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Senkaku/Diaoyu: Are They Islands?

CONSTANTINOS YIALLOURIDES*

I. Introduction

The Senkaku or Diaoyu islands, as they are respectively known to the Japanese and the Chinese¹ (hereafter, “Senkaku/Diaoyu islands”), is a small group of islands lying at the southwestern edge of the East China Sea. They are approximately 120 nautical miles (nm) northeast of Taiwan, 200nm east of China, and 200nm southwest of the Japanese island of Okinawa.² They are comprised of the Uotsurijima/Diaoyu Dao island, four other smaller islets, and three barren rocks; their land amasses to just over six square kilometers.³ All of the islands are currently uninhabited. Interestingly, since the 1970s, when China and Japan formally expressed their territorial claims over the islands, these small, isolated, and uninhabited offshore features have served as the most persistent and explosive bone of contention between the two countries.⁴ The reason lies not in their economic value per se, as no

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1. Diaoyu is the Chinese name of the islands in the Latin alphabet. Its Chinese name is also known as “Diaoyu Dao” or “Diao-yu tai.” China calls the islands “Diaoyu Tai” or “Diaoyu Dao”. Taiwan uses the same Chinese characters but gives them a different spelling as “Tiao Yu Ta”. Japan calls the islands “Senkaku”, “Senkaku Gunto” or “Sento Shosho”. See Guoxing Ji, *The Diaoyudao (Senkaku) Disputes and Prospects for Settlement* 6(2) KOREAN J. OF DEF. ANALYSIS 285 (1994); see also Min G Koo, *The Senkaku/Diaoyu Dispute and Sino-Japanese Political-Economic Relations: Cold Politics and Hot Economics?* 22(2) THE PAC. REV. 205, 206 (2009).

2. CHOON-HO PARK, *EAST ASIA AND THE LAW OF THE SEA* 32 (1983).

3. Masahiko Asada, *Senkaku/Diaoyu Islands*, MAX PLANCK ENCYCLOPEDIA OF PUBLIC INTERNATIONAL LAW (June 2007), available at: <http://opil.ouplaw.com/view/10.1093/law/epil/9780199231690/law-9780199231690-e2015?rskey=MAYf0L&result=1&prd=EPIL>.

4. The historical and factual evidence advanced by interested states to support their territorial title in the disputed features has been widely examined in literature and falls beyond the scope of this paper, which focuses exclusively on the aspects relevant to the law of the sea. Suffice to say, at this point, China claims the islands on the basis of historic discovery and usage dating back to the Ming Dynasty (AD 1368-1644). While Japan argues that it acquired the islands as terra nullius, in 1895, as they were found to be unoccupied with no signs of formal control. See Ji, *supra* note 1, for an analysis of the customary international law of territorial acquisition and the historical facts of the dispute; Hitoshi Nasu and Donald R Rothwell, *Evaluating the Role of International Law in Territorial and Maritime Disputes in East Asia* 4(1) ASIAN J. OF INT’L L. 55 (2014); Hungdah Chiu, *An Analysis of the Sino-Japanese Dispute Over the*

economic activities are currently being conducted on the islands, but rather on their strategic location near areas where substantial quantities of offshore oil and gas are thought to be present.⁵

Under the framework of the 1982 United Nations Convention on the Law of the Sea (UNCLOS) and customary international law at large, offshore features qualifying as islands, in a legal sense, can generate zones of maritime jurisdiction in the same way as any other mainland territory. That being the case, the suspected presence of vast hydrocarbon deposits in the adjacent waters renders Senkaku/Diaoyu islands intrinsically valuable.⁶ The significance attached to these islands stems from the perception that their possession can potentially generate extensive areas of maritime jurisdiction capturing the marine resources in the surrounding waters and seabed.⁷ Obviously, there is a close connection between the islands' maritime generating capacity and the associated sovereign rights over resources thereof.⁸

The possible effect of an island on maritime delimitation presupposes that the island is capable of generating maritime projections to be delimited vis-à-vis other states with opposite or adjacent coasts.⁹ Accordingly, this paper

T'iaoyu Tai Islets (Senkaku Gunto) 15 CHINESE Y.B. OF INT'L L. AFF. 9 (1996); *Basic View on the Sovereignty over the Senkaku Islands*, MINISTRY OF FOREIGN AFFAIRS OF JAPAN (Nov. 9, 2012), www.mofa.go.jp/region/asia-paci/senkaku/position_paper_en.html; Min G Koo, *The Senkaku/Diaoyu Dispute and Sino-Japanese Political-Economic Relations: Cold Politics and Hot Economics?* 22(2) THE PAC. REV. 205, 213 (2009); JEANETTE GREENFIELD, CHINA'S PRACTICE IN THE LAW OF THE SEA 127-129 (1992).

5. Geologists Emery and Niino first identified the perception that the East China Sea could potentially be one of the most prolific oil regions in the world in 1961. Their report was largely based on stratigraphic and oceanographic data gathered by Japanese and American submarines during the Second World War. In 1968, a geological study funded by the United Nations Economic Commission for Asia and the Far East (ECAFE), confirmed that the "continental shelf between Taiwan and Japan may be one of the most prolific oil reservoirs in the world" and "one of the few large continental shelves in the world that has remained untested by the drill, owing to military and political factors." See K.O. Emery et al., *Geological Structure and Some Water Characteristics of the East China and the Yellow Sea*, 2 TECHNICAL BULLETIN OF THE ECONOMIC COMMISSION FOR ASIA AND THE FAR EAST 41 (Apr. 30, 1968).

6. RALF EMMERS, RESOURCE MANAGEMENT AND CONTESTED TERRITORIES IN EAST ASIA 33 (2013); Sang-Myon Rhee & James MacAulay, *Ocean Boundary Issues in East Asia: The Need for Practical Solutions*, in *Ocean Boundary Making: Regional Issues and Developments* 85-86 (1988).

