted 28 July 1994, provisionally applied by the participating states from 16 November 1994 and entered into force 28 July 1996) 1836 UNTS 3 (Implementing Agreement).

8 Rüdiger Wolfrum, ‘The Principle of the Common Heritage of Mankind’ (1983) 43 ZaöRV 312, 316.

9 Ian Brownlie, *Principles of Public International Law* (7th edn, OUP 2008) 169.

10 Convention on the High Seas (adopted 29 April 1958, entered into force 30 September 1962) 450 UNTS 11 (CHS). Based on the CHS, ‘The term “high seas” means all parts of the sea that are not included in the territorial sea or in the internal waters of a State’ (art 1). High seas freedoms include the freedom of navigation, fishing, laying submarine cables and pipelines, flying over the high seas, and others freedoms as ‘recognized by the general principles of international law’, to be exercised by states ‘with reasonable regard to the interests of other states’ (art 2).



the relevant UNCLOS provisions.¹¹ The 'Outer Space Treaty' (hereinafter OST)¹² and complementing conventions,¹³ with the exception of the Moon Agreement, set forth a regime very close to that of *res communes* for outer space, including the Moon and the other celestial bodies.

The CHM regime introduces significant advances vis-à-vis the regime of *res communes omnium*; traditionally the utilisation of common areas does not necessarily require state cooperation or solidarity. According to the OST, the exploration and use of outer space are 'the province of all mankind', and must be carried out for the benefit and in the interests of all states, irrespective of their degree of economic and scientific development.¹⁴ A non-binding instrument adopted by the UNGA in 1996 provides further guidance for the application of the 'benefit principle'.¹⁵ However, this did not change the reality that outer space and celestial bodies are subject, like the high seas, to a regime under which the freedom of utilisation puts the most developed states in the best position to explore and exploit resources and, therefore enables *de facto* inequalities. Determinations on cooperation with developing countries, including the sharing of the benefits are at the discretion of individual states.¹⁶ The OST does not impose detailed obligations, instead it sets out general principles governing activities, most of which are universally recognised as being of a customary nature and perhaps of peremptory character.¹⁷

With regard to the institutional framework, the constituent treaties of some UN Agencies, such as the IMO (International Maritime Organization) and the ICAO (International Civil Aviation Organization) have conferred upon these IGOs competences on the regulation of safe navigation, environmental protection and the exploitation of natural resources in common areas. Similarly, the ITU (International Telecommunication Union) is authorised to manage the geostationary satellite orbit and radio frequencies 'efficiently and economically' and 'taking into account the special needs of the developing countries'.¹⁸ This practice highlights that the principle of state freedom provides a general legal framework for activities in common areas, but does not govern every aspect of the utilisation

11 UNCLOS, Part VII, arts 87 to 120.

12 Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies (adopted 19 December 1966, opened for signature 27 January 1967, entered into force 10 October 1967) 610 UNTS 205 (Outer Space Treaty-OST).

13 These are: the Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space (adopted 22 April 1968, entered into force 3 December 1968) 672 UNTS 119 (Rescue Agreement); the Convention on International Liability for Damage Caused by Space Objects (adopted 29 March 1972, entered into force 1 September 1972) 961 UNTS 187 (Liability Convention); and the Convention on Registration of Objects Launched into Outer Space (adopted 14 January 1975, entered into force 15 September 1976) 1023 UNTS 15 (Registration Convention).

14 OST, art I.

15 UNGA Res 51/22 (13 December 1996).

16 With regard to the poor legal effects of the 'common benefit clause', see Stephan Hobe, 'Article I' in Stephan Hobe, Bernhard Schmidt-Tedd, Kai-Uwe Schrogl (eds), *Cologne Commentary on Space Law*, vol I (Wolters Kluwer 2009), 36 and 56.

17 Vladimir Kopal, 'Comments and Remarks' in *Proceedings of the Workshop on Space Law 'Disseminating and Developing International and National Space Law: The Latin-America and Caribbean Perspective'* (UN Publications 2005) 25, fn 7.

18 Cf art 33 para 2 of the International Telecommunication Convention (as revised in Nairobi on 6 November 1982, and entered into force 1 January 1984) 33 UKTS 1 (ITU Convention). On the wide range of the ITU regulatory powers see Setsuko Aoki, 'Efficient and Equitable Use of Orbit by Satellite Systems: 'Paper Satellite' Issues Revisited' in *Proceedings of the International Institute of Space Law 2013* (Eleven International Publishing 2014) 229.



of these areas and resources. As will be discussed in Sections 2 and 3, an international mechanism managing areas beyond national jurisdiction in accordance with a CHM regime, seems more adequate to protect the interests of all states and future generations. The principle of state freedom, indeed, is most particularly unable to safeguard common interests such as safety, security, prevention of pollution and resource depletion, avoiding contentious issues, dispute settlement, and the needs of vulnerable populations. The lack of authority to exercise jurisdiction and control over these areas makes it difficult to enforce such protection measures as may be provided for by global or regional treaties, especially *vis-à-vis* non-party states.

Unsurprisingly, a CHM-oriented perspective is part of the debate about the requirements for legitimately recovering and exploiting outer space natural resources, anticipated to become operational within a few decades.¹⁹ Moreover, governments have invoked the CHM as an opposing principle to the freedom of the high sea, in the framework of negotiating a new agreement, possibly supplementing UNCLOS on the subject of the conservation and the sustainable use of marine biodiversity, including genetic resources, from areas beyond national jurisdiction.²⁰ In addition, the idea has emerged from the 1992 Rio Declaration on Environment and Development²¹ that state policies and legislation concerning biodiversity, climate, forests, and other resources that are essential to human survival on Earth, should conform to the principles of sustainable development enshrined in the Declaration, notably the inter generation equity.²² From this point of view, it does not really matter whether so-called 'global commons' lie in state territory or beyond areas of national jurisdiction, because their conservation and sustainable use partly transcends the concept of state sovereignty.²³

That the CHM has become anachronistic since the demise of the NIEO as a political project is unconvincing.²⁴ It is true that important changes have occurred since the CHM was introduced. However, few developing countries have benefitted from economic globalisation.²⁵ Consequently, the problem with the CHM is a need for reinterpretation.²⁶

19 Steven Freeland, 'Common heritage, not common law: How international law will regulate proposals to exploit space resources' (2017) 35 QIL, Zoom-in, 19, <http://www.qil-qdi.org/wp-content/uploads/2017/01/03_Space-Resources-Mining-FREELAND.pdf> accessed 6 December 2019.

20 UNGA Res 69/292 (9 June 2015).

21 UNGA 'Report of the UN Conference on Environment and Development. Rio de Janeiro 3-14 June 1992' (12 August 1992) UN Doc A/CONF.151/26 (Vol I).

22 See Surabhi Ranganathan, 'Global Commons' (2016) 27 EJIL 693.

23 Nico Schrijver, 'The dynamics of State sovereignty in a changing world' in Konrad Ginther, Erik Denters and Paul J.I.M. de Waart (eds) *Sustainable Development and Good Governance* (Martinus Nijhoff 1995) 80.

24 Ruth Gordon, 'The Dawn of a New, New International Economic Order?' (2009) 72 LCP 131 (also available online: <<https://scholarship.law.duke.edu/cgi/viewcontent.cgi?article=1548&context=lcp>>, accessed 6 December 2019).

25 Cf. Vai Io Lo and Mary Hiscock (eds) *The Rise of the BRICS in the Global Political Economy: Changing Paradigms?* (Elgar 2014).

