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Who Owns the Oil that Traverses a Boundary on the Continental Shelf in an Enclosed Sea? Seeking Answers in Natural Law through Grotius and Selden

MELISSA H. LOJA*

Abstract

The principle of sovereign rights under UNCLOS countenances competition among littoral states for ownership of a common oil deposit through the unilateral exploitation of their continental shelf. This leads to conflict, wastage, and resource sterilization. However, rather than apply the principle of sovereign rights, states seem to turn to natural law principles as a more reasonable regulation of their activities on the continental shelf. Two sources of natural law principles are relevant. One source consists of a priori principles of sociableness and necessity which prescribe that, for their own preservation, states ought to act pursuant to the common good. These principles underlie energy security policies which espouse interdependence. Another source of natural law principles are international agreements and national laws in which states temper their sovereign rights and interests and recognize the co-existence of the rights and interests of other states in a common deposit. These practices constitute a posteriori intervenient or secondary law of nations, which appears similar to customary law. Adherence is not dictated by conviction that these principles are obligatory. Rather, adherence seems to be based on discernment that, while permissible under the principle of sovereign rights, unilateral appropriation is impermissible under natural law.

Key words

continental shelf; customary law; law of the sea; natural law; natural resources

1. Introduction

Grotius and Selden were largely ignored when the International Law Commission (ILC) formulated the general principles of the doctrine of the continental shelf.[1] From the beginning, it was acknowledged that the exploitation of the continental shelf was of great importance to mankind, and that, as new technology has made such exploitation possible,[2] 'legal concepts should not impede this development'.[3] No time was wasted 'on the classic questions of *mare liberum* and *mare clausum*', for

* Melissa H. Loja is a PhD candidate at the Faculty of Law, University of Hong Kong. She obtained her LL M from the same university under a Sohmen Scholarship in Human Rights. She received the 2012 Anna Wu Prize [h1198345@hku.hk].

1 See Summary of Records of the Eighth Session, 1956, YILC, Vol. I, at 144.

2 Summary of Records of the Second Session, 1950, YILC, Vol. II, at 384.

3 Ibid.

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the focus was solely on the new doctrine of the continental shelf.[4] Expediency was paramount.[5]

The principle of sovereign rights was adopted as the basic regulation of state activities on the continental shelf.[6] Under the principle the littoral state 'exercises over the continental shelf sovereign rights for the purpose of exploring and exploiting its natural resources'.[7] Its rights are sovereign for solely the littoral state may explore or exploit its continental shelf, although it may consent to other states undertaking these activities in its stead.[8] Prior occupation or possession of the continental shelf is not a prerequisite to the enjoyment of such rights.[9] Sovereign rights include everything that is 'necessary for and connected with the exploration and exploitation of the natural resources of the continental shelf',[10] save only those activities that imperil freedom of navigation and fishing.[11]

On the continental shelf, it is possible that a single deposit of oil[12] traverses the boundary of adjacent or opposite states.[13] As oil is fluid and fugacious, it is possible that if one state drills on its side of the boundary, that state will capture and deplete the common oil deposit, to the prejudice of the other states and to the detriment of peaceful relations among them.[14] The question is: which state owns the deposit? Section 2 shows that the principle of sovereign rights is silent on this question of ownership. The principle imposes no constraint on the littoral state when it exploits a deposit, not even when it causes a portion to migrate from the other side.[15] The principle is also silent on the remedy available to the opposite or adjacent state, which would then have no recourse except to engage in similar unilateral exploitation.[16] To fill the silence of the principle of sovereign rights, applicable natural law principles are sought in the works of Grotius and Selden. Natural law remains a relevant jurisprudential tool which guides interpretation of positive law and plugs its gaps or curbs its excesses.[17] For this reason, Hugo Grotius's

4 Summary of Records of the First Session, 1949, YILC, at 237; J. Francois, Report on the High Seas, UN Doc. A/CN.4/17 (1950), at 2–3. See also, H. Kelsen, 'On the Issue of the Continental Shelf: Two Legal Opinions', (1986) *Austrian Journal of Public and International Law Supplementum*.

5 See the statement of George Scelle in UN Doc. A/CN.4/L.51 (1952), the English text of which was incorporated as Footnote 16 in Summary of Records of the Seventh Session, 1955, YILC, Vol. I, at 7–8.

6 1956, YILC, Vol. II, at 264.

7 Ibid.

8 Ibid., at 297.

9 Ibid.

10 Ibid.

11 Ibid.

12 For convenience, the term 'oil' is used to refer to offshore hydrocarbon resources beyond the territorial sea. The term common oil deposit or resource is used to refer also to shared, transboundary, cross-border, straddling, or migratory offshore hydrocarbon resources or deposits.

13 Secretariat, Memorandum on the Regime of the High Sea, UN Doc. A/CN.4/32 (1950), at 107–8.

14 C. Yamada, Fourth Report on Shared Natural Resources: Transboundary Groundwaters, UN Doc. A/CN.4/580 (2007), at 3–4.

15 See *Guyana/Suriname*, Award of the Arbitral Tribunal, 17 September 2007, 1–167, para. 470, at 156. Note that the fugacious nature of oil was not taken into account.

16 See T. Daintith, *Finders Keepers? How the Law of Capture Shaped the World Oil Industry* (2010), 402.

17 See, generally, A. Orakhelashvili, 'Natural Law and Customary Law', (2008) 68 *Heidelberg Journal of International Law* 69–110.

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Prolegomena to *De Jure Praedea*,[18] *Prolegomena* to *De Jure Belli Ac Pacis*,[19] and Defensio,[20] and John Selden's *Of the Dominion or Ownership of the Sea*[21] are consulted. These texts are still unequalled as reference for a system of analysis of the content of natural law as applied to the resources of the sea. Section 3 reviews this system of analysis, as well as certain key principles which it reveals. Of particular relevance to the discussion on common oil deposits are the principles of necessity and sociableness under which states, for their own preservation, ought to pursue the common good.

The enquiry of Grotius and Selden was whether the sea is capable of dominion. In this article, the enquiry is broadened to encompass a contemporary subject matter: mineral resources, specifically common offshore oil deposits on the continental shelf. Section 4 discusses that, in enclosed and semi-enclosed seas, there are current practices and agreements relating to access and use of common deposits that seem to adhere to natural law principles rather than to the principle of sovereign rights. In these practices states temper their sovereign rights and recognize the co-existence of the rights and interests of other states in the deposit. Some delegations in the General Assembly did not consider these practices sufficient as basis for codification. However, under natural law these practices qualify as a source of law called intervenient law of nations or secondary law of nations. Intervenient law of nations and secondary law of nations are akin to regional or special customary laws, but the difference is that intervenient/secondary law of nations can be based on state practices which are concurrent or compatible, albeit only imitatively or coincidentally. In other words, these are practices that do not reflect *opinio juris*. Rather, this subjective element is subsumed under the notion of rationality or right reason in natural law. Concurrent state practices that interpret permissive natural law are a source of rights and obligations of states, regardless of whether these practices are seen as obligatory or permissive.