7. Clive Schofield, *The Trouble with Islands: The Definition and Role of Islands and Rocks in Maritime Boundary Delimitation*, in MARITIME BOUNDARY DISPUTES, SETTLEMENT PROCESSES, AND THE LAW OF THE SEA 21 (Seoung-Yong Hong & Jon M. Van Dyke eds., 2008).

8. This connection is amply illustrated in the words of some Japanese scholars who consider that "the Senkaku Islands fill every condition for being qualified as islands from the viewpoint of international law [hence] Japan has the sovereign right for the exploration of natural resources on the continental shelf adjacent to the Senkaku Islands." Toshio Okuhara, *The Territorial Sovereignty over the Senkaku Islands and Problems on the Surrounding Continental Shelf*, 15 JAPANESE ANN. INT'L L. 95, 105 (1971).

9. "In giving special attention to the regime of islands the Convention reflects the importance of islands in the delimitation of maritime space," UNITED NATIONS CONVENTION

examines whether the Senkaku/Diaoyu islands qualify as islands in accordance with UNCLOS, and as a consequence, generate full maritime zones, before evaluating the possible effect of these islands on maritime boundary delimitation in the area in question. To that end, the relevant provisions of UNCLOS are presented and analyzed with a moderate degree of reference to literature, international jurisprudence and state practice.

II. What is an “Island” in a Legal Sense?

UNCLOS only provides a single article on the regime of naturally occurring islands.¹⁰ This indicates what geographic formations qualify as “islands” in a legal sense, but also what geographic formations similar to islands cannot be legally considered as such. It also provides for the equal treatment of islands and other land territories for the purpose of delimiting the territorial sea, contiguous zone, exclusive economic zone (EEZ), and continental shelf. Article 121 of UNCLOS reads as follows:

1. An island is a naturally formed area of land, surrounded by water, which is above water at high tide.
2. Except as provided for in paragraph 3, the territorial sea, the contiguous zone, the exclusive economic zone and the continental shelf of an island are determined in accordance with the provisions of this Convention applicable to other land territory.
3. Rocks, which cannot sustain human habitation or economic life of their own, shall have no exclusive economic zone or continental shelf.¹¹

Paragraph 1 of the above Article has adopted, unchanged, Article 10 of the 1958 Convention on the Territorial Sea and the Contiguous Zone (1958 Territorial Sea Convention).¹² In defining an island as a “naturally formed area of land,” it excludes by definition artificial islands, which come under the scope of Articles 11, 60, 80 and 147(2) of UNCLOS. Further, the indispensable condition that an island must be “above water at high tide”

ON THE LAW OF THE SEA, 1982: A COMMENTARY VOL. 3 325 (Myron Norquist et al. eds., 1995).

10. U.N. Convention on the Law of the Sea (hereinafter “UNCLOS”), Dec. 10, 1982, Article 121, 1833 U.N.T.S. 3.

11. *Id.* (Article 121 applies to individual islands, not to archipelagic states constituted wholly by groups of islands that are geographically, economically and politically interconnected. The latter come under the scope of Article 46 of UNCLOS).

12. Article 10(1) of the 1958 Territorial Sea Convention provided that “An island is a naturally-formed area of land, surrounded by water, which is above water at high-tide. . .” U.N. Convention on the Territorial Sea and the Contiguous Zone (1958 Territorial Sea Convention), Apr. 29, 1958, 516 U.N.T.S. 205. In its commentary on this article, the International Law Commission noted that low-tide elevations and technical installations built on the seabed, such as installations for the exploitation of the continental shelf, were not considered islands. *Report of the International Law Commission on the Work of its Eighth Session*, 2 Y.B. OF THE INT’L L. COMM’N 253, 270 (1956).

excludes such offshore features as low-tide elevations and drying reefs, which are dealt with in Article 13 of UNCLOS.¹³

Paragraph 2 of Article 121 of UNCLOS reaffirms the customary position of international law that islands can generate the same range of maritime zones as any other land territory and that these zones, namely the territorial sea, EEZ, and continental shelf are to be delimited in accordance to UNCLOS in the same way as applicable to land territories.

Paragraph 3 forms the cornerstone of this Article providing an exception to its preceding paragraphs. Paragraph 3 deprives “rocks which cannot sustain human habitation or economic life of their own” of the capacity to generate EEZs and continental shelf areas, but retains their ability to generate a territorial sea and contiguous zone.¹⁴ In other words, any insular feature satisfying the conditions of Article 121(1), namely natural formation and permanently above water at high tide, is *prima facie* entitled to generate full maritime projections in accordance to UNCLOS. But if such feature may be classified as “rock,” its capacity to generate EEZ and continental shelf must be ascertained at a second stage by examining the conditions set forth in Article 121(3), “human habitation” and “economic viability.”¹⁵

Interestingly, while Article 121(3) of UNCLOS draws a distinction between “islands” with full zone-generative capacity and “rocks” limited to a territorial sea, the term “rock” and the phrase “cannot sustain human habitation or economic life of their own” receive no further definition.¹⁶ This interpretative loophole has given rise to considerable uncertainty, particularly in cases where certain geographical features lie at the borderline between an “island” and a “rock.” In the case under examination, this is the primary question one has to answer before discussing the possible effect of the Senkaku/Diaoyu islands in the maritime boundary delimitation between China and Japan.

Before applying Article 121(3) to the Senkaku/Diaoyu island group, the substantial content of this provision must be determined. The starting point in this regard is Article 31(1) of the Vienna Convention on the Law of Treaties (1969 Vienna Convention).¹⁷ This states that “a treaty should be interpreted in good faith, in accordance with the ordinary meaning to be given to the terms of the treaty in their context and in the light of its object and purpose.” Article 32 of the 1969 Vienna Convention sets out the supplementary means of interpretation, namely, the preparatory works of the treaty and the circumstances of its conclusion.¹⁸

13. UNCLOS, *supra* note 10, art. 13.

14. UNCLOS, *supra* note 10, art. 121.

15. *Id.*

16. Lewis M. Alexander, *The Identification of Technical Issues of Maritime Boundary Delimitation within the LOSC Context*, in *THE UN CONVENTION ON THE LAW OF THE SEA: IMPACT AND IMPLEMENTATION* 273-4 (E.D. Brown & R.R. Churchill eds., 1987).