26 Daniel Bethlehem, 'The End of Geography: The Changing Nature of the International System and the Challenge to International Law' (2014) 25 EJIL 9.



2. Marine Resources

2.1 The CHM under UNCLOS and Implementing Agreement

Provisions for the Area and its mineral resources set out in UNCLOS and the Implementing Agreement²⁷ are the most complete expression of the CHM ever realised. Sovereignty claims over the Area, its mineral resources, and any part thereof are prohibited.²⁸ The utilisation of the Area is open to all parties for peaceful purposes.²⁹ Any activity within the Area must be carried out for the benefit of ‘mankind as a whole’, taking particular consideration of the interests and needs of the developing countries.³⁰ Scientific research is free, if peaceful and in the interest of humanity.³¹ When carrying out activity in the Area, states must take measures to ensure the protection of the environment and human life.³²

The international mechanism that manages the Area is the International Seabed Authority (ISA), established under UNCLOS and of which all parties are *ipso facto* members.³³ The ISA has the power to adopt rules on the equitable sharing of benefits derived from activities in the Area, and for securing compliance with its determinations by states parties.³⁴ States have the responsibility of ensuring that private activities carried out in the Area conform to UNCLOS, the Implementing Agreement and ISA regulations; they are liable for any damage caused by activities carried out under their jurisdiction or control.³⁵

Part XI of UNCLOS provided for the establishment of the ‘Enterprise’,³⁶ which should carry out exploration and exploitation activity, directly, including by entering into joint ventures with commercial operators. This is not yet operational, and the ISA Secretariat currently performs some of these functions. Postponing the establishment of the Enterprise was a result of the Implementing Agreement’s successful efforts to address the most problematic areas of UNCLOS,³⁷ in order to facilitate wider acceptance of the Convention among developed states. Both instruments have been widely rat-

27 Under UNCLOS, art 136, ‘The Area and its resources are the common heritage of mankind’. As already noted, the word ‘Area’ indicates ‘the seabed and ocean floor and subsoil thereof, beyond the limits of national jurisdiction’ (UNCLOS, art 1 para 1). The resources of the Area mentioned in art 136 are intended as ‘all solid, liquid or gaseous mineral resources *in situ* in the Area at or beneath the seabed, including polymetallic nodules’; when recovered from the Area, these resources are designated as ‘minerals’ (UNCLOS, art 133).

28 UNCLOS, art 137.

29 UNCLOS, art 141.

30 UNCLOS, arts 140 and 148.

31 UNCLOS, art 143.

32 UNCLOS, art 139.

33 UNCLOS, arts 156-185.

34 The ISA is provided with an Assembly, in which each member state is represented (UNCLOS, art 159); an executive body (the Council) and a Secretariat assist the Assembly in the performance of its functions (UNCLOS, arts 161-169).

35 UNCLOS, arts 156-185.

36 UNCLOS, art 170.

37 These areas are addressed in the different sections of the Annex to the Implementing Agreement: ‘Costs to state parties and institutional arrangements’, ‘The Enterprise’, ‘Decision-making’, ‘Review Conference’, ‘Transfer of Technology’, ‘Production Policy’, ‘Economic Assistance’, ‘Financial Terms of Contracts’, and ‘The Financial Committee’. Under Section 1, para. 4, the setting up and the functioning of the ISA organs and subsidiary bodies are based on “an evolutionary approach” in order that “they may discharge effectively their respective responsibilities at various stages of the development of activities in the Area”.



ified (US non-participation to UNCLOS is an important exception).³⁸ The modifications introduced by the Implementing Agreement have weakened the CHM regime attached to the Area.³⁹ Indeed, it has been underlined how the Agreement, rather than dealing with ‘implementation’, is effectively an amendment to UNCLOS, and has substantively changed certain aspects of the CHM concept.⁴⁰ However, others highlight that the fundamental aspects of the regime of the Area (international managing authority, sharing of benefits) remain unchanged.⁴¹ However, the original innovations of Part XI were weakened even if the substantive content of the CHM legal concept was preserved.⁴²

To conclude, UNCLOS states that the Authority shall perform its functions ‘on behalf of mankind as a whole.’⁴³ This norm reflects the most accredited international law concept of CHM. However, it also harbours ambiguities, such as those related to interpretations of the meaning of ‘humankind’ (which, as discussed in Section 4.2., is not a legal person).

State and ISA practice concerning the CHM regime of the Area suggests states are in favour of its consolidation for certain aspects. While the ISA has entered in a number of contracts on exploration and prospecting of minerals in certain parts of the Area,⁴⁴ no mining activity has been undertaken to date. This, together with the failure to establish the ‘Enterprise’, has prompted some commentators to speak of a ‘halved implementation’ of the CHM. Others highlight further serious deficiencies, such as the non-effective representation of ‘humankind’ in ISA decision-making processes, and the fact that there is no consensus on the understanding of the term ‘equitable’ as an attribute of the benefit sharing system.⁴⁵ On the other hand, the implementing practice is also enhancing the CHM regime of the Area in some important aspects, such the non-admissibility of sovereignty claims, the protection of the marine environment, and the freedom of scientific research, including results distribution.⁴⁶

The existence of a broader institutional framework established under UNCLOS, including the International Tribunal for the Law of the Sea (ITLOS), is one further element facilitating CHM in-

38 The UNCLOS has 168 contracting parties and the Implementing Agreement 150 contracting parties, <http://www.un.org/depts/los/reference_files/status2010.pdf>, accessed 6 December 2019.

39 As observed by Antonio Cassese, *International Law* (OUP 2001) 63, ‘[...] although the notion of common heritage of mankind has not been scuttled, in practice all its major implications for developing countries, with regard to seabed resources, have been watered down [...]’. See also John E. Noyes, ‘The Common Heritage of Mankind: Past, Present and Future’ (2012) 40 DJILP 464.

40 Cf. Tullio Scovazzi, ‘The Exploitation of Marine Genetic Resources in Areas beyond National Jurisdiction’ in Gemma Andreone (ed.) *Jurisdiction and Control at Sea. Some Environmental and Security Issues* (Giannini 2014) 41-42.

41 Thus e.g. Edward Guntrip, ‘The 1994 Agreement does not alter the content of the common heritage of mankind principle. It merely reworks the provisions that were preventing universal acceptance’ (Edward Guntrip, ‘The Common Heritage of Mankind: An Adequate Regime for Managing the Deep Seabed?’ (2012) 4 MelbJIntLaw 376).

42 Sergio Marchisio, ‘Patrimonio comune dell’umanità (Dir. Internaz.)’ (2007) *Enciclopedia Il Sole* 24 Ore, 730.

43 UNCLOS, art 152 para 1.

44 Information on these contracts is available on the ISA official website, <<https://www.isa.org.jm/deep-seabed-minerals-contractors/overview>> accessed 6 December 2019. For an overview of the situation in 2016, see also UNGA Res 71/257 (23 December 2016) UN Doc A/RES/71/57 (2017) 18-19, paras 70-78.

45 Marie Bourrel, Torsten Thiele, Duncan Currie, ‘The common heritage of mankind as a means to assess and advance equity in deep sea mining’ (2016) *Marine Policy* 3.