At the conclusion of this article it is emphasized that, notwithstanding the prevalence of positivist regulations of state activities on the continental shelf, natural law continues to be relevant as standby principles which states apply for the reasonable regulation of their activities in regard to common offshore oil deposits.

2. PRINCIPLE OF SOVEREIGN RIGHTS

Section 2.1. explains the principle of sovereign rights as the basic regulation of state activities on the continental shelf. Under the principle, the exclusive control and jurisdiction of a littoral state over its continental shelf is subject to the horizontal limitation imposed by its maritime boundaries,[22] and the upward vertical limitation imposed by the status of the superjacent water and air space.[23] However, these limitations do not effectively regulate littoral states in their exercise of sovereign

18 H. Grotius, *Commentary on the Law of Prize and Booty*, trans. G. L. Williams (1950).
19 H. Grotius, *De Jure Belli ac Pacis Libri Tres*, trans. F. W. Kelsey (1925).
20 H. Grotius, *Defense of Chapter V of the Mare Liberum*, in H. Grotius, *The Free Seas*, trans. R. Hakluyt (2004).
21 J. Selden, *Of the Dominion or Ownership of the Sea: Two Books*, trans. M. Nedham (1652).
22 Art. 83, UNCLOS.
23 Art. 78.

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rights to explore and exploit a common oil deposit. As discussed in section 2.2., the efforts of the ILC to fill the gap have not prospered.

2.1. Deficiency of the principle of sovereign rights

The first and third Law of the Sea Conference (LOSC) codified the principle of sovereign rights as Article 2 of the 1958 Convention on the Continental Shelf,[24] and Article 77 of the 1982 UN Convention on the Law of the Sea (UNCLOS).[25] UNCLOS spelled out specific forms of sovereign rights, such as the right to install structures on the continental shelf,[26] the right to 'authorize and regulate drilling on the continental shelf for all purposes'[27] and the right to exploit the subsoil by means of tunnelling.[28]

Beginning with Hurst in 1923,[29] several authors have inquired into the status of the resources on the seabed under the high seas. The status of these resources is unlike that of resources found on the seabed under the territorial sea. The sovereignty of a littoral state 'extends to the air space over the territorial sea as well as to its bed and subsoil'.[30] Oil resources within territorial waters are under the sovereignty of the littoral state.[31] As for oil resources beyond the territorial sea, these are not subject to the full sovereignty of any littoral state, and the only way these resources could be brought under the will of a littoral state is to conjure the fiction of a continental shelf, and lay it open exclusively for that state to explore.[32]

One view maintains that seabed resources are part of the high seas and the status of both is that of *res omnium communis*, incapable of ownership, except upon the express acquiescence of other states or upon prescriptive acquisition.[33] The other view holds that these resources are part of the land territory submerged under the high seas.[34] The resources are *res nullius* while the high seas are *res omnium communis*; thus, the resources are capable of ownership through occupation of the continental shelf, while the high seas are not.[35] Note that both views treat the status of the underlying resource as consolidated with the status of the continental shelf.

The 1958 Convention on the Continental Shelf and UNCLOS avoided making a determination of whether the continental shelf and its resources are *res communis*

24 499 UNTS 311.
25 1833 UNTS 897.
26 Art. 80, UNCLOS.
27 Art. 82.
28 Art. 85.
29 C. Hurst, 'Whose is the Bed of the Sea?', (1923–24) 4 *BYBIL* 34, at 36; C. Hurst, 'The Continental Shelf', (1948) 34 *Transactions of the Grotius Society* 153, at 166–7).
30 Art. 2, UNCLOS.
31 Ibid.
32 D. Bowett, 'Jurisdiction: Changing Patterns of Authority over Activities and Resources', (1982) 53 BYBIL 1, at 6–7.
33 See G. Gidel, 'The Continental Shelf', trans. L. F. E. Goldie, (1954–56) 3 *U.W. Austl. Ann. L. Rev.* 87; S. Oda, 'A Reconsideration of the Continental Shelf Doctrine,' (1957–58) 32 *Tul. L. Rev.* 21.
34 C. Waldock, 'The Legal Basis of Claims to the Continental Shelf', (1950) 36 *Transactions of the Grotius Society* 115; R. Trigg, 'National Sovereignty over Maritime Resources', (1950) 99 *University of Pennsylvania Law Review* 1.
35 See Waldock, ibid., at 140–3.

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or *res nullius*.[36] Rather, these laws incorporated the principle of sovereign rights under which littoral states do not have title to the continental shelf or to the oil *in situ* underneath;[37] although, they have exclusive access to the continental shelf for the special purpose of exploring it and exploiting its resources.[38] Thus, to acquire title to the oil, the littoral state must take effective and exclusive possession of the substance, such as by drawing it all the way up to the well head.[39] This is the purport of the principle of sovereign rights – to reserve for the littoral state the exclusive right to undertake any activity 'for the purpose of winning these resources from the sea bed and the subsoil of [its] continental shelf'.[40] The littoral state is granted surface rights to pave the way for the acquisition of subsoil rights, as pointed out by Gidel:

> It is common knowledge that in mining law it is possible to separate surface rights from subsoil rights; but here the very object of the continental shelf doctrine is to permit, with a view to exploiting its natural resources, an attack upon the subsoil from the waters of the high seas, an attack that requires that the seabed should be opened and subsoil penetrated.[41]

In other words, to exercise exclusive right to control the continental shelf is to control all operations for winning the underlying resources.[42] Therein lies the difficulty. Apparently, no account is taken for the potential or actual existence of a common oil deposit *in situ* on a continental shelf bordered by two or more states.

In the municipal context, there is extensive practice relating to common oil deposits *in situ* which underlies various landholdings. In both common law[43] and civil law jurisdictions,[44] the accepted notion is that oil is a mineral formed by the land; thus, he who possesses the land possesses the oil, provided the oil remains within his land and under his control.[45] However, oil and gas are minerals *ferae naturae* that 'have the power and the tendency to escape without the volition of the owner ... [and] when they escape, and go into other land, or come under another's control, the title of the former owner is gone'.[46] The former owner incurs no damage if an adjoining or distant owner drills on his own land, taps the deposit and brings it up to his well.[47] The former owner cannot restrain the adjoining or distant owner from drilling, for the latter has the absolute right to drill on his own property.[48]

36 See H. Briggs, 'Jurisdiction Over the Sea Bed and Subsoil Beyond Territorial Waters', (1951) 45 AJIL 338, at 339–41; J. Gutteridge, 'The 1958 Geneva Convention on the Continental Shelf', (1959) 35 BYBIL 102, at 105.