17. Vienna Convention on the Law of Treaties, May 23, 1969, No. 18232, 1155 U.N.T.S. 332.

18. *Id.*

III. What is the Meaning of the Term “Rock”?

From the construction of Article 121 of UNCLOS, it can be safely suggested that a rock is a peculiar sub-category of island.¹⁹ Strictly speaking, there is no substantial difference between a “rock” and an “island” insofar as they must both constitute “an area of land,” “naturally formed,” “surrounded by water,” and “above water at high tide.”²⁰ Nonetheless, under UNCLOS, rocks are much more disadvantaged than islands since their zone-generative capacity is substantially reduced.²¹

UNCLOS does not provide a definition of the term “rock.”²² Assuming that ordinary definitions of rock apply, this may lead to ambiguities regarding the true meaning of the term “rock” and its distinction from other maritime features.²³ For example, the Cambridge English Dictionary provides that rocks form “the dry solid part of the earth’s surface or any large piece of this that sticks up out of the ground or the sea.”²⁴ Webster’s Third New International Dictionary defines rock as, “a mass of stone lying at or near the surface of the water.”²⁵ But these descriptions may also hold true for other offshore geographical features, such as islands, which are treated differently under UNCLOS.²⁶ Vice versa, to be considered a “rock,” in a legal sense, it is not always necessary that an offshore feature constitutes a rock in a geological sense. Article 121(3) can also apply to a formation consisting of sand. Therefore, in the interest of clarity and consistency, it seems reasonable to seek the actual content of the term “rock,” not in its strict dictionary definition, but in the meaning which UNCLOS drafters intended to confer in light of the Convention’s objective and purpose.

From the Second Session of UNCLOS III, held in Caracas in 1974, the general perception among states was that islands should be allowed the same treatment in terms of ocean space as continents.²⁷ According to some delegations, an island’s maritime space should be determined according to

19. Jon M. Van Dyke et al., *The Exclusive Economic Zone of the Northwestern Hawaiian Islands: When Do Uninhabited Islands Generate an EEZ?*, 25 SAN DIEGO L. REV. 425, 435 (1988).

20. UNCLOS, *supra* note 10, art. 121.

21. Chris M. Carleton & Clive Schofield, *Developments in the Technical Determination of Maritime Space: Delimitation, Dispute Resolution, Geographical Information System and the Role of the Technical Expert* 3(4) INT’L BOUNDARIES RESEARCH UNIT: MARITIME BRIEFING 35-36 (2002); Clive Schofield, *supra* note 7, at 25.

22. Alexander, *supra* note 16.

23. Alex G. Oude Elferink, *Clarifying Article 121(3) of the Law of the Sea Convention: The Limits Set by the Nature of International Legal Processes*, 2 INT’L BOUNDARIES RESEARCH UNIT: BOUNDARY & SECURITY BULLETIN 58, 59 (1998).

24. Definition of Rock, CAMBRIDGE ENGLISH DICTIONARY, <http://dictionary.cambridge.org/us/dictionary/english/rock>.

25. WEBSTER’S THIRD NEW INTERNATIONAL DICTIONARY OF THE ENGLISH LANGUAGE (Philip B. Gove ed., 1993).

26. For example, Cotter defines islands as “relatively small fragments of land.” CHARLES H. COTTER, *THE PHYSICAL GEOGRAPHY OF THE OCEANS* 59 (1965).

27. U.N. SCOR, 2nd Sess., 40th mtg. at 286-7, U.N. Doc. A/CONF.62/C.2/SR.40 (Aug. 14, 1974).

criteria equal to those used for continental landmasses.²⁸ Further, many states held the view that allowing islands to generate full seaward projections was vital to safeguard the interests of their inhabitants which "entirely depend upon the natural resources of the sea for the livelihood."²⁹ The statement of Cyprus is noteworthy in that regard:

Islands are mutatis mutandis in the same tradition as continental territories insofar as rights and obligations under international law are concerned, and that if any discrimination were to be made, it should be in favor of, not at the expenses of, islands which rely on the resources in their maritime zones.³⁰

Three far more intriguing issues were: (1) the distinction between islands and other insular formations, (2) their precise definition, and (3) their effect in maritime boundary delimitation. Some states raised concerns regarding the "vagueness and generalized nature" of the existing definition of islands contained in Article 10 of the 1958 Territorial Sea Convention; particularly whether this broad, generic, and somehow enigmatic definition could mean that even minor rocks and seabed elevations would qualify as islands in a legal sense.³¹

In response to the much-criticized 1958 Territorial Sea Convention's definition, Romania submitted a proposal submitted that attempted to differentiate islands from other geographical formations similar to islets.³² Paragraph 2 of the Romanian proposal read as follows:

An island similar to an islet is a naturally formed elevation of land (or simply and eminence of the seabed) surrounded by water, which is above water at high tide and which is more than one square kilometer but less than (. . .) square kilometers in area, which is not or cannot be inhabited (permanently) or which does not or cannot have its own economic life.³³

28. See Statements of New Zealand, West Samoa, Trinidad and Tobago and Fiji and Greece at the 21st, 38th and 39th meetings of the Second Committee, emphasizing the equitable treatment of island states and islands, generally, and to their entitlement to the same territorial sea and economic zone to be fixed for other land territory. U.N. SCOR, 2nd Sess., 21st mtg., U.N. Doc. A/CONF.62/C.2/SR.21 (July 31, 1974); see also U.N. SCOR, 2nd Sess., 38th mtg., U.N. Doc. A/CONF.62/C.2/SR.38 (Aug. 13, 1974); U.N. SCOR 2nd Sess., 39th mtg., U.N. Doc. A/CONF.62/C.2/SR.39 (Aug. 14, 1974).