46 John E. Noyes, ‘The Common Heritage of Mankind’ [39], 465.



terpretation and application. In 2011, the ITLOS Seabed Disputes Chamber⁴⁷ issued an Advisory Opinion concerning the responsibilities and obligations of the states sponsoring private activities in the Area.⁴⁸ In clarifying the content of these obligations, the Chamber considered, *inter alia*, whether there are differences in the content of the obligations imposed upon developed and developing countries respectively. This issue is relevant to the CHM regime, because its main objective is to ensure that developing countries can participate, and benefit from resource exploitation on an equal footing with developed states. The Advisory Opinion in this respect is arguably an authoritative reading of certain aspects of the CHM concept.⁴⁹ For the Chamber, all contracting parties sponsoring activities in the Area have, in principle, the same obligations. Differentiated legal treatment can be however justified, and less stringent obligations imposed upon the developing states based on non-UNCLOS principles or norms in ISA regulations. For example, the 'precautionary approach', under which states parties are allowed to apply 'according to their capabilities', due to a *renvoi* to Principle 15 of the Rio Declaration made by the ISA *Nodule Regulation* and *Sulphides Regulation*.⁵⁰

2.2 From Minerals to Biodiversity?

Equal access to and sharing of revenues from the utilization of resources from areas beyond national jurisdiction have come into focus also with regard to marine genetic resources (MGRs). State and private interests in prospecting and utilizing these resources are continuously growing, also in relation to scientific research and discovery activities, which are for the most part oriented towards commercial use. This situation raises novel and complex legal questions.⁵¹ Whether adequate principles to govern such activities exist, currently, under international law remains unclear. However, UNCLOS and the Convention on Biological Diversity (CBD)⁵² are two important reference points.

Under UNCLOS, the legal regime of the Area covers minerals but not biological resources. Moreover, the water column superjacent to the Area – where the majority of marine living resources are located – is subjected to the regime of the high sea.⁵³ Detailed regulation is laid down in Part VII of

47 The Seabed Disputes Chamber of the ITLOS may give advisory opinions on legal questions, at the request of the ISA Assembly or Council (UNCLOS, art 191).

48 Responsibilities and obligations of states sponsoring persons and entities with respect to activities in the Area, Case No 17, Advisory Opinion (ITLOS Seabed Dispute Chamber 1 February 2011) <https://www.itlos.org/fileadmin/itlos/documents/cases/case_no_17/adv_op_010211.pdf> accessed 6 December 2019. See also: David Freeman, 'Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area' (2011) 105 AJIL 755; Tim Poisel, 'Deep Seabed Mining: Implications of Seabed Dispute Chamber's Advisory Opinion' (2012) 19 AustILJ 213.

49 Cf. Peter Holcombe Henley, 'Minerals and Mechanisms: The Legal Significance of the Notion of the 'Common Heritage of Mankind' in the Advisory Opinion of the Seabed Dispute Chamber' (2011) 12 MelbJIntLaw 125, <<http://www5.austlii.edu.au/au/journals/MelbJIL/2011/14.html#Heading106>> accessed 6 December 2019.

50 *ibid* ch III ('Responsibilities of sponsoring states').

51 Eve Heafy, 'Access and Benefit Sharing of Marine Genetic Resources from Areas beyond National Jurisdiction: Intellectual Property-Friend, Not Foe' (2014) 14 CJIL 493.

52 Convention on Biological Diversity (opened for signature 5 June 1992, entered into force 29 December 1993) 1760 UNTS 79 (CBD).

53 UNCLOS, arts 87 and 89.



UNCLOS,⁵⁴ whose second section provides limits on the use of biological resources,⁵⁵ in partial derogation from the *res communes* regime. The objective is, on the one hand, fostering living resource conservation and, on the other, securing coordination of the obligations of contracting parties under UNCLOS and under a number of fishing conventions and other relevant treaties. The 'Fish Stocks Agreement' of 1995, which supplements UNCLOS provisions with respect to straddling and highly migratory species is also relevant;⁵⁶ further, Part XII of UNCLOS provides the general legal framework on environmental protection in all marine areas.⁵⁷

The CBD, with its holistic approach to biodiversity conservation, offered a corrective to the excessive fragmentation in international biological diversity regulation. The chosen solution was a framework convention establishing guiding principles on the subject, which was expected to have, in addition to normal treaty effects, the ability of influencing the implementation of the pre-existing legal instruments. Actually, a significant number of global and regional treaties on wildlife concluded in the 1970s and 1980s have been aligned with the CBD, either through formal revision or by means of interpretation.⁵⁸

The CBD main purposes concern the management of MGRs: (a) biodiversity conservation (b) the sustainable use of biodiversity components and (c) a fair and equitable sharing of the benefits deriving from the utilization of genetic resources.⁵⁹ The CBD applies to both terrestrial and marine resources, with differences depending on whether the resources lie in areas under or beyond national jurisdiction.⁶⁰ In marine areas, application must be consistent 'with the rights and obligations of states under the law of the sea.'⁶¹ This proviso is interpreted in various ways, and not necessarily as a without-prejudice clause in favour of UNCLOS; it refers to specifically the rights and obligations of the states, rather than the law of the sea in its entirety.⁶²

The interplay between UNCLOS and the CBD has many further aspects. However, there remain important legal and regulatory gaps concerning a framework for the conservation and the sustainable use of marine biodiversity in areas beyond national jurisdiction. This is especially true with regard to access and benefit sharing from MGRs UNCLOS contains no specific rules on MGRs (ex-

54 UNCLOS, arts 86-120.

55 UNCLOS, arts 116-120.

56 Agreement for the Implementation of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks (adopted 4 August 1995, entered into force 11 December 2001) 2167 UNTS 3. The Agreement applies in areas beyond national jurisdiction and, for certain aspects, in areas of national jurisdiction (see arts 3, 6, and 7).

57 UNCLOS, arts 192-237.

58 On a well-known case of formal revision, see Tullio Scovazzi, 'The Updating of the Barcelona System for the Protection of the Mediterranean Sea Against Pollution' in Sergio Marchisio *et al.* (eds) *Sustainable Development and Management of Water Resources: A Legal Framework for the Mediterranean* (CNR Publ. 1999), 48. Updating a treaty regime through dynamic interpretation has characterised, by contrast, the protection of wetlands: cf. Ornella Ferrajolo, 'State Obligations and Non-Compliance in the Ramsar System' in (2011) 14 *JIWLP* 243.

59 CBD, art 1.

60 CBD, arts 4-5.

61 CBD, art 22 para 2.

62 Rüdiger Wolfrum, Nele Matz, 'The Interplay of the United Nations Convention on the Law of the Sea and the Convention on Biological Diversity' (2000) 4 *Max Planck YBUNL* 445, at 463.



cept indirectly, through provisions on living resources), while the CBD, to which issues on genetic resources are of central concern, is only a framework convention.⁶³ The regime resulting from the Nagoya Protocol,⁶⁴ which supplements the CBD, is more detailed; however, the Protocol applies only to marine and terrestrial genetic resources in areas under national jurisdiction. In addition, neither UNCLOS nor the CBD is particularly helpful in solving further legal problems, such non-enforceability of biodiversity protection measures in maritime areas beyond national jurisdiction. UNCLOS allows states to take more stringent measures for the protection of marine rare or fragile ecosystems (article 194 para 5), in addition to their general obligation of protecting the marine environment (article 192). No zonal restriction is provided. In addition, UNCLOS explicitly allows states to take preservation measures in certain areas of the exclusive economic zone (EEZ) where the environment is particularly at risk (article 211 para 6). The provisions above also set out that coastal states may take protection measures in areas beyond the limits of their territorial waters. To become effective, however, such measures require further *ad hoc* intergovernmental arrangements, especially in the case where marine protected areas are established in international waters.⁶⁵