37 R. Higgins, *Problems and Process: International Law and How We Use It* (1994), 137–8.

38 Ibid.

39 Ibid.

40 See Hurst, :'The Continental Shelf', *supra* note 29, at 162.

41 See Gidel, *supra* note 33, at 97.

42 See Hurst, 'The Continental Shelf', *supra* note 29, at 161.

43 *Westmoreland and Cambria Natural Gas Co. v. De Witt*, 130 Pa. 235 (1889). The issue was whether the first lessee fulfilled the requirement of possession to be entitled to injunction against drilling by the second lessee.

44 See N. Campbell, 'Principles of Mineral Ownership in the Civil Law and Common Law Systems', (1956–57) 31 *Tul. L. Rev.* 303.

45 *Westmoreland and Cambria Natural Gas Co. v. De Witt.* In jurisdictions that adhere to the Regalian Doctrine, like the Philippines, the state owns all mineral resources, but it may award lease rights to private persons.

46 Ibid., at 249–50.

47 Ibid.

48 *Kelly vs. Ohio Oil Co.*, 39 LRA 765 (1897).

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Nor can the former owner claim compensation for the oil lost as a consequence of legitimate drilling by the adjoining or distant owner.[49] The only remedy of the former owner, or, for that matter, any surface owner holding an interest in the same oil deposit, is to engage in competitive drilling on his own land in order to capture or re-capture the deposit himself.[50] This is the essence of the rule of capture in the municipal context.[51]

In the international context, none of the littoral states owns the common oil deposit *in situ* under their continental shelf, but each of them has exclusive control of the means to explore for and exploit the deposit from their respective sides of the actual or potential boundary on the continental shelf. For as long as these states confine their exploratory and extractive activities within the limits of their respective continental shelves, none of them can restrain the others from capturing the deposit or from engaging in wasteful competitive drilling, for they are all within their sovereign rights to drill, even at the risk of conflict or wastage.[52] This makes the principle of sovereign rights a faulty regulation for it countenances unilateralism and fuels conflict.

The existence of an actual or potential boundary on the continental shelf poses no restraint upon these states. In an address to the Grotius Society pertaining to the US proclamation of its exclusive jurisdiction and control over its continental shelf, Hurst made an observation, which is still relevant today, that, while the proclamation indicates the complete willingness of the United States to discuss with any other state the question of where the boundary between their respective continental shelves may lie, 'it gives no indication of any willingness to discuss with another State any questions of what the United States may or may not do in connection with the resources of what it proclaims to be its Continental Shelf, or with the steps it takes for the purpose of winning these resources from the sea bed and the subsoil of the Continental Shelf.'[53] There were attempts to fill this gap in regulation,[54] as the next section will discuss.

2.2. Efforts to fill the regulatory gap

In its 1950 Memorandum on the Regime of the High Seas, the ILC Secretariat headed by Yuen-li Liang[55] proposed the principle of unity of the deposit under which

49 Ibid.

50 Ibid.

51 B. Kramer and O. Anderson, 'The Rule of Capture: An Oil and Gas Perspective', (2005) 35 *Environmental Law* 899–954, discusses state regulations which recognize the rule of capture as the prevailing rule on ownership of gas, but adopt the principle of correlative rights to restrict a co-owner's method of capture and prohibit deliberate wastage for the purpose of injuring other co-owners. In other words, the principle of correlative rights is corollary to the rule of capture (953).

52 See *Guyana/Suriname*, 156.

53 See Hurst, 'The Continental Shelf', *supra* note 29, at 162.

54 UN Doc. A/CN.4/32, *supra* note 13, and UN Doc. A/2456 (1953), at 216–217.

55 There are authors who erroneously attribute the formulation of the principle of unity of the deposit to Gidel (see Separate Opinion of Judge Jessup, *North Sea Continental Shelf Judgment*, [1969] ICJ Rep. 1, at 68; Comment of De Azcarraga in J. Francois, Fourth Report on the Regime of the High Seas, UN Doc. A/CN.4/60 (1953), 74; W. Onorato, 'Apportionment of an International Common Petroleum Deposit', (1968) 17 ICLQ 85–102, 86; D. Ong, 'Joint Development of Common Offshore Oil and Gas Deposits: "Mere" State Practice or Customary International Law?', (1999) 93 AJIL 771–804, 778). The official copy of the 1950 Memorandum is published

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the rules for the delimitation of the continental shelf 'should be supplemented by special agreements',[56] which take into account the presence of oil whose limits do not always coincide with the delimitation line, as the deposit can be found on both sides of the line, such that exploitation 'at any given spot will, at least as regards oil-bearing strata, undoubtedly react on other parts of the deposit'.[57] This proposal did not prosper for all that the first and third LOSC adopted was an optional arbitration mechanism for resolving such ownership disputes.[58]

From 2003 to 2010, in the course of its codification work on transboundary groundwater, the ILC turned to the issue of common oil deposits.[59] However, when the ILC surveyed the various states for their opinion,[60] the majority disfavoured codification,[61] for it viewed the issue of common oil deposit as

> pertaining to the bilateral interests of States ... [which are] more comfortable in negotiating concrete aspects of management of such resources on a case-by-case basis, bearing in mind the geological features, the needs of the region, the capacity and the efforts of States concerned.[62]

On the other hand, the minority feared that to give preference to negotiation over codification would be to regress to a regime of might is right.[63] The minority proposed the alternative that states identify 'a template of elements relating to applicable practice, shared principles and features, and best practices and lessons learned to guide [them] in negotiating agreements' on their common deposits.[64] The ILC heeded the majority and discontinued the effort to codify.[65] It might be said this decision goes against the purpose for which the ILC was established, which is 'to bring about an agreed rule of law where the source of divergence is due to a substantial conflict of interests and claims'.[66] Consequently, there remains uncertainty in the rules that should govern the rights and obligations of states in a common deposit.

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in French in 1950, YILC, Vol. II, while the copy used in this article is an English mimeograph obtained from the Dag Hammarskjöld Library. The relevant pages of the French and English copies of the memorandum do not cite Gidel.

56 UN Doc. A/CN.4/32, *supra* note 13, at 108.

57 Ibid., at 109.

58 Optional Protocol of Signature Concerning the Compulsory Settlement of Disputes, 450 UNTS 169. See Summary Records of Meetings and Annexes, UN Doc. A/CONF.13/38 (1958), United Nations Conference on the Law of the Sea Official Records, Vol. II, 55, 90 and 92. See also Summary Records of Meetings and Annexes, UN Doc. A/CONF.13/42 (1958), United Nations Conference on the Law of the Sea Official Records Volume VI: Fourth Committee, at 95, and Volume II, Summary Records of Meetings of the First, Second, and Third Committees, Second Session, at 152, 289 and 295. The discussions were in reference to the rights and obligations of states that border a narrow continental shelf, such as those in enclosed or marginal seas.

59 See Report of the International Law Commission Sixty-second session, UN Doc. A/65/10, (2010) at 342–343.

60 See Shared Natural Resources: Comments and Observations Received from Governments on Oil and Gas, UN Doc. A/CN.4/607 (2009); Shared Natural Resources: Comments and Observations received from Governments, UN Doc. A/CN.4/633 (2010).