29. See Denmark's and Greece's Statements at the 39th Meeting of the Second Committee. U.N. SCOR 2nd Sess., 39th mtg. at 285, U.N. Doc. A/CONF.62/C.2/SR.39 (Aug. 14, 1974).

30. See Statement of Cyprus at the 20th Meeting of the Second Committee. U.N. SCOR 2nd Sess., 20th mtg. at 163-4, U.N. Doc. A/CONF.62/C.2/SR.20 (July 30, 1974).

31. Clive Symmons, *THE MARITIME ZONES OF ISLANDS IN INTERNATIONAL LAW* 16 (1979); see Statements of Tunisia, Colombia and Spain at the 39th and 40th Meetings of the Second Committee. U.N. SCOR 2nd Sess., 39th mtg., U.N. Doc. A/CONF.62/C.2/SR.39 (Aug. 14, 1974); U.N. SCOR 2nd Sess., 40th mtg., U.N. Doc. A/CONF.62/C.2/SR.40 (Aug. 14, 1974).

32. *Romania: Draft Articles on Definition of and Regime Applicable to Islets and Islands Similar to Islets*, U.N. Doc. A/CONF.62/C.2/L.53 (Aug. 12, 1974).

33. *Id.*

This trend was further advanced by the draft articles of delegations from Algeria, Dahomey, Guinea, Ivory Coast, Liberia, Madagascar, Mali, Mauritania, Morocco, Sierra Leone, Sudan, Tunisia, Upper Volta and Zambia, which sought to define various categories of insular features such as "islands," "islets," "rocks" and "low-tide elevations."³⁴ Their proposals advocated the use of specific criteria such as size, geographical, geological and geomorphological configuration, needs and interests of island population and the living conditions thereof. By contrast, a number of delegations opposed the above proposals and reiterated their support for the applicability of the 1958 Convention's definition.³⁵

The resulting composite text, as emerged from the second session of UNCLOS III, was a combination of the alternative definitions put forth by the delegates during the discussions. The composite text read as follows:

1. An island is a naturally formed area of land, surrounded by water, which is above water at high tide;
2. An islet is a naturally formed area of land less than (. . .) square kilometers, surrounded by water, which is above water at high tide;
3. A rock is a naturally formed rocky elevation normally unfit for human habitation which is surrounded by water and is above water at high tide.

Following further refinements, the third session of UNCLOS III, held in Geneva in 1975, led to Article 121 of UNCLOS 1982 as appears in the present. This defines islands largely in the same terms as in the 1958 Convention.³⁶ Only 121(3) reflects, to some extent, proposals for differentiating islands from some other types of insular features, *i.e.* rocks. In part, this is because of the serious practicalities of finding an alternative definition for islands and commonly acceptable distinctions among different types of islands.³⁷ Largely, however, it is due to the realization that by attempting to add detailed rules and complex formulae, such as those based on size and population analogies,³⁸ there would inevitably be artificial

34. *Algeria, Dahomey, Guinea, Ivory Coast, Liberia, Madagascar, Mali, Mauritania, Morocco, Sierra Leone, Sudan, Tunisia, Upper Volta and Zambia: Draft Articles on the Regime of Islands*, U.N. Doc. A/CONF.62/C.2/L.62/Rev.1 (Aug. 27, 1974).

35. *See Fiji, New Zealand, Tonga and Western Samoa: Draft Articles on Islands*, U.N. Doc. A/CONF.62/C.2/L.30 (July 30, 1974); *see also* Statements of Singapore, Canada, Denmark and Trinidad and Tobago at the 39th Meeting of the Second Committee. U.N. SCOR 2nd Sess., 39th mtg., U.N. Doc. A/CONF.62/C.2/SR.39 (Aug. 14, 1974).

36. *Informal Single Negotiating Text, Part II*, U.N. Doc. A/CONF.62/WP.8/PartII (Dec. 10, 1982).

37. U.N. SCOR 2nd Sess., 40th mtg. at 287-8, U.N. Doc. A/CONF.62/C.2/SR.40 (Aug. 14, 1974).

38. For example, Ireland's draft proposal stated, ". . . account may be taken of an island only if it is inhabited and if . . . it contains at least one tenth of the land area and population of the State concerned." *Ireland: Draft Article on Delimitation of Areas of Continental Shelf Between Neighbouring States* U.N. Doc A/CONF.62/C.2/L.43 (Aug. 6, 1974).

ambiguities, resulting in the “very inequity which they purported to avoid.”³⁹ As one commentator observed, “the majority of these proposals were simply sophisticated attempts to protect national interests, and thus, despite the superficial appeal of this approach, the absence of any reference to these characteristics of islands. . . comes as no surprise.”⁴⁰ Therefore, proposals to draw distinctions between islands, rocks and other insular features based on certain size criteria, fixed population analogies and other geographical factors, were considered incredibly complex, and as a consequence, were explicitly ruled out. But the introduction of 121(3) indicates a common understanding that emerged during the discussions, that in situations where offshore natural resources were vital to the economy of the coastal state and the livelihood of the islands’ inhabitants, such islands would be entitled to full maritime zones. Inversely, small, uninhabitable maritime features without any economic life should be excluded from such generating capacity.

IV. “Human Habitation” or “Economic Life of Its Own”

At present, Article 121(3) of UNCLOS stipulates two crucial conditions for an insular feature to qualify as “island”: to sustain “human habitation” or “economic life of its own.”⁴¹ The inclusion of the grammatical conjunction “or” suggests that these two conditions are non-cumulative, meaning that the fulfillment of just one of these conditions is sufficient to prove that an insular feature has full zone-generative capacity.⁴² Arguably, Article 121(3) gives rise to several questions of interpretation. How can one say with any certainty whether a rock is capable of sustaining human habitation or has the capacity to generate economic life of its own? More importantly, can there be a category of island, in a legal sense, that can have economic life of its own but cannot sustain human habitation, or vice versa? Finally, would an island that had once been inhabited, but has become uninhabited over time due to persisting adverse economic conditions, for example, be deprived of its legal status?