As already observed, a process to complement the existing regulation through a new agreement on marine biodiversity is ongoing. It was launched by the UNGA in 2004, with the establishment of the *Ad Hoc* Open-ended Informal Working Group to Study Issues Relating to the Conservation and Sustainable Use of Marine Biological Diversity beyond Areas of National Jurisdiction (hereinafter 'WG').⁶⁶ The WG Reports illustrate the importance states attach to marine biodiversity and its role in relation to food security and poverty alleviation, especially in small island developing states. The lack of a common regulatory framework may easily frustrate conservation efforts of individual states, because genetic resources are often transboundary in nature, or their status is otherwise relevant to the conservation of a coastal ecosystem as a whole.⁶⁷

Although states expressed differing views about concluding a new agreement or instead strengthening the implementation of existing ones, the WG was eventually able to recommend the former approach. The UNGA endorsed this recommendation in 2015, through establishing a preparatory committee in charge with elaborating elements of a draft-treaty.⁶⁸ The UNGA recommended that the committee address a 'package' of issues agreed on by the WG in 2011, namely the utilisation of genetic resources beyond areas of national jurisdiction and the sharing of benefits derived therefrom; marine protected areas and other area based management tools; environmental impact assessment; capacity building and marine technology transfer.⁶⁹

63 *ibid* 469-471.

64 Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization to the Convention on Biological Diversity (adopted 29 October 2010, entered into force 12 October 2014), < <https://treaties.un.org/doc/Publication/UNTS/No%20Volume/30619/A-30619-08000002802b5335.pdf> >, accessed 6 December 2019.

65 Cf. Ornella Ferrajolo, 'Specially Protected Areas and Biodiversity in the Mediterranean' in Sergio Marchisio *et al.* (eds) *Sustainable Development and Management* [58], 68.

66 UNGA Res 59/24 (4 February 2005) paras 73-76.

67 'Letter Dated 13 February 2015 from the Co-Chairs of the Ad Hoc Open-ended Informal Working Group to the President of the General Assembly', UN Doc A/69/780 (13 February 2015) Annex, 4, para 10.

68 *Supra* [20].

69 'Letter Dated 13 February 2015 from the Co-Chairs[...] [67], 5, para 12.



Predicting the principles that are likely to inspire the future treaty would be premature, as during the WG sessions some delegations supported CHM-related concepts while others favoured the regime of living resources in the high sea.⁷⁰ Legally there is no reason against broadening the material scope of the regime of the Area and enlarging existing ISA competencies to cover also marine biodiversity in areas beyond national jurisdiction. However, this is not universally accepted, which raises a dilemma between choosing a satisfactory technical solution and adopting a more politically palatable approach.⁷¹

However, considering UNCLOS as the only source material for a future treaty might be misleading: despite its importance as a 'constitution for the oceans,' UNCLOS does not regulate all activities.⁷² The same observation is valid with respect to the OST, whose ability to provide a comprehensive legal framework for commercial exploitation of space resources is discussed in the next Section.

3. Outer Space Resources

3.1 The General Legal Framework

During the Moon Agreement drafting process, a parallel debate on the CHM was ongoing with regard to the future convention on the law of the sea. This is why the drafters of the Moon Agreement specified in article 11 that the CHM concept applicable to the Moon and its natural resources 'finds its expression in the provisions of this Agreement, in particular in paragraph 5 of this Article,'⁷³ thus downplaying any influence from other treaties.⁷⁴

The key components of the CHM are however the same in both the Moon Agreement and UNCLOS. Article 11 of the Moon Agreement embeds the principle of non-admissibility of sovereignty claims over any part of the Moon and the resources thereof. It further prohibits appropriation of any part of the Moon and resources by states, IGOs, non-governmental organisations (NGOs), public bodies, private entities, and natural persons.⁷⁵ This precision is necessary because under the OST non-international persons may carry out activities in outer space, if 'under the authority and supervision of the appropriate state.'⁷⁶

Other constituent elements are the denuclearisation of the Moon, the utilisation for only peaceful

⁷⁰ *ibid* 6, para 16.

⁷¹ Dire Tladi, 'The Common Heritage of Mankind and the Proposed Treaty on Biodiversity in Areas Beyond National Jurisdiction: The Choice between Pragmatism and Sustainability' (2015) 25 YIEL 113-132.

⁷² Tullio Scovazzi, 'Negotiating Conservation and Sustainable Use of Marine Biological Diversity in Areas beyond National Jurisdiction: Prospects and Challenges' (2014) XXIV IYIL 63.

⁷³ Moon Agreement, art 11 para 1.

⁷⁴ Cf. Marco Gestri, *La gestione delle risorse naturali d'interesse generale per la Comunità internazionale* (Giappichelli 1996) 316.

⁷⁵ Moon Agreement, art 11 paras 2 and 3.

⁷⁶ OST, art VI; based on the same article, states bear international responsibility for any 'national activities' in outer space. These principles are present also in the Registration Convention and the Liability Convention, as well as in the Moon Agreement, art 14, and are reputed to have acquired the status of customary norms of international law.



purposes,⁷⁷ and the freedom of exploration and use,⁷⁸ with a focus on scientific investigation.⁷⁹ Article 7 sets out duties of protection of the Moon environment; a novelty in space law, given that the OST only envisages the possible pollution of the Earth from extra-terrestrial matters (so called ‘back contamination’).⁸⁰ Under the OST, some protection of the outer space environment from man-made activity has been inferred, by means of interpretation, from the principle of non-interference with the other states’ freedoms and from the obligation to notify other parties of any ‘potentially harmful interferences’ that might result from a planned activity or project.⁸¹ By contrast, the Moon Agreement expressly set forth a ‘due diligence’ obligation of states parties to protect the lunar environment and preventing the disruption of the existing balance of the same, whether by introducing adverse changes, by contamination from exogenous matter, or in any other manner.⁸² This regime further benefits from the *in situ* inspection system, which applies, on a reciprocity basis, to all manned or unmanned stations, facilities, installations, equipment, vehicles, etc., which contracting parties may establish and/or utilize on the Moon.⁸³

The Moon Agreement is weak, compared with UNCLOS, with regard to CHM procedural elements. Drafted when the exploitation of lunar resources was only theoretical, article 11 postponed the setting up of a benefits sharing system, including ‘appropriate procedures’, to further arrangements. Parties should agree on these procedures once resource exploitation will become imminent (paragraph 5).⁸⁴ This clause contains a *pactum de contrahendo* or, rather, *de negotiando*.⁸⁵ It leaves unresolved some legal issues, starting from the question of whether article 11 contains an implicit moratorium on the exploitation of lunar resources, at least pending the adoption of the CHM regime envisaged in paragraph 5. Based on the drafting history and the absence of an express provision, an implicit moratorium seems unlikely.⁸⁶ Parties to the Moon Agreement wishing to undertake resource exploitation should conform, however, to the guiding principles of the future regime, which are listed in article 11 paragraph 7. The most important principle for establishing a CHM regime and not a *res communis* one is the ensuring of equitable benefit sharing through the balancing of interests of the investor states and the interests and needs of the developing countries.⁸⁷

77 Moon Agreement, art 3.

78 Moon Agreement, art 11 para 4.

79 Moon Agreement, art 6.

80 OST, art IX.

81 *ibid.*

82 Moon Agreement, art 7 para 1.

83 Moon Agreement, arts 9 and 15.

84 Moon Agreement, art 11 para 5 reads: ‘States Parties to this Agreement hereby undertake to establish an international regime, including appropriate procedures, to govern the exploitation of the natural resources of the moon as such exploitation is about to become feasible.’