61 Oral report of the Chairman of the Working Group on Shared Natural Resources in UN Doc. A/CN.4/SR.3069 (2010), 12–13; Topical Summary of the Discussion held in the Sixth Committee of the General Assembly during its Sixty-Fifth Session, Prepared by the Secretariat, UN Doc. A/CN.4/638 (2011), 26.

62 See UN Doc. A/CN.4/638, ibid.

63 Ibid., at 27.

64 Ibid.

65 Ibid., 25.

66 H. Lauterpacht, 'Codification and Development of International Law', (1955) 49 AJIL 16–43, 27.

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In sum, section 2 of this article showed that the principle of sovereign rights provides no answer to the question of ownership of a common deposit. In fact, if pursued to its logical end, the principle leads to the rule of capture and undermines maritime peace. Section 3 turns to natural law for principles that can serve as the template for elements of a normative framework for resolving the issue of ownership.

3. Applicable principles of natural law

Wastage and conflict are inevitable if littoral states are unrestrained in the enjoyment of their sovereign rights to a common oil deposit.[67] State will alone might not be a sufficient source of restraint.[68]

In section 3, natural law is examined for principles which might supply the deficiency of positive law. In particular, this article reviews the works of Grotius and Selden on ownership of maritime resources to determine the existence of a priori principle or a posteriori practice for resolving an issue of ownership of a common oil deposit. Section 3.1. reviews Grotius' system of analysis on the content of a natural law governing the relations of nations. Two a priori principles of the natural law of nations are the principles of sociableness and necessity, which can be useful for regulating an ownership dispute over a common oil deposit. Section 3.2 summarizes Selden's idea of an intervenient common law of nations as a source of a posteriori regulation. Such a law of nations consists of customs or compacts that represent an accepted interpretation of permissive natural law. Section 4 discusses existing practices which apply these natural principles as a viable normative framework to resolve the issue of ownership of a common oil deposit.

3.1. Grotius: a priori principles of sociableness and necessity

Grotius refers to regulation that concerns the mutual relations of states as secondary law of nature or primary law of nations, and traces its origins to natural law, divine law, and right reason.[69] It was in refutation of the Academics – who believed that, among states, there is no law except expediency and self-interest[70] – that Grotius set out to prove the existence of a law of nations which preceded the state and is imbued with the common good.[71] His method of proving the existence of such a law of nations consisted of stating general propositions about the nature of man,[72] and drawing parallels between the nature of man and the nature of nations (or society of nations).[73]

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67 See C. Robson, 'Transboundary Petroleum Reservoir: Legal Issues and Solutions' and R. Bundy, 'Natural Resource Development (Oil and Gas) and Boundary Disputes,' in G. Blake et al., *The Peaceful Management of Transboundary Resources* (1995).

68 UN Doc. A/CN.4/638, *supra* note 61, at 27.

69 Grotius, *De Jure Belli*, *supra* note 19, at 15, 19–20.

70 Ibid., at 10–11. See also H. Grotius, *Freedom of the Seas or the Right Which Belongs to the Dutch to Take Part in the East Indian Trade*, trans. J. Scott (1916), 1–2.

71 See Grotius, *Freedom of the Seas*, ibid. at 26.

72 Grotius, *De Jure Praedae Commentaries*, *supra* note 18, at 7; Grotius, *De Jure Belli*, *supra* note 19, at 11–20.

73 Grotius, *De Jure Belli*, *supra* note 19, 15–17.

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For Grotius, there is a parallelism between the nature of man and the nature of nations.[74] When God[75] brought man into existence, God imprinted man with natural properties 'whereby that existence may be preserved and each party may be guided for its own good, in conformity ... with the fundamental law inherent in its origin'.[76] Foremost of these natural properties is the 'sovereign attribute of reason'[77] whereby man can discern 'what things are agreeable or harmful ... and what can lead to either alternative'.[78] This rational capacity enables man to understand fundamental principles of nature and to act upon 'knowledge which prompts him to similar actions under similar conditions'.[79] Being rational in nature, man will 'follow the direction of a well-tempered judgment, being neither led astray by fear, or the allurement of immediate pleasure, nor carried away by rash impulse'.[80] Finally, while man is by nature rational, man is afflicted by vices that blur what is true and good. However, the good still manifests itself 'in the mutual accord of nations' as a precept of collective free will. Grotius equates universal concord with universal reason and agrees with Heraclitus that such 'universal reason is the criterion and judge ... of truth ... on the ground that those things are worthy of faith which are commonly so regarded'.[81] The law of nations is that which is not at variance with this rational nature of man and nations.[82]

Moreover, God judged that there would be insufficient provision for the preservation of his works'.[83] Thus, God imprinted man with the attributes of 'sociableness'[84] as well as speech,[85] so that man will naturally seek a social life which is peaceful and organized, for it is only through mutual aid and reciprocal service that man can survive.[86] Being intrinsically sociable, man will not seek his sole advantage, but strive for the maintenance of the social order, and pursue the common good.[87]

In the parallel realm of nations, the same sociableness and rationality are observable. As nature did not supply every nation with all its necessities, then all nations must foster friendship and peaceful relations, such as through navigation

74 Ibid.
75 God and Nature are used interchangeably (see Grotius, *De Jure Praedae*, 217)
76 Grotius, *De Jure Praedae Commentaries*, *supra* note 18, at 9.
77 Ibid., at 11–12.
78 Grotius, *De Jure Belli*, *supra* note 19, 13.
79 Ibid., at 12.
80 Ibid., at 13.
81 Grotius, *De Jure Praedae Commentaries*, *supra* note 18, at 12.
82 Grotius notes that the law of nature is often called the law of nations because there 'is hardly any law common to all nations' other than natural law. However, while the law of nations is that which 'has received its obligatory force from the will of all nations or of many nations', there can be a law of nation in one part of the world which is not observed elsewhere. (See Grotius, *De Jure Belli*, *supra* note 19, at 44.) The first type of law of nations is *jus gentium primarium*, which is a 'body of moral precepts imposed by natural reason upon all peoples', while the second type of law of nations is *jus gentium secundarium*, which is a volitional, positive, and consensual law of nations consisting of 'rules commonly accepted by the members of the international community for the good of all'. (Ibid., at 12.) The last type of law of nation is akin to Selden's intervenient common law of nations.
83 Ibid., at 11.
84 Ibid., citing the Stoics.
85 Ibid., at 12.
86 Ibid., citing Seneca.
87 Grotius, *De Jure Praedae Commentaries*, *supra* note 18, at 10–11

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and exchange, for their mutual well-being and progress.[88] For Grotius, there is no state 'so powerful that it may not some time need the help of others outside itself, either for purposes of trade, or even to ward off the forces of many foreign nations united against it'.[89] Accordingly, there can be a law among states that has 'in view the advantage, not of particular states, but the great society of states'.[90] It is in keeping with the social nature of man and of nations to pursue the common good, and that to attend solely to one's interests is contrary to this precept.[91] Among nations, to temper one's self-interest and to pursue the 'international good' is laudable.[92] Grotius relies on the Stoics to argue that:

> ... to take away from another in order to gain an advantage for oneself is contrary to nature; and ... if this should happen, human society and the common good would of necessity be destroyed ... Just as all the members of the body agree with one another, says Seneca, because the preservation of each conduces to the welfare of the whole, so men refrain from injuring one another because we are born for community of life. For society can exist in safety only through the mutual love and protection of the parts of which it is composed.[93]

Thus, the law of nations is that which is not in contravention of the nature of man and nations endowed with reason and sociableness.[94]

Closely related to the principle of sociableness is the principle of necessity. Grotius maintains that nature produced things for all of mankind, without distinguishing people from people.[95] There was no institution of private property prior to the law of nature.[96] It was only by reason of convenience that man imposed his will on nature by apportioning and appropriating parts of it.[97] However, laws of convenience must yield to the first principle of the preservation of existence, which may require that resources be pooled rather than apportioned.[98] Grotius illustrates this rule of necessity with the case of famine on board a ship. He maintains that 'necessity, which reduces everything to the natural law ... makes common again things formerly owned. By this law, if food becomes scarce on board ship, what each one has is gathered together in a common store'.[99]

It is underscored that, by 'common store', Grotius did not mean an open store, which anyone can plunder. On the contrary, a common store is a pooled supply that is administered for a common necessity. This meaning of 'common store' is derived from the context of the case cited by Grotius. The case was discussed in *The Digest of Justinian*, specifically Title II on the Rhodian law of jettison.[100] The case was

88 Ibid., at 217–18.
89 Grotius, *De Jure Belli*, *supra* note 19, at 17.
90 Ibid., at 15.
91 Ibid.
92 Grotius, *De Jure Praedae Commentaries*, *supra* note 18, at 26.
93 Grotius, *De Jure Belli*, *supra* note 19, at 34.
94 Ibid.
95 Grotius, *Defence*, *supra* note 20, at 85 and 91.
96 Ibid.
97 Ibid., at 87.
98 Ibid., at 12 and 87.
99 Ibid., at 86. See also Grotius, *De Jure Belli*, *supra* note 19, at 192–3.
100 2 The Digest of Justinian, at 385.

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about a ship which, faced with the necessity to lighten its load, jettisoned several cargoes to save itself.[101] The rule was that 'all to whom it was advantageous that the jettison should be made must share the loss, for they owed the tribute on account of the preservation of their goods'.[102] The issue was how the amount of the loss should be divided in proportion to the value of the goods saved.[103] It was agreed that everything brought on board, even the smallest item, such as clothing, should be taken into account.[104] However, an exception was made for food stuff brought on board for consumption 'there being the stronger reason ... that, if at any time there was a shortage of these on the voyage, each one would bring what he had into the common stock'.[105] Thus, the stock would have consisted of the divisible share of each person on board, and these shares would have been mingled to meet the common necessity of staving off famine on board the ship.

In sum, Grotius showed that a priori laws exist that govern the relations of man as well as nations. The foregoing section focused on the principles of sociableness and necessity. Grotius demonstrated that, according to the principles of sociableness and necessity, nations ought to pursue, not their self-interest, but the common good, especially in times of necessity. Section 4 considers the relevance of these principles to the regulation of rights to a common oil deposits.

Selden identifies another source of a natural law of nations. He calls it the intervenient common law of nations, which consists of a posteriori regulations that interpret a permissive natural law. This source of natural law is discussed in the succeeding section.

3.2. Selden: A posterori customs and compacts

Selden did not formulate his own notion of the nature of man or the nature of international society, but proceeded directly to outline his system of laws. In his scheme of laws, Selden calls regulation between states a 'universal law of nations or common law of mankind'[106] which is 'manifested by the light of nature or the use of right reason'.[107] The law of nations which governs all of mankind in general[108] is either obligatory or permissive.[109] It is obligatory if it explicitly gives a command or prohibition; otherwise, it is permissive.[110] A law of nations is obligatory according 'to the nature of the thing itself or ... the authority of the father of nature'.[111] Such law is immutable, although it admits of additions or enlargements which do not alter its essence or 'diminish its authority';[112] whereas, a permissive law of nature 'is various and changeable, according to the judgment and pleasure of persons in

101 Ibid.
102 Ibid., at 386.
103 Ibid.
104 Ibid.
105 Ibid.
106 Selden, *Of the Dominion or Ownership of the Sea*, *supra* note 21, Ibid., at 12–13.
107 Ibid., at 12.
108 Ibid.
109 Ibid., at 11.
110 Ibid.
111 Ibid., at 13.
112 Ibid.

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power'.[113] These additions and alterations, if they do not pertain to all of mankind in general, but are received by 'diverse nations, jointly, equally and indifferently, by some obligation',[114] are called the common law of diverse nations.

Of the common law of diverse nations, there is a sub-layer of imperative laws which Selden claims are

> observed ... among several nations or people who are subject to supreme powers that are otherwise distinct, and this by reason of an obligation equally common to them all, but derived from some other, and enjoined by some special command, either from God or man.[115]

One such central authority was Pope Alexander whose laws held sway over several nations.[116] Yet another sub-layer are intervenient laws which represents 'additions of right reason',[117] as manifested in compacts and customs[118] that are not prohibited by the law of nature.[119] Selden refers to these additions of right reason as secondary law of nations.[120]

Intervenient laws arise not from any command imposed upon several nations in common, but through the intervention of either custom or compact.[121] As these custom and compacts deal with 'matters of duty between man and man and are not forbidden by any command of God, they reflect that which is permitted by natural law'.[122] Selden cited examples of a posteriori customs and compacts[123] by which the sea has been subjected to occupation that springs from occupation of the land,[124] specifically the customs and compacts of the more civilized and noble nations, both ancient and modern.[125]

To reiterate, for this article, it is not important whether Selden was correct that the sea is capable of acquisition. As with Grotius, the usefulness of Selden lies in his system of laws, specifically his idea that nations can be bound by a posteriori customs and compacts that represent an accepted interpretation of permissive natural law. These a posteriori customs and compacts are a possible source of regulation of the rights and obligations of states in regard to a common offshore deposit.

Grotius has a similar notion of a secondary law of nations[126] which consists of international pacts or accepted customs among various peoples, who have established states, concerning what they regard as the common good of an international nature or 'international good.'[127] For Grotius, international pacts, such as on the

113 Ibid.
114 Ibid.,
115 Ibid., at 15.
116 Ibid.
117 Ibid.
118 Ibid.
119 Ibid.
120 Ibid.
121 Ibid.
122 Ibid., at 43.
123 Ibid., at 42.
124 Ibid., at 25–8.
125 Ibid., at 42–134. It is interesting that most of the practices examined by Selden are those of nations surrounding enclosed and semi-enclosed.
126 Grotius, *De Jure Praedae Commentaries*, *supra* note 18, at 26–7.
127 Ibid.