In answering these questions, it is necessary to point out that Article 121(3) refers to the capacity of sustaining human habitation, not simply actual habitation. Capacity for habitation is arguably a broader condition than actual habitation.⁴³ This suggests that an island must not necessarily be, or have once been, inhabited to be considered as such. The key is to prove the island’s ability to sustain habitation. Clearly, the first step to prove this ability is to look at the island’s present or past population. Even though

39. Statement of the United Kingdom at the 40th Meeting of the Second Committee. U.N. SCOR 2nd Sess., 40th mtg., U.N. Doc. A/CONF.62/C.2/SR.40 (Aug. 14, 1974).

40. Donald E. Karl, *Islands and the Delimitation of the Continental Shelf: A Framework for Analysis*, 71 AM. J. OF INT’L L. 642, 645 (1977).

41. UNCLOS, *supra* note 10, art. 121.

42. Barbara Kwiatkowska & Alfred H.A. Soons, *Entitlement to Maritime Areas of Rocks which Cannot Sustain Human Habitation or Economic Life of Their Own*, 21 NETH. Y.B. OF INT’L L. 139, 163-165 (1990).

43. Clive Symmons, *THE MARITIME ZONES OF ISLANDS IN INTERNATIONAL LAW* 49 (1979).

it is not necessary for an island to actually be or have at some point been inhabited to meet the “sustain human habitation” condition, it will certainly be easier to argue that an island can actually sustain human habitation if it had once been inhabited. In addition, the fact that the given population has historically made use of the surrounding waters, e.g. for fishing or mining, may be used to establish the island’s legal status.⁴⁴

Assuming that there are no solid indications that the island is, or used to be, inhabited, the second step is to examine the island’s capacity to sustain human habitation. In that regard, the most vital needs for human survival are arguably food, fresh water, and shelter. Therefore, it may be suggested that the existence of cultivable soil, fresh water and enough space for shelter are the three most critical features of an island that has the ability to sustain human life.

The second requirement provided in Article 121(3) concerns the island’s capacity to “sustain economic life of its own.” Similar to the first requirement, the phrase “able to sustain” suggests that the existence of economic life is not necessary, but rather it is the presence of resources that can sustain such economic life that is crucial to qualify as an island. Be that as it may, it is submitted that if natural resources such as fisheries or minerals are known to be present on the island, this alone is enough to reach the threshold of Article 121(3). This view finds some support in the judgement of the Supreme Court of Norway in *Public Prosecutor v. Haraldson et al.*,⁴⁵ where it was held that Abel island, an outlying island in the northeastern part of Svalbard archipelago, was not an uninhabitable rock within the meaning of Article 121(3) of UNCLOS because it was able to support a significant polar bear hunt, notwithstanding that hunting was prohibited for conservation reasons.⁴⁶ The existence of physical opportunities on the feature for sustaining some kind of economic life, such as hunting, were considered enough to grant the feature the legal status of an island. It should also be noted that teams of meteorologists and scientists living on the island did not qualify as a stable population.⁴⁷ Further, the phrase “of its own” indicates that the island itself must be capable of generating a source for economic life. But nowhere in the discussions that took place at UNCLOS III was it mentioned that islands must be self-sufficient. As a matter of fact, it would not always be possible for a state, whether continental or island, to achieve self-sufficiency at every level, whether

44. Fisheries Case (U.K. v. Nor.), Judgment, 1951 I.C.J. Rep. 116, 127-142. (It is interesting to note that in the *Fisheries Case* of 1951, Norway contended that waters adjacent to the coastal zone of the various insular formations (known as fjords) were essential to the livelihood of their inhabitants. The Court acknowledged this and granted Norway full jurisdiction to extensive fisheries zones measured from straight baselines connecting all the aforementioned features.).

45. Robin R. Churchill, *Norway: Supreme Court Judgment on Law of the Sea Issues*, 11(4) INT’L J. OF MARINE AND COASTAL L. 576 (1996) (citing *Public Prosecutor v. Haraldson et al.*, Judgment, 1996).

46. *Id.* at 579.

47. *Id.*

analyzed from the perspective of the economy, energy, food or agriculture. Some external support to fully realize the economic potential of an island must be deemed permissible to that end.

State practice and jurisprudence on the issue of an island have been remarkably unhelpful. International courts and tribunals have failed to offer a decisive and authoritative definition of Article 121 of UNCLOS.⁴⁸ This is largely because in boundary cases involving islands, international courts and tribunals have tended to focus on issues relevant to drawing the delimitation lines rather than specifically interpreting the legal status of the offshore features in question.⁴⁹

In the *Volga Case*,⁵⁰ concerning the release of the Russian-flagged fishing vessel, *Volga*, which was apprehended by the Australian Navy for illegally fishing in the Australian EEZ adjacent to Heard and McDonald islands, Judge Vukas raised serious doubts as to the appropriateness of establishing EEZ off the shores of “uninhabitable and uninhabited” islands. In his separate declaration, he explained that a crucial factor for establishing an EEZ was the protection of the economic interests of the coastal states, and particularly of their coastal population. He then went further to observe that these economic interests did not exist with respect to uninhabited islands, such as Heard and McDonald islands, as they had no “coastal fishing communities” and “no permanent habitation.”⁵¹ But it is important to note that neither Russia nor any other member of the Tribunal had challenged Australia’s right to claim an EEZ around Heard and McDonald islands.⁵² It is also interesting to note that this reasoning would imply that actual human habitation and economic life must be recorded cumulatively to meet the test of Article 121(3) of UNCLOS. This, however, runs contrary to the wording of said article, particularly the grammatical conjunction “or” between “human habitation” and “economic life” and the phrase “able to sustain” as opposed to actual habitation and economic life.⁵³ The authoritative value of Judge Vukas’ independent statement and its potential impact on future case law regarding the issue remains to be seen.