85 In the view of many scholars, a treaty cannot create upon contracting parties a legal obligation, in proper sense, to give their consent to be bound by a future treaty; therefore, so-called *pacta de contrahendo* should be interpreted, merely, as creating for the states an obligation of undertaking future negotiation and engaging in such negotiation in good faith. Cf. Paolo Fois, *L'accordo preliminare nel diritto internazionale* (Giuffrè 1974), 18-23.

86 Bin Cheng, *Studies in International Space Law* (Clarendon Press 1997) at 374.

87 Moon Agreement, art 11 para 7.



The idea that article 11 represents a serious obstacle to the commercial exploitation of space resources has underpinned poor acceptance of the Moon Agreement. In accordance with its article 59 para 2, the Moon Agreement entered into force in 1980, following ratification by five states. That same year, ratification was rejected by the US Congress,⁸⁸ soon followed by the USSR (and, later, the Russian Federation), as well as a great majority of both developed and developing states participating in the OST. The Moon Agreement has 17 contracting parties, and most space-faring nations have not ratified the Agreement.⁸⁹

In this situation, prospects on negotiating further arrangements to supplement article 11 appear unrealistic. This does not mean that, once commenced, the commercial exploitation of space resources will be carried out in a *vacuum iuris*. The OST is applicable to resource 'exploitation' even if the words utilised in the text are 'exploration' and 'use'; in its ordinary meaning, the term 'use' is broad enough to include exploitation.⁹⁰ The OST preparatory works⁹¹ and the fact that this Treaty regularly applies to, *inter alia*, satellite commercial services, support this interpretation.⁹²

Thus, a legal framework exists, under the OST and general international law, relevant to the extraction and commercialisation of natural resources from the Moon and the other celestial bodies. Whether these principles, which are sometimes vague, are able to govern such activities in all their aspects is a different question.

3.2 The Debate on Requirements for Legitimately Exploiting Outer Space Resources

A number of legal issues have arisen in the two last decades. A central question is whether states may allow public bodies, private companies and individuals to acquire property rights or other real rights over space resources in the domestic legal order, or whether this would be inconsistent with states' international law obligations.

One precedent could be found in a practice of private companies, which consists in selling portions of the Moon, Mars or asteroids as 'extraterrestrial real estates'. These contracts are wrongful and without legal effect, *prima facie*, in light of article 11 of the Moon Agreement, which expressly prevents any form of outer space appropriation, including by natural or juridical persons. However, the Moon

88 Cf. Thomas Gangale, 'Common Heritage in Magnificent Desolation' (paper presented to the 46th American Institute of Aeronautics and Astronautics (AIAA) *Aerospace Sciences Meeting and Exhibit*, 7-10 January 2008, Reno, Nevada, <<https://doi.org/10.2514/6.2008-1467>>, accessed 6 December 2019).

89 As at 6 December 2019, the states having ratifying the Moon Agreement were Australia, Austria, Belgium, Chile, Kazakhstan, Kuwait, Lebanon, Mexico, Morocco, Netherlands, Pakistan, Peru, Philippines, Saudi Arabia, Turkey, Uruguay, and Venezuela. Cf. 'Status of International Agreements relating to activities in outer space as at 1 January 2017', UN Doc A/AC.105/C.2/2017/CRP.7 (2017).

90 Based on the 'General rule of interpretation' ex art 31 of the Vienna Convention on the Law of Treaties, a treaty should be interpreted according to the ordinary meaning of the words utilised in the text.

91 Carl Quimby Christol, *Space Law: Past, Present and Future* (Kluwer Law and Taxation Publishers 1991) 68.

92 Cf. Stephan Hobe, 'Adequacy of the Current Legal and Regulatory Framework Relating to the Extraction and Appropriation of Natural Resources in Outer Space' (2007) XXXII *AnnAir&SpaceL* 116.



Agreement is legally binding upon few states. Though more concise, article II of the OST prohibits 'national appropriation' of outer space and celestial bodies. This norm should be read in conjunction with article VI of the OST, imposing upon contracting parties the obligations of subjecting national private activities in outer space to prior authorisation and secure continuous conformity of these activities with the OST.

The Board of Directors of the International Institute of Space Law (IISL) issued a statement in 2004⁹³ where it is affirmed that under international law, states parties to the OST: 'are under a duty to ensure that, in their legal systems, transactions regarding claims to property rights to the Moon and other celestial bodies or parts thereof, have no legal significance or recognized legal effect.'⁹⁴ A second statement from the Board issued in 2009 further clarified the concept: 'Since there is no territorial jurisdiction in outer space or celestial bodies, there can be no private ownership of parts thereof, as this would presuppose the existence of a territorial sovereign competent to confer such title of ownership.'⁹⁵ In the opinion of the IISL experts, special regulation is needed, and should be elaborated on the input of the UN, to improve 'clarity and legal certainty in the near future'.⁹⁶

Some states have commenced domestic regulation. The United States (US) passed the 'Commercial Space Launch Competitiveness Act' in 2015.⁹⁷ The Act contains provisions on various aspects of national activities in outer space, including the exploration and exploitation of space resources. Accordingly, US nationals engaged in recovering resources from celestial bodies are entitled '[...] to any asteroid resource or space resource obtained, including to possess, own, transport, use, and sell the asteroid resource or space resource obtained in accordance with applicable law, including the international obligations of the United States.'⁹⁸ Other parts of the text mention the need to respect international obligations. A clearer formula is found in the 'Disclaimer of Extraterritorial Sovereignty' clause, expressly affirming that the US does not intend to assert, through the Act, '[...] sovereignty or sovereign or exclusive rights or jurisdiction over, or the ownership of, any celestial body.'⁹⁹

In December 2015, the IISL Board of Directors has made an initial assessment of the US Act in the light of the UN space treaties.¹⁰⁰ The assessment notes, among other things, that while it is clear that international law does not allow appropriation of 'territory' in outer space, no commonly shared

93 IISL Position Paper, 'Statement by the Board of Directors of the International Institute of Space Law (IISL) on Claims to Property Rights Regarding the Moon and Other Celestial Bodies' (2004) <http://iislwebo.wwwnsls1.a2hosted.com/wp-content/uploads/2015/03/IISL_Outer_Space_Treaty_Statement.pdf> accessed 6 December 2019. See also Ricky J. Lee, 'Article II of the Outer Space Treaty: Prohibition of State Sovereignty, Private Property Rights, or Both?' (2004) 11 *AustILJ* 128.

94 IISL Position Paper, 'Statement by the Board of Directors' [93].

95 IISL Position Paper, 'Statement of the Board of Directors of the International Institute of Space Law' (29 March 2009) <<http://iislwebo.wwwnsls1.a2hosted.com/wp-content/uploads/2015/03/Statement-BoD.pdf>> accessed 6 December 2019.

96 *ibid.*

97 US 'Commercial Space Launch Competitiveness Act', Public Law 114-90 (25 November 2015) <<https://www.congress.gov/bill/114th-congress/house-bill/2262/text>> accessed 6 December 2019.

98 *ibid* ch IV para 51303.

99 *ibid*, s 403.