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inviolability of ambassadors, which are established by common international agreements, have the force of law as between the parties.[128] On the other hand, not being established by international agreements, accepted customs do not have the force of international pacts.[129] Nonetheless, Grotius treats accepted customs as secondary law of nations for these customs are practiced by all or at least by a majority of nations, 'acting singly ... and in accordance with their separate and individual interests',[130] but in an 'identical ... form – either imitatively or as a coincidence'.[131]

The intervenient law of nations of Selden and the secondary law of nations of Grotius might be equated to special or regional customary law. However, customary law is generally identified by the objective element of state practice and the subjective element of *opinio juris*.[132] It is different with secondary or intervenient law of nations which are based on customs and compacts or agreements to which states adhere, not out of conviction that these are obligatory, but out of an 'imitatively or [coincidentally]'[133] compatible interpretation of what natural law permits. Thus, discernment of what is permissible or impermissible under natural law takes the place of the subjective element of *opinio juris*. Concretely, a secondary or intervenient law of nations applicable to common oil deposits would be based on discernment that the dissipation of an inherently fluid and fugacious common resource by one state to the prejudice of other states would not be permissible under natural law principles of sociableness and necessity.

The tools of Grotius and Selden for analysing the contents of natural law are used in section 4 to address the question which was posed at the beginning of this article: in the silence of the principle of sovereign rights, what law ought to determine ownership of a common oil deposit on the continental shelf in an enclosed sea? Section 4 focuses on existing practices which set aside the principle of sovereign rights and turn to natural law principles of good neighbourliness and necessity expressed as such concepts as energy interdependence and resource sharing. These practices consider impermissible for one state to drain a common deposit or for the other state to engage in wasteful competitive drilling or for both of them to keep the deposit unproductive.

4. Energy security in enclosed and semi-enclosed seas

The modern context to which the tools of analysis of Grotius and Selden are applied is characterized by two key elements. First, as explained in section 3, a common oil deposit *in situ*, being inherently fluid and fugacious, is not capable of effective and exclusive possession as a single unit by one littoral to the exclusion of all the other littoral states. This is because any one of these states can drill on its side of the

128 Ibid.
129 Ibid. Grotius does not place accepted customs under the category of 'law' (ibid.).
130 Ibid., at 27.
131 Ibid.
132 *North Sea Continental Shelf Judgment*, [1969] ICJ Rep. 1, at 77.
133 Grotius, *De Jure Praedae Commentaries*, *supra* note 18, at 26.

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continental shelf and drain oil from the unit.[134] Mouton likens the situation to a glass with two or more straws.[135] This difficulty is more acute in enclosed and semi-enclosed seas where there can be multiple overlapping claims to continental shelf.[136] Second, access to oil resources is the driver of most disputes involving the dual issues of maritime delimitation and territorial sovereignty.[137] This is especially true in enclosed and semi-enclosed seas where there are notable common oil deposits.[138]

Keeping within the foregoing context, the discussion in section 4.1. considers as an application of the a priori principles of sociableness and necessity the current shift from independence to interdependence as the necessary condition for energy security. Section 4.2. assesses the level of such interdependence and co-operation in terms of widespread practice characterized by tempered rights in regard to common oil deposits.

4.1. Energy interdependence

Energy security in both supply and demand is the constant availability of sufficient and affordable energy.[139] In the past, energy security was equated to energy independence and self-sufficiency, achieved through competition for access to sources of energy supply.[140] That paradigm has led to the militarization of energy security where the outcome is inevitably zero-sum.[141]

In the twenty first century, the paradigm shifted to energy interdependence as the optimal underlying condition of the various energy sectors conducive to energy security.[142] Under the concept of energy interdependence, it is prejudicial to energy security for littoral states to engage in the rule of capture or competitive drilling in respect to a common oil deposit, just as it is inimical to energy security to sterilize the exploration and exploitation of the deposit.[143] Co-operation among them is imperative. Energy security is a regional and sub-regional, rather than a mere national, concern:

> The interdependence of states not only in the supply of energy, but also in its delivery via interconnected transmission grids (eq. the South African Power Pool) and/or pipelines

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134 See Robson, *supra* note 67, at 5.

135 M. W. Mouton, *The Continental Shelf* (1952), 421.

136 See UN Doc. A/CN.4/32, *supra* note 13, at 108.

137 *Continental Shelf (Libyan Arab Jarnahiriya/Malta)*, Judgment, [1985] ICJ Rep. 13, at para. 50.

138 See Robson, *supra* note 67, at 11–3.

139 "B. Barton, *Energy Security: Managing Risks in a Dynamic Legal and Regulatory Environment* (2004), at 5. The full definition reads: Energy security is 'a condition in which a nation and all, or most of its citizens and businesses have access to sufficient energy resources at reasonable prices for the foreseeable future free from serious risk of major disruption of service'.

140 J. Prantl, Cooperating in the Energy Security Regime Complex, 2011 Asia Security Initiative Policy Series No. 18, at 3–4.

141 See D. Moran and J. Russel, 'Introduction: the Militarization of Energy Security', in D. Moran and J. Russel, *Energy Security and Global Politics: The Militarization of Resource Management* (2009).

142 F. Ciuta, 'Conceptual Notes on Energy Security: Total or Banal Security?', (2010) 41 *Security Dialogue*, 128. However, there are authors who view energy security as energy independence but recognize that this must take place in an interdependent world. Achieving energy security is about the optimal balancing and management of the interdependent system (see Z. Daojoning. 'Energy Interdependence', (2006) *China Security*, at 12–14).

143 See N. Owen and C. Schofield, 'Disputed South China Sea Hydrocarbons in Perspective', (2012) *Marine Policy*, at 815–18.

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> (eq. the West African Gas Pipline Project, the Chad–Cameroon Pipeline Project, and the Transmed Pipeline), renders a rigid internal/external distinction in terms of energy security impossible to maintain. Energy security is no longer the sole purview of the individual state. Increasingly, its challenge is met at the level of transborder, regional, and international interactions.[144]

This observation is particularly relevant to enclosed and semi-enclosed seas where there is potential or actual presence of common oil deposits.[145] To recall, the principle of sovereign rights engenders uncertainty over ownership of the deposit for, technically, each littoral state possesses exclusive rights to explore and exploit the deposit from its side of the continental shelf. In the midst of uncertainty over resource ownership the option of a littoral state which is faced with the challenge of energy security is either to incur the risk of developing the disputed resource over the objection of the opposite or adjacent littoral state, or to sterilize development and forego the benefits indefinitely.[146] However, the first option can start off wasteful competitive drilling and trigger conflict that inhibits investment; while the second option is simply inefficient and wasteful management of resource and opportunity.[147] Both options are clearly inimical to energy security.