The preceding section has examined the meaning of Article 121 of UNCLOS in light of its negotiating history and the ordinary interpretation

48. Schofield, *supra* note 7, at 28.

49. See Maritime Delimitation in the Black Sea (Rom. v. Ukr.), Judgment, 2009 I.C.J. Rep. 61, ¶184-188. (The Court omitted to respond to the contentions of the parties regarding the status of Serpents’ Island under Article 121 of UNCLOS, but instead simply observed that Serpents’ Island was entitled to a 12nm territorial Sea and it had no impact on the maritime delimitation between the two states.)

50. The “Volga” Case (Russ. Fed’n v. Austl), Judgment, (Dec. 23, 2002), available at www.itlos.org/fileadmin/itlos/documents/cases/case_no_11/11_judgment_231202_en.pdf.

51. *Id.*

52. It is noteworthy that Australia enforces its EEZ regime due to Japanese whaling in the area. See Marko Milanovic, *ICJ Decides the Whaling in the Antarctic Case: Australia Wins*, EJIL: TALK! BLOG OF THE EUROPEAN JOURNAL OF INTERNATIONAL LAW (June 7, 2016), www.ejiltalk.org/icj-decides-the-whaling-in-the-antarctic-case-australia-wins/.

53. UNCLOS, *supra* note 10, art. 121(3).

of its terms with regard to its objective and purpose. The following section applies the above analysis to the case of the seven Senkaku/Diaoyu islands in the East China Sea.

V. Senkaku/Diaoyu: Are They Islands?

The Senkaku/Diaoyu island group consists of seven insular features, all of which have a dry surface permanently above water.⁵⁴ Only three features are covered by some vegetation, mostly palm trees, but the rest are totally barren.⁵⁵ Despite the fact that they are extremely small, with the largest island being only about one square kilometer in size, all seem to satisfy the conditions set forth in Article 121(1) of UNCLOS, being naturally formed areas of land permanently above water at high tide.⁵⁶ On the other hand, it is not entirely clear as to whether they can escape the conditions defined in Article 121(3) of UNCLOS due to the requirement of being able to support human life or economic activities of their own.⁵⁷

Though there have been some reports of people living periodically on the larger island of the group, Uotsurijima/Diaoyu Dao, for example, civilians processing bonito caught in the surrounding waters or fishermen finding shelter during storms, it is highly doubtful that any of the Senkaku/Diaoyu has ever been permanently inhabited, a fact which may indicate their incapacity to sustain stable human habitation. Furthermore, as illustrated by the preparatory works of UNCLOS III, the requirement of human habitation cannot be met solely by the infrequent presence of fishermen or other civilians on the islands.⁵⁸ According to the above-mentioned findings, the human habitability “criterion may not inevitably require that the insular feature itself be permanently inhabited, but would require, at a minimum, that it provide support for a *nearby* stable community of persons”⁵⁹ or “stable residence of organized human groups.”⁶⁰ While “[i]nfrequent visits from interested scientists would not constitute a stable community. . . [h]istoric use of the island as a basis for the purpose of harvesting ‘the surrounding waters could, however, provide a good indication’” of its capacity to generate full maritime projections.⁶¹ Indeed, as noted above, if the rationale for attributing extended zones of maritime jurisdiction to islands were to protect the interests of their local communities which are dependent on the exploitation of the area and the surrounding waters, extended maritime zones should not be accorded to islands that lack such stable community of residents.

54. J.R.V. Prescott, *Maritime Jurisdiction in East Asian Seas*, EAST-WEST ENV'T AND POL'Y INST., 52 (1987).

55. Douglas M. Johnson & Mark J. Valencia, *Pacific Ocean Boundary Problems* 80 (1991).

56. See UNCLOS, *supra* note 10, art 121.

57. See *id.*

58. See *id.*

59. Van Dyke et al., *supra* note 19, at 437.

60. *Id.* at 436, n. 62.

61. *Id.* at 438.

Nonetheless, despite the absence of stable human habitation on a given island, its intrinsic capacity to sustain human life should not be totally excluded. In order, however, to prove such capacity, it is crucial to demonstrate the presence of other factors on the island, such as fresh water, cultivable soil, and enough space to build shelter. In that regard, while some vegetation is reported on the larger island of the group, it seems doubtful that any of them has cultivable soil to enable the production of food to sustain permanent human habitation.⁶² Further, none of the Senkaku/Diaoyu islands seem to have readily accessible fresh water.⁶³ Hence, if Senkaku/Diaoyu are deemed to be totally dependent for food and water and every other human need, they can hardly meet the requirement of being able to sustain human habitation.

The next and perhaps more complicated question is whether the Senkaku/Diaoyu islands satisfy the other requirement stipulated in Article 121(3) UNCLOS, namely, to be capable to “sustain human habitation or economic life of their own.”⁶⁴ Would fishing and production of oil from the surrounding waters meet this requirement? The fish stocks in the Senkaku/Diaoyu area are reportedly very significant.⁶⁵ The same holds true for hydrocarbon resources in the surrounding seabed.⁶⁶ As a consequence, it can be reasonably assumed that the area could potentially sustain economic life if the surrounding seabed and superjacent waters were to be commercially exploited.

The question that then arises is whether this form of economic life could be considered to be generated by the island “of [its] own” or if the island plays only a minor role in such economic activities.⁶⁷ To that end, some commentators have asked whether it is sufficient for uninhabited islands, such as the islands in question, to have enough strategic economic value due to their adjacency to valuable seabed resources, even if they have to import food and supplies from external sources.⁶⁸ In other words, can a tiny, isolated and uninhabitable feature be considered an island simply due to the fact that vast amounts of commercially exploitable hydrocarbon resources are known or suspected to be present in its proximity? Charney suggested that even if economic viability has to be realized by some kind of external support, it should be regarded as satisfying the test.⁶⁹ He also believed that resources such as hydrocarbons in the adjacent seabed could be included in

62. Johnson & Valencia, *supra* note 55.

63. *Id.*

64. See UNCLOS, *supra* note 10.

65. *How Uninhabited Islands Soured China-Japan Ties*, BBC NEWS (Nov. 10, 2014), <http://www.bbc.com/news/world-asia-pacific-11341139>

66. Jonathan I. Charney, *Central East Asian Maritime Boundaries and the Law of the Sea*, 89(4) AM. J. INT'L L. 724, 733-34 (1995).