100 IISL, 'Position Paper on Space Resource Mining, adopted by consensus by the Board of Directors on 20 December 2015' <<http://www.iislweb.org/docs/SpaceResourceMining.pdf>> accessed 6 December 2019.



view exists on whether the expression ‘free use’ utilised in the Treaties includes ‘the right to take and consume non-renewable natural resources’, such minerals or water, from celestial bodies.¹⁰¹ The assessment concludes that the US Act should be regarded as ‘a possible interpretation’ of the non-appropriation principle under the OST.¹⁰²

The fact that states cannot in any way regard mining activities in outer space as a means of asserting sovereignty over, or exclusive rights to celestial bodies should be, logically, a minimum threshold requirement for complying with the OST (*‘in claris non fit interpretatio’*). However, any such concern is absent from the Luxembourg Act of 20 July 2017,¹⁰³ which states in article 1: ‘Les ressources de l’espace sont susceptible d’appropriation’ [‘Outer space resources are susceptible to appropriation’]. In this case, contradiction between national and international law is evident. The US has taken a more cautious approach. However, this has not prevented the Russian Federation from viewing the enactment of the US “Commercial Space Launch Competitiveness Act” as a threat to the role of international law in the governance of space activities.¹⁰⁴

The content of the US Commercial Space Launch Competitiveness Act is assessed along with further measures established in the ‘American Space Commerce Free Enterprise Act’ of 24 April 2018.¹⁰⁵ The 2018 Act entitles the Commerce Department to govern all ‘non-traditional’ space activities carried out by US citizens and entities, including mining activity. It reiterates that limits to such activity may be imposed upon the operators as required by US international obligations under the OST.¹⁰⁶

The role of the CHM in this debate is unclear. The IISL Position Paper of 2015 does not refer to the concept, but expressly refers to the ‘common benefit’ principle. This document correctly observes that the provisions of the Moon Agreement – a treaty to which the US is not a party – have not gained the status of customary norms of international law.¹⁰⁷ It does not further consider, however, if legal consequences can derive to non-party states from the fact that article 11 of the Agreement has proclaimed the Moon and its resources the CHM. Yet, the doctrine stated that the Moon Agreement is relevant to the OST interpretation as ‘subsequent practice’ in the meaning of article 31 para 3 b of the Vienna Convention on the Law of Treaties.¹⁰⁸ This, because the states participating in the UNCO-

101 *ibid*, s II para 1 b.

102 *ibid*, s II para 2.

103 ‘Loi des 20 juillet 2017 sur l’exploration et l’utilisation des ressources de l’espace’ [Law of 20 July 2017 governing space resource exploration and use] <<http://legilux.public.lu/eli/etat/leg/loi/2017/07/20/a674/jo>> accessed 6 December 2019

104 UN Committee on the Peaceful Uses of Outer Space (UNCOPUOS), ‘Reviewing opportunities for achieving the Vienna consensus on Space Security encompassing several regulatory domains, Working Paper submitted by the Russian Federation’ (2016) UN Doc A/AC.105/C.1/2016/CRP.15 (16 February 2016) <http://www.unoosa.org/oosa/oodoc/data/documents/2016/aac.105c.12016crp/aac.105c.12016crp.15_0.html> accessed 6 December 2019.

105 US ‘American Space Commerce Free Enterprise Act’, 115th Congress 2017-2018, Bill, (24 April 2018) <<https://www.congress.gov/bill/115th-congress/house-bill/2809/text?r=40>> accessed 6 December 2019.

106 The 2018 Act specifies, however, that ‘to the maximum extent practicable, the Federal Government shall interpret and fulfil its international obligations to minimize regulations and limitations on the freedom of United States nongovernmental entities to explore and use space’ (Sec. 2, para 2 and 3). Moreover, it is stated in § 80308 that ‘[...] outer space shall not be considered a global commons.’

107 IISL, ‘Position Paper on Space Resource Mining’ [100] s II para 1 c.

108 Stephan Hobe, ‘Adequacy of the Current Legal and Regulatory Framework’ [92], 123-124.



PUOS adopted the Moon Agreement, by consensus, about ten years after the OST, and at a time in which the commercialisation and privatisation of space activities had become a reality.

Unsurprisingly, the UNCOPUOS Sixtieth session (2017) addressed the relationship between the CHM and national regulations on the extraction and commercialisation of space resources. In the view of some delegations, rapid developments in the national legal framework would put at risk ‘multilateralism in space diplomacy’.¹⁰⁹ In another opinion, ‘... as space was to be considered the common heritage of humanity, belonging to all States on an equal footing, legislation regarding the commercialization of outer space should neither exist or be promoted’.¹¹⁰ The UNCOPUOS Report clearly illustrates how states are far from achieving consensus on solutions.

4. Re-Founding the CHM Concept in International Law

4.1 Environmental Law

Are there other treaties that employ a CHM regime? The answer depends on the interpretation of the CHM concept. Many conventions drafted in the 1970s utilise the words ‘heritage’, ‘mankind’, ‘interest of future generations’. However, this does not necessarily mean that a CHM-relevant practice has developed from these treaties.¹¹¹

The 1959 Antarctic Treaty¹¹² recognised in its preamble that preserving Antarctica for peaceful uses is ‘in the interest of all mankind’. This Treaty also provides a cooperative mechanism, wherein the ‘Consultative Parties’ – i.e. states carrying out concrete activities in Antarctica – have special conservation responsibilities. The Madrid Protocol of 1991 and its Annexes introduced environmental concerns into the ‘Antarctic system’.¹¹³ The Protocol established, *inter alia*, a moratorium on mining in Antarctica¹¹⁴ and, thus, suspended *sine die* the application of a previous treaty, the Wellington Convention (CRAMRA) of 1988, containing a detailed regulation on the exploitation of Antarctic mineral resources.¹¹⁵

109 UNCOPUOS, ‘Report of the Committee on the Peaceful Uses of Outer Space, Sixtieth session (7-16 June 2017)’, UN GAOR, 72th Session supp No 20 (2017), 26 para 193 and 30 para 237.

110 *ibid* 30 para 233. See also UNCOPUOS, ‘Report of the Committee on the Peaceful Uses of Outer Space, Sixty-first session (20-29 June 2018)’, UN GAOR, 73th Session supp No 20 (2018), 36 para 282-288.

111 Kemal Baslar, *The Concept of Common Heritage of Mankind in International Law* (Martinus Nijhoff 1998), 311.

112 Antarctic Treaty (adopted 1 December 1959, entered into force 23 June 1961) 402 UNTS 71. See also Christopher C. Joyner, *Governing the Frozen Commons. The Antarctica Regime and Environmental Protection* (South Carolina UP 1998).

113 Protocol on Environmental Protection to the Antarctic Treaty (adopted 4 October 1991, entered into force 14 January 1998) 30 ILM 1455 (Madrid Protocol).

114 ‘Any activity relating to mineral resources other than scientific research shall be prohibited’ (Madrid Protocol, art 7).

115 Convention on the Regulation of Antarctic Mineral Resource Activities (adopted 2 June 1988, open for signature 25 November 1988, not in force) 27 ILM 686 (CRAMRA).



Similarly, the UNESCO World Heritage Convention of 1972¹¹⁶ enshrines certain responsibilities for preserving the sites included in the 'World Heritage List' to all contracting parties and to the World Heritage Committee, in addition to the primary responsibility of the territorial sovereign. Moreover, the Convention includes a mechanism on technical and financial assistance, primarily for the benefit of developing countries.¹¹⁷ The World Heritage Convention has been crucial to introducing environmental elements into the CHM concept.¹¹⁸

However, none contains a CHM regime as explicit as that set out in the Moon Agreement or in UNCLOS. Most importantly, these treaties do not set out a system for equitable benefit sharing, nor establish an international organisation that may function as trustee to manage respectively Antarctica or the World Heritage sites on behalf of humanity.