The shift from energy independence to interdependence reflects discernment of the inherent merit of co-operation over unilateral action: that states ought to temper their sovereign rights or to hold off their assertion of those rights in order for there to be co-operation in the exploration and exploitation of their common deposit for the benefit of all. The North Sea experience demonstrates that early co-operation among the littoral states ensured production to such a level that this sea now guarantees to an extent the energy security of Western Europe as a region:

> In effect, the region is no longer susceptible to pressures from external energy suppliers and fearful of the threat of supply disruption. North Sea oil and gas now provide over 55 per cent of the region's hydrocarbons demand (equal to 40 per cent of its total energy use): moreover, there is quite significant surge capacity for use in a supply emergency. Europe's freedom for action internationally has been much enhanced by its greatly reduced exposure to the kind of blackmail over oil supplies which it suffered in 1973/4 and 1979/80.[148]

Crucial to this role of the North Sea in regional energy security has been the 'ongoing inter-dependence'[149] of the littoral states in the management of their energy resources through joint development and unitization.[150] The North Sea experience

144 B. Barton, C. Redgwell, A. Ronne, and D. Zillman, 'Energy Security in the 20th Century', in B. Barton, *Energy Security: Managing Risks in a Dynamic Legal and Regulatory Environment*, *supra* note 139, at 458. at 458–9. See also G. Bahgat, 'Europe's Energy Security: Challenges and Opportunities', (2006) 82 *International Affairs* 961, at 972–75.

145 See L. Goldie, 'Equity and the International Management of Transboundary Resources', (1985) 25 *Transboundary Resource Management*, 685 and 687.

146 E. Smith, *Materials on International Petroleum Transactions* (1993), 68.

147 See Robson, *supra* note 67.

148 P. Odell, 'Hydrocarbons: The Pace Quickens,' in Blake et al., *Boundaries and Energy: Problems and Prospects* (1998), at 33–4.

149 Ibid., at 38.

150 J. Woodliffe, 'International Unitisation of an Offshore Gas Field', (1977) 26 ICLQ 338.

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is important for what Odell calls its demonstration effect.[151] It is noticeable that in other enclosed seas and semi-enclosed seas, littoral states have patterned their resource management systems closely to the North Sea model of cooperation.[152] The co-operation clause in the North Sea maritime delimitation treaties[153] has become a standard clause in maritime delimitation treaties in other enclosed and semi-enclosed seas.[154]

In sum, energy security based on interdependence bears an element of natural law – the a priori principles of sociableness and necessity. It prescribes to littoral states that in their relations over a common oil deposit, they ought to temper their sovereign rights and engage in co-operative endeavours that will inure to their mutual benefit. Some of these endeavours are discussed in the next section.

4.2. State practice in energy co-operation

The modes of co-operation which have been adopted by littoral states in regard to a common deposit consist of maritime delimitation agreements which incorporate co-operation clauses, joint development and unitization agreements, and offshore petroleum regulations and model contracts which facilitate negotiation over resource sharing. Among littoral states that have confirmed common oil deposits on their continental shelf in these seas, there is a growing preference for the adoption of either a joint development agreement or a unitization agreement as modes of exploitation.[155] There are today around 24 joint development agreements that have been adopted,[156] which is a significant increase from only 12 in 1989.[157] In contrast, there is a deliberate avoidance of the rule of capture, as this engenders conflict and the consequent sterilization of the development of the oil field.[158]

In addition, at present there are fifty three maritime delimitation agreements which provide for co-operation in regard to common oil deposits.[159] Nine of these

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151 See Odell, *supra* note 149, at 35–9.

152 Ibid.

153 See Supplementary Agreement to the Treaty Concerning Arrangements for Co-operation in the Ems Estuary (509 UNTS 140); Agreement between the Government of the United Kingdom of Great Britain and Northern Ireland and the Government of the Kingdom of the Netherlands relating to the Exploitation of Single Geological Structures Extending Across the Dividing Line on the Continental Shelf under the North Sea (595 UNTS 105).

154 See G. Blake and R. Swarbrick, 'Hydrocarbons and International Boundaries: A Global Overview', in Blake, *supra* note 148, at 11.

155 I. Shihata and W. Onorato, 'Joint Development of International Petroleum Resources in Undefined and Disputed Areas', in G. Blake et al., *supra* note 148, at 433–5; P. Cameron, 'The Rules of Engagement: Developing Cross-Border Petroleum Deposits in the North Sea and the Caribbean', (2006) 55 ICLQ, 2.

156 Ibid.

157 H. Fox, *Joint Development of Offshore Oil and Gas*, Vol. I (1989), 3–4. There is a pending agreement between the United States and Mexico. See J. Vaca, 'The New Legal Framework for Oil and Gas Activities near the Maritime Boundaries between Mexico and the US: Comments on the Agreement between the United Mexican States and the United States of America concerning Transboundary Hydrocarbon Reservoirs in the Gulf of Mexico', (2011) 5 *Journal of World Energy Law and Business*, 235.

158 Shihata and Onorato, *supra* note 155, at 435; M. Klare, *Resource Wars* (2001), 52.

159 In the Persian/Arabian Gulf, these are: Agreement concerning Delimitation of the Continental Shelf between Iran and Bahrain, Art. 2, see S. Oda (ed.), *The International Law of the Ocean Development: Basic Documents*, Vol. 2. (1975), 63; Agreement between the Kingdom of Saudi Arabia and the Government of Bahrain, Art. 2, 1733 UNTS 3; Agreement concerning Delimitation of the Continental Shelf between Iran and Oman, Art. 2, Registration No. 14085; Agreement concerning the Boundary Line Dividing the Continental Shelf between

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agreements are in the Persian/Arabian Gulf,[160] nine in the North Sea,[161] and six in the Caribbean Sea.[162] These practices are significant for they involve top oil producers and exporters such as Iran, Venezuela, and Norway, and they take place in maritime areas that account for nearly half of global crude oil production.[163] The United States and Mexico recently signed the US–Mexico Transboundary Hydrocarbons Agreement.[164] Having been ratified by the United States, the agreement will govern production of an estimated 172 million barrels of oil and 304 billion cubic feet of natural gas in the Gulf of Mexico.[165] This agreement can potentially generate the same normative impact as the 1945 Truman proclamation on the continental shelf. It is disputed whether customary international law has emerged from the

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Iran and Qatar, Art. 2, 787 UNTS 165; Agreement concerning the Sovereignty over the islands of Al-'Arabiyah and Farsi and the Delimitation of the Boundary Line Separating Submarine areas between the Kingdom of Saudi Arabia and Iran, Art. 4, 696 UNTS 189; Offshore Boundary Agreement between Iran and Dubai, Art. 2, Limits in the Sea No. 63; Agreement between the Kingdom of Saudi Arabia and the State of Kuwait concerning the Submerged Area Adjacent to the Divided Zone, Annex 1, Registration No. 37359; Muscat Agreement on the Delimitation of the Maritime Boundary between the Sultanate of Oman and the Islamic Republic of Pakistan (Gulf of Oman), Art. 6, 2183 UNTS 3; Agreement between Qatar and Abu Dhabi on the Settlement of Maritime Boundaries and Ownership of islands, para. 5, 2402 UNTS 49.