67. See UNCLOS, *supra* note 10.

68. 121(3) of the *Law of the Sea Convention: The Limits Set by the Nature of International Legal Processes*, 2 IBRU 58, 60-64 (1998); see also Carleton & Schofield *supra* note 21.

69. Charney, *supra* note 66.

the calculation if the rock is, or has the resources necessary for use as, an economically viable base for operations.⁷⁰

If it is accepted that hydrocarbon resources can justify the requirement of “sustaining economic life,” this means that a barren rock could potentially qualify as an island, thus unlocking a marginally bigger maritime space simply due to the proven or plausible presence of such resources.⁷¹ But simply imagine the legal implications if the said hydrocarbons prove to be of lesser quantity or quality than initially expected, hence failing the “economic life” test. Could it ever be admissible, under international law, that the legal status of an insular formation, and the associated maritime entitlements, could be determined solely on the basis of the commercial success, or otherwise, of the resources to which the feature is believed to be adjacent?

International courts and arbitral tribunals have consistently rejected the relevance of purely economic factors, such as oil exploration and exploitation, in the context of assigning maritime entitlements between disputing states. In the *Tunisia v. Libya* case,⁷² the ICJ rejected the Tunisian arguments about its lack of access to the same mineral resources that Libya could secure, considering them as “variables” that may change over time.⁷³ It went on to say that “[a] country might be poor today and become rich tomorrow as a result of an event such as the discovery of a valuable economic resource.”⁷⁴ The *Guinea/Guinea-Bissau* Tribunal concluded that pure economic factors could not be taken into account because they relate to uncertain and changing factors and they are not thus “permanent circumstances.”⁷⁵ Likewise, in the *Bahrain v. Qatar* case,⁷⁶ the ICJ held that it did “not consider the existence of pearling banks, though predominantly exploited in the past by Bahrain fishermen, as forming a circumstance which would justify an eastward shifting of the equidistance line as requested by Bahrain.”⁷⁷ In the *Libya/Malta* case,⁷⁸ though it was recognized that natural resources of the continental shelf “so far as known or readily ascertainable might well constitute relevant circumstances which it would be reasonable to take into account in a delimitation,” the Court refrained from taking such factor into account.⁷⁹ Finally, in the *Jan Mayen* case, the ICJ found that Jan Mayen was clearly an island, notwithstanding the absence of locally based

70. *Id.*

71. *Id.*

72. *Continental Shelf (Tunisia v Libya Arab Jamahiriya)*, Judgment, 1982 I.C.J. 18 ¶ 107 (Feb. 1982).

73. *Id.*

74. *Id.*

75. Roberty F. Pietrowski, Jr., *Guinea/Guinea-Bissau: Dispute Concerning Delimitation of the Maritime Boundary*, 25(2) I.L.M. 251, 302 ¶ 122 (1986).

76. *Maritime Delimitation and Territorial Questions (Qatar v. Bahrain)*, Judgment, 2001 I.C.J. 40 ¶ 236 (Mar. 2001).

77. *Id.*

78. *Continental Shelf (Libyan Arab Jamahiriya/Malta)*, Judgment, 1985 I.C.J. 13 ¶ 58 (June 1985).

79. *Id.*

fishing operations and the limited size of its population.⁸⁰ It noted “the attribution of maritime areas to the territory of a State, which, by its nature, is destined to be permanent, is a legal process based solely on the possession by the territory concerned of a coastline.”⁸¹ Therefore the size of the population and other socio-economic factors should not be taken into account.

Interestingly, at the time of writing the present paper, an Arbitral Tribunal constituted under Annex VII of UNCLOS, delivered a historic verdict on the maritime dispute between the Philippines and China in the South China Sea.⁸² As it turns out, this is the first time in the history of international adjudication that an international arbitral Tribunal has ever sought to determine the status of several maritime features in the South China Sea within the meaning of Article 121 of UNCLOS. While a detailed analysis of the Tribunal’s 500-page verdict lies beyond the scope of this paper, it is nonetheless crucial to address the key elements of the Tribunal’s authoritative interpretation and application of Article 121 of UNCLOS to the South China Sea insular features.

The Tribunal commenced its analysis by noting that Article 121 of UNCLOS had not previously been the subject of significant consideration by courts or arbitral tribunals and that the scope of application of its paragraph 3 was not clearly established.⁸³ Therefore, the Tribunal considered it appropriate to examine the meaning of this provision by separately reviewing the text, its context, the object and purpose of this provision, pursuant to Articles 31 and 32 of the Vienna Convention on the Law of Treaties.⁸⁴ Having done so, it went on to establish some key findings with important practical implications for the future interpretation and application of Article 121 of UNCLOS. In the words of the Tribunal:

(a) First, the use of the term “rock” does not require that a feature be composed of rock in the geologic sense in order to fall within the scope of the provision.

(b) Second, the use of the term “cannot” makes clear that the provision concerns the objective capacity of the feature to sustain human habitation or economic life. Actual habitation or economic activity at any particular point in time is not relevant, except to the extent that it indicates the capacity of the feature.

(c) Third, the use of the term “sustain” indicates both time and qualitative elements. Habitation and economic life must be able to extend over a certain duration and occur to an adequate standard.

80. *Maritime Delimitation in the Area Between Greenland and Jan Mayen*, (Denmark v. Norway), Judgment, 1993 I.C.J. 38 ¶ 80 (June 1993).

81. *Id.*

82. *See South China Sea Arbitration (Phil. v. China)*, Award, 2016 PCA Case Repository (Perm. Ct. Arb. July 2016).

83. *Id.* ¶ 474.