International conservation law, in particular, has failed to recognise living resources in general or migratory species in particular as part of the CHM, in terms similar to the UNCLOS CHM regime. The 'International Undertaking on plant genetic resources for food and agriculture' adopted by the FAO in 1983, for example, declared these resources to be 'a common heritage of humankind'.¹¹⁹ However, the subsequent International Treaty, adopted under FAO auspices in 2001, abandoned the CHM concept in favour of the concept of 'common concern of all countries'.¹²⁰ Similarly, the CBD does not have a CHM clause, despite the World Commission on Environment and Development (WCED) suggestion, in its report 'Our Common Future', to draft a global convention on wild species qualifying the same as 'a common heritage'.¹²¹ It is true that the concept of CHM was utilised, in this document, in a hortatory sense. This meant that the management of wild species would imply: (a) the collective responsibility of states (though not collective rights), while respecting the state sovereignty over natural resources; (b) equitable sharing of revenues; and (c) the establishment of a trust fund to collect contributions and support conservation programmes. The CBD eventually adopted the concept of 'common concern of humankind',¹²² which also occurs in the UN Framework Convention on Climate Change (UNFCCC).¹²³ The concept of 'common concern' has a more delimited normative and operational scope than 'common heritage' because it does not involve the 'internationalisation' of areas or resources. It implies a degree of flexibility, and is more deferential to sovereignty; therefore, it is probably more adequate than the CHM to define the legal status of natural resources lying in areas under state jurisdiction.

116 Convention Concerning the Protection of the World Cultural and Natural Heritage (adopted 16 November 1972, entered into force 17 December 1975) 1037 UNTS 151 (World Heritage Convention).

117 World Heritage Convention, art 13.

118 Alexandre Kiss, Jean-Pierre Beurier, *Droit international de l'environnement* (3th edn, Pedone 2004), 147.

119 FAO Conference Res 8/83 (23 November 1983).

120 International Treaty on Plant Genetic Resources (adopted 3 November 2001, entered into force 29 June 2004) 2004 UNTS 379, preamble para 3.

121 World Commission on Environment and Development (WCED) (1987) UN doc. A/42/427.

122 CBD, preamble para 3.

123 UN Framework Convention on Climate Change (adopted 9 May 1992, entered into force 21 March 1994) 1771 UNTS 107 (UNFCCC), preamble para 1.



The shifting from CHM to the concept of ‘common concern’ in the drafting of global environmental treaties confirms that a majority of states – be they developed or developing – are not ready to accept the CHM as a legal concept. Attempts have been made, including by legal scholarship, to modify the core content of the CHM to render it more acceptable, especially to industrialised states. However, these attempts have proved detrimental to the consolidation of the concept, especially with regard to the procedural components, which are as important as the substantive ones and which have proved to be controversial among the states.¹²⁴ These attempts include the idea that, once a treaty has declared a common good as part of the CHM, states have a duty to comply with the relevant legal regime even if no international benefit sharing system and implementing mechanism are in place. The reason is that the CHM is able, like all norms of international law, to be applied ‘in a decentralized manner’ by the states.¹²⁵ At the conceptual level, this assertion is correct. However, lessons drawn from the implementation of the Moon Agreement suggest that leaving out procedural elements significantly weakens the legal force of the CHM, and misses the opportunity to establish a regime of common goods different from the regime of *res communes*.

4.2 Human Rights Law

After the demise of the NIEO, the CHM has found new roots, some authors suggest, in the ‘modern natural law’ that developed after the Second World War, and of which the protection of human dignity is the most relevant expression.¹²⁶ However, the African Charter of 1981¹²⁷ is the only legally binding instrument that mentions ‘the equal enjoyment of the common heritage of mankind’, in relation to peoples’ right to economic, social and cultural development.¹²⁸ This proviso is too vague, because it does not specify, unlike the Moon Agreement and UNCLOS, which areas or resources are covered by the CHM regime, nor does it explain in which manner the CHM and the right to development are interlinked. Since treaty effects attach to all African Charter provisions however, considering article 22 as ‘a sort of declaration with no legal value’¹²⁹ is arguably excessive.

The occurrence of a variety of inconsistent expressions in the relevant instruments is a further element militating against regarding the CHM as a concept well established in human rights law. The

124 With regard to proposals of modifying the CHM concept under the Moon Agreement in a manner inconsistent with its core legal content see Ornella Ferrajolo, ‘Il trattato ‘incompiuto’. L’accordo sulla luna del 1979 e altre norme internazionali rilevanti per l’uso delle risorse naturali nello spazio esterno’ in Lina Panella, Ersiliagrazia Spatafora (eds) *Studi in onore di Claudio Zanghi* (Giappichelli 2011) 51.

125 Francesco Francioni, ‘Genetic Resources, Biotechnology and Human Rights: The International Legal Framework’ in Francioni (ed) *Biotechnologies and International Human Rights* (Hart Publishing 2007), 10.

126 Cf. Kemal Baslar, *The Concept of Common Heritage* [111], 21.

127 African (Banjul) Charter on Human and Peoples’ Rights (adopted 27 June 1981, entered into force 21 October 1986) 21 ILM 58 (African Charter).

128 African Charter, art 22 para 1.

129 Kemal Baslar, *The Concept of Common Heritage* [111], 349. For this Author, reference to the CHM in the African Charter does not differ, as for legal value, from article 17 of the ‘Universal Declaration of the Rights of Peoples’ (so called Algiers Charter), a political document adopted, on NGOs input, on 4 July 1976. Text published on the official website of the ‘Permanent Peoples’ Tribunal’ – Lelio and Lisli Basso Foundation, <<http://permanentpeopletribunal.org/algiers-charter/?lang=en>>, accessed 6 December 2019



UNESCO 'Universal Declaration on the Human Genome and Human Rights'¹³⁰ is significant in this respect. After declaring that '[T]he human genome underlies the fundamental unity of all members of the human family, as well as the recognition of their inherent dignity and diversity', the Declaration further proclaims the human genome 'a heritage of humanity', but 'in a symbolic sense'. The Declaration is not legally binding, the chosen formula is such as to weaken, rather than reinforce, the *legal* concept of CHM. Independent from the wording, however, international soft law instruments cannot *per se* create customary rules of international law, if state practice remains uncertain and contradictory.¹³¹

Nonetheless, the question of whether the CHM can be envisaged in human rights law, either in the form of an autonomous right, or by virtue of its relationship with other, more universally accepted rights, to which individuals and/or peoples are entitled deserves attention. Recognising a human right to the CHM could help to realise the effective enjoyment by the individuals of their rights to life, to food, to water and to a sound environment. Similarly, the CHM has, in theory, a strong functional relationship with the rights of peoples to peace, to self-determination, to development. This functional relationship rests on the fact that the realisation of these rights would be significantly facilitated if resources in areas beyond national jurisdiction (and other global commons, such water, forests, climate, biodiversity, etc.) were subjected to a CHM regime universally recognised, and effectively implemented.