160 Ibid.

161 Agreement between the Government of the United Kingdom of Great Britain and Northern Ireland and the Government of the Kingdom of Belgium relating to the Delimitation of the Continental Shelf between the Two Countries, 2494 UNTS 83; Treaty between the Kingdom of Denmark and the Federal Republic of Germany concerning the Delimitation of the Continental Shelf under the North Sea, 857 UNTS 109; Agreement between Denmark and Norway relating to the Delimitation of the Continental Shelf, 634 UNTS 71; Agreement between the Government of the United Kingdom of Great Britain and Northern Ireland and the Government of the Kingdom of Denmark relating to the Delimitation of the Continental Shelf between the Two Countries, 592 UNTS 207; Treaty between the Kingdom of the Netherlands and the Federal Republic of Germany concerning the Delimitation of the Continental Shelf under the North Sea, 857 UNTS 131; Agreement between the United Kingdom of Great Britain and Northern Ireland and the Federal Republic of Germany relating to the Delimitation of the Continental Shelf under the North Sea between the two Countries, 880 UNTS 185; Agreement between the Government of the Kingdom of the Netherlands and the Government of the United Kingdom of Great Britain and Northern Ireland relating to the Exploitation of Single Geological Structures extending across the Dividing Line on the Continental Shelf under the North Sea, 595 UNTS 105; Agreement between the Government of the United Kingdom of Great Britain and Northern Ireland and the Government of the Kingdom of Norway relating to the Delimitation of the Continental Shelf between the Two Countries, 551 UNTS 213; Agreement on the Continental Shelf between Iceland and Norway, International Legal Materials, Vol. 21, 122.

162 Agreement between the Commonwealth of the Bahamas and the Republic of Cuba for the Delimiting Line between their Maritime Zones, Registration No. I-49590; Exclusive Economic Zone Co-operation Treaty between the State of Barbados and the Republic of Guyana concerning the Exercise of Jurisdiction in their Exclusive Economic Zones in the Area of Bilateral Overlap within each of their Outer Limits and beyond the Outer Limits of the Exclusive Economic Zones of other States, 2277 UNTS 201; Agreement between the Government of the Jamaica and the Government of the Republic of Cuba on the Delimitation of the Maritime Boundary between the Two States, 34 Law of the Sea Bulletin 64–8; Treaty between the Republic of Trinidad and Tobago and the Republic of Venezuela on the Delimitation of Marine and Submarine Areas, 1654 UNTS 293; Boundary Delimitation Treaty between the Republic of Venezuela and the Kingdom of the Netherlands, 1140 UNTS 311; and Maritime Delimitation Treaty between Jamaica and the Republic of Colombia, 1776 UNTS 17.

163 J. Hilyard, *International Petroleum Encyclopedia* (2010), Table 1. World Reserves and Production; See also Table 11.1, (April 2013) *US Energy Information Administration/Monthly Energy Review*.

164 The Mexican Senate approved the agreement on 12 April 2012. See J. Vaca, 'The New Legal Framework for Oil and Gas Activities near the Maritime Boundaries between Mexico and the US: Comments on the Agreement between the United Mexican States and the United States of America concerning Transboundary Hydrocarbon Reservoirs in the Gulf of Mexico', (2011) 5 *Journal of World Energy Law and Business* 235, 47. The agreement entered into force on 18 July 2014.

165 See C. Hagerty and J. Uzel, 'Proposed US–Mexico Transboundary Hydrocarbons Agreement: Background and Issues for Congress', 2013 Congressional Research Service.

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foregoing practices among states[166] – this is in view of the bilateral nature of the agreements and the lack of uniformity in the mechanisms adopted in these practices.[167] However, while the particular modality of co-operation differ according to the peculiar geographical characteristics of the continental shelf, there are basic rules underlying these practices: specifically, an acceptance of the co-existence of the interests of opposite or adjacent states in the same offshore oil deposit and a conscious avoidance of the rule of capture. An additional source of intervenient law of nations applicable to common oil deposits are municipal petroleum regimes. A clear example is the 2013 model offshore petroleum contract of Vietnam, paragraph 18.2.2 of which provides for international unitization that can be negotiated at the level of the operating oil company:

> 18.2.2 If any proven accumulation of Petroleum extends beyond the Contract Area into another adjacent contract area managed by another country, then the CONTRACTOR and the contractors concerned in such adjacent areas must negotiate in order to reach agreement on unitized development in order to jointly appraise, develop and produce such accumulation of Petroleum by a method generally agreed within the Petroleum Industry, and in accordance with same the costs and revenue arising shall be shared at an equitable ratio. Such agreement on unitized development must be approved by the Government of Vietnam and by the Government of the country concerned. The unitized areas shall be regulated by corresponding contracts and by a unitization contract.[168]

The foregoing provision acknowledges the co-existing interest of another state in the same oil deposit. This is a significant shift in policy for in its 2005 model contract Vietnam asserted exclusive title to all resources on its continental shelf and did not contemplate the co-existing rights of other states in the same deposit.[169] The shift might be explained as a deliberate application of natural law principles rather than the principle of sovereign rights.

5. Conclusion

Who then owns the oil that traverses a boundary on the continental shelf? The principle of sovereign rights under UNCLOS does not provide an answer, but leaves a littoral state to rush to drain the deposit through the unilateral exploitation of its side of the continental shelf. The principle does not proscribe the littoral state from draining oil from underneath the continental shelf of its adjacent or opposite neighbours, nor the latter from undertaking competitive or offset drilling. In other words, if applied without mitigation, the principle leads to conflict, wastage, and resource sterilization.

This article turned to natural law for principles that might regulate the activities of states in regard to their common offshore deposits. Modern scholars consider

166 Ibid. See also D. Ong, *supra* note 55; M. Miyoshi, 'The Basic Concept of Joint Development of Hydrocarbon Resources on the Continental Shelf', (1988) 3 *International Journal of Estuarine and Littoral Law*, 1.
167 See Cameron, *supra* note 155, at 561.
168 Adopted under Decree No. 33/2013/ND-CP dated 22 April 2013.
169 Model Petroleum Production Sharing Contract attached to Decree No. 139–2005-ND-CP, 11 November 2005.

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natural law still relevant today either as a guide in interpretation or a plug to the many loopholes of positive law. This article considered the system of laws of Grotius and Selden particularly useful in the regulation of the exploitation of the resources of the sea. Indeed, in lieu of sovereign rights, states seem to apply a priori natural law principles of sociableness and necessity to regulate their offshore petroleum activities. This is evident in the shift in energy security policy from independence to interdependence. Moreover, there is a noticeable growth in the number of international agreements and national laws in which states temper their sovereign rights and interests and recognize the co-existence of the rights and interests of other states in a common deposit. These practices can be interpreted as a posteriori intervenient or secondary law of nations to which states adhere, not necessarily out of conviction that it is obligatory, but on the basis of their discernment that unilateral exploitation, while permissible under the principle of sovereign rights, is impermissible under natural law.

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