The degree to which this line of reasoning would enhance the role of the CHM and consolidate its status in general international law is however modest. As a matter of fact, human rights of so-called 'third generation' – and notably people's rights – encounter many problems with regard to their effective implementation. One relevant question is individuating the relevant legal subjects entitled to these rights. Which judicial or other remedies should states make available, internationally and/or domestically, for repressing violations is another critical issue. In the case of the CHM, these problems are even more complex because 'humankind' is not a legal person under either international or national law. According to an early and arguably still valid interpretation, the relevant UNCLOS provisions do not consider humankind as a 'subject' in deep seabed activities, but rather as an 'object' whose interests the ISA must take into account.¹³² The same is true with regard to future generations, who also do not have legal personality. Recent studies suggest that managing common goods from a human rights perspective requires enabling recourse to states' extra territorial jurisdiction to a much larger degree than is currently the case in the international legal order and by national legislation.¹³³

130 UNESCO General Conference Res No 16 (11 November 1997).

131 Louis Frederick Edward Goldie, 'A Note on Some Diverse Meanings of the 'Common Heritage of Mankind'' (1983) 10 SJILC 70.

132 Rüdiger Wolfrum, 'The Principle of the Common Heritage' [8], 318.

133 Daniel Augenstein, 'Paradise Lost: Sovereign State Interest, Global Resource Exploitation and the Politics of Human Rights' (2016) 27 EJIL 669.



5. Furthering the CHM as Legal Concept Without Changing the Fundamentals of International Law Is Possible

In the opinion of many scholars, the most important obstacle to significant developments in international law concerning the CHM is legal positivism.¹³⁴ The argument is that such theoretical approach inevitably brings with it concepts and principles that are inimical to the CHM, such as state sovereignty and an individualistic approach to natural resource use. Indeed, the fact that the norms of international law are primarily consent-based, has prompted scholars to explore whether there are other avenues than treaty obligations for establishing a more successful cooperative management of the global commons.¹³⁵

These arguments prompt objections. One is that the CHM and the related legal principles are relevant mainly to the management of resources from areas beyond national jurisdiction. Moreover, the exercise of sovereign rights in state territory encounters limits too, in accordance with international law. State legal obligations for protecting individual, collective, and peoples' rights, preserving the environment and utilising natural resources in a sustainable manner are numerous. When crystallised in customary norms, these obligations are binding upon all international legal persons. If treaty-based, they are often binding upon a great majority of states, thanks to wide participation to these treaties by countries from all regions. Almost all states participate in the UN 'core treaties' on human rights.¹³⁶ The same is true for global, regional and bilateral conventions on environmental matters. Moreover, states comply, on a voluntary basis, with the recommendations stemming from UN and other soft law documents.

From this viewpoint, one of the most important merits of CHM is its relevance to the initial building, and the subsequent development of a progressive interpretation of the concept of territorial sovereignty, distant from the Westphalian model, and rather functional to the protection of life on Earth. This alternative articulation of sovereignty has emerged, largely, thanks to the principles enshrined in UNCLOS and in other widely ratified treaties adopted in the twentieth century and concerning territory, sea, air, outer space and natural resources.¹³⁷

The alleged incompatibility between CHM-related issues and legal positivism is disproved by the fact that the CHM does form part of positive international law. A CHM regime is in force, and is

134 Kemal Baslar, *The Concept of Common Heritage* [111], 347, has pointed out that the traditional sources of international law "are generally used by 'formalists' to crucify the common heritage of mankind". The Author reports an opinion from so-called 'naturalists', according to which the general principles of international law should be interpreted as broadening the concept of sources of international law beyond the limit of legal positivism (352-352). Hence, the conclusion that "The binding force of the common heritage of mankind should not be sought in the free will of states, as they are not the only entities that represent people" (357).

135 Nico Krisch, 'The Decay of Consent: International Law in an Age of Global Public Goods' (2014) 108 AJIL 1.

136 The International Convention on the Elimination of All Forms of Racial Discrimination (ICERD) of 1965 has 182 states parties; the 1966 International Covenants on Civil and Political Rights (ICCPR) and on Economic, Social and Cultural Rights (ICESCR) both have 173 states parties; the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) of 1979 has 189 states parties; the 1989 Convention on the Rights of the Child (CRC) is the most ratified human rights treaty, with 196 states parties (source: United Nations Treaty Collection, Status of treaties, Chapter IV, Human Rights, <https://treaties.un.org/Pages/Treaties.aspx?id=4&subid=A&clang=_en> accessed 6 December 2019).

137 Antonio Cassese, *International Law* [39] 64.



binding upon many states by virtue of UNCLOS. Wide acceptance of UNCLOS, together with the implementing practice of the ISA, have reinforced the legal status of the regime of the Area. Indeed, it is widely argued that the CHM regime can be applied also to non-party states to UNCLOS.¹³⁸ Hence, the possibility of a competing deep sea bed regime ‘appears extremely remote’, and ‘would surely be condemned as inconsistent with international law’.¹³⁹

Many authors believe that taking a positivistic approach when dealing with CHM issues is counterproductive to the consolidation of CHM in international law as a set of customary rules widely applicable in areas beyond national jurisdiction. This because positivism is supposed to coincide with a conservative attitude towards existing norms, which qualify such areas as *res communes omnium*, with the only exceptions being the Area and, in part, the Moon. If correctly interpreted, however, legal positivism is not the enemy of change in international law, in accordance with change that might occur in the international community’s factual situation. Social changes are insufficient to produce legal developments, however, if no new rules come from a recognised legal source (custom or treaty). As Dionisio Anzilotti has suggested, positivism presupposes that legal norms change over time much more than the theories on “natural law” do.¹⁴⁰ It is true, however, that no further developments have occurred in relation to the CHM, after the adoption of UNCLOS and the Moon Agreement. It does not seem that so-called global commons – a concept later emerged in the terminology of treaties and successfully utilised by international jurists – qualify as part of the CHM in proper sense. As noted, a new debate on the CHM has developed in the context of the ongoing negotiations towards a new treaty on marine biodiversity in areas beyond national jurisdiction, where the question of MGRs is central. Some governments support CHM-related principles, while others support freedom of access and use, on the model of the high seas regime.¹⁴¹ Meanwhile, developments in space-related national legislation are encouraging state unilateral regulation and thus putting at risk prospects of implementing an effective CHM regime for the Moon and other celestial bodies. To conclude, it is unclear whether or not states are ready to accept new, consent-based obligations in near future, with a view of proclaiming MGRs, space resources or other common goods as CHM.

The CHM remains a treaty-based concept, as no generally accepted practice and *opinio iuris* of states concerning its application to the global commons has developed. Moreover, the CHM concept varies depending on the relevant instrument, and its interpretation by both governments and scholars varies. Effective and widespread application of the CHM to the global commons encounters many obstacles, mostly linked with the will of the states to maintain a margin of appreciation for the management of natural resources. Nonetheless, there is nothing in the international community or in the fundamentals of international law preventing further consolidation of the CHM concept and principles, by treaty or custom.

138 Cf. Rüdiger Wolfrum, ‘The Principle of the Common Heritage’ [8], 333.

139 John E. Noyes, ‘The Common Heritage of Mankind’ [39], 465.

140 Giorgio Gaja, ‘Positivism and Dualism in Dionisio Anzilotti’ (1992) 3 EJIL 123, 125-126.

141 Debate is ongoing within the intergovernmental conference convened under UNGA Res 72/249 (19 January 2018), <<https://undocs.org/A/RES/72/249>>, accessed 6 December 2019. The first session of the Conference was held from 4 to 17 September 2018, the second and third sessions from 25 March to 5 April 2019 and from 19 to 30 August 2019, respectively. Cf. UNGA Res ‘Oceans and the law of the sea’, UNGA Res 73/124 (31 December 2018), 41-42, para 248-249.