84. *Id.* ¶ 476.

(d) Fourth, the logical interpretation of the use of the term “or” discussed above indicates that a feature that is able to sustain either human habitation or an economic life of its own will be entitled to an exclusive economic zone and continental shelf.⁸⁵

In addition to the above, the Tribunal observed that a rock cannot be transformed into a fully-entitled island through human efforts, *e.g.* through land modification, and generally by the introduction of technology and extraneous materials intended to increase its capacity to sustain human habitation or economic life of its own.⁸⁶ According to the Tribunal, the phrase “cannot sustain” means “cannot, without artificial addition, sustain.”⁸⁷ Key here is the status of a feature in its natural condition. Moreover, as regards the term “human habitation,” the Tribunal noted that this should be understood to involve “a stable community of people for whom the feature constitutes a home and on which they can remain,” regardless of the size of this community.⁸⁸ As far as the “economic life” criterion is concerned, the court made the notable observation that any economic activity should revolve around the feature itself and not focus exclusively on the adjacent waters or seabed.⁸⁹ To that end, any economic activity that is entirely dependent on external support or exclusively devoted to using a feature as an object for extractive activities, *e.g.* as an oil or fishing platform, without the involvement of a local island population cannot reasonably be considered to constitute the economic life of an island as its own.⁹⁰

Finally, and perhaps most importantly, the Tribunal found that the capacity of a feature to sustain human habitation or economic life of its own must be addressed on a case-by-case basis, having regard to the principal factors indicating the natural capacity of any given feature to sustain human habitation and economic life. These may include, *inter alia*, “the presence of water, food, and shelter in sufficient quantities to enable a group of persons to live on the feature for an indeterminate period of time.”⁹¹ But, the Tribunal went to great lengths to emphasize that no “abstract test” of assessing these physical requirements can or should be formulated and that the relative contribution of these factors to the natural capacity of a feature

85. *Id.* ¶¶ 504, 539-42.

86. *Id.* ¶ 559.

87. *Id.* ¶¶ 508-10.

88. *Id.* ¶ 542. (In remote features, a few individuals or even periodic habitation by nomadic people could well suffice.)

89. South China Sea Arbitration, *supra* note 82 ¶ 500.

90. *Id.* ¶ 417, 543; *see also id.* ¶ 547 (“A feature that is only capable of sustaining habitation through the continued delivery of supplies from outside does not meet the requirements of Article 121(3). Nor does economic activity that remains entirely dependent on external resources or that is devoted to using a feature as an object for extractive activities, without the involvement of a local population, constitute a feature’s ‘own’ economic life.”).

91. *Id.* ¶ 546.

will vary from one case to another.⁹² If for example, an insular “feature is entirely barren of vegetation” and lacks indigenous freshwater resources and all other sources necessary for basic survival, it will be undisputedly incapable of sustaining human habitation.⁹³ On the other hand, the Tribunal acknowledged that it is not always possible to determine, just by looking at the physical characteristics of a feature, “where the capacity merely to keep people alive ends and the capacity to sustain settled habitation by a human community begins.”⁹⁴

Having reached the above conclusions, the Tribunal went on to apply its findings to the various features that were the subject of the Philippines’ submission.⁹⁵ It found that Scarborough Shoal, Johnson Reef, Cuarteron Reef, Fiery Cross Reef, Gaven Reef, and McKennan Reef were all “rocks” in the meaning of Article 121(3) of UNCLOS.⁹⁶ The evidentiary basis for this conclusion was that none of these features could sustain human habitation in their natural state because they had no fresh water, vegetation, or living space, despite the fact that some states, such as China, had constructed installations, deployed military personnel, and engaged in significant reclamation work on several of these features.⁹⁷ Concerning the application of Article 121 to the disputed Spratly island group, the Tribunal, having recognized that most of these features had been significantly modified from their natural condition with land reclamation, construction of installations etc., it then undertook the herculean task to assess various sources of historical evidence of conditions on the said features, prior to advent of human modification.⁹⁸ These conditions included the presence of portable fresh water,⁹⁹ vegetation,¹⁰⁰ soil and agriculture,¹⁰¹ historical habitation by fishermen,¹⁰² and commercial operations.¹⁰³ On the basis of this analysis, the Tribunal reached a groundbreaking conclusion, that the principal high-tide features in the Spratly islands are in fact “capable of enabling the survival of small groups of people” in the light of their physical characteristics.¹⁰⁴ But the Tribunal denied their “capacity of a feature to sustain human habitation” on the basis that: a) no stable human community had ever formed on the

92. *Id.* (In the tribunal’s words, “human habitation entails more than the mere survival of humans on a feature and that economic life entails more than the presence of resources.”).

93. *Id.* ¶ 548.

94. *Id.*

95. *Id.* ¶¶ 554-70.

96. South China Sea Arbitration, *supra* note 82 ¶¶ 554-70.

97. *Id.*

98. *Id.* ¶¶ 580-614.

99. *Id.* ¶ 580.

100. *Id.* ¶¶ 585-93.

101. *Id.* ¶ 594.

102. *Id.* ¶¶ 597-601.

103. South China Sea Arbitration, *supra* note 82 ¶ 602.

104. South China Sea Arbitration, *supra* note 82 ¶ 602.

Spratly islands;¹⁰⁵ and that, in the absence of such community b) all economic activities in the Spratly were aimed at utilizing the surrounding resources for the benefit of the populations of Hainan, Formosa, Japan, the Philippines and Viet Nam, not the features' local community itself.¹⁰⁶ As a result, the Tribunal found that "none of the high-tide features in the Spratly Islands, in their natural condition, are capable of sustaining human habitation or economic life of their own."¹⁰⁷ Therefore, under Article 121(3) none of these features could generate "exclusive economic zone or continental shelf" areas.¹⁰⁸

VI. Conclusory Remarks

The application of UNCLOS provisions to the disputed Senkaku/Diaoyu islands raises several important issues. First and foremost, it is not altogether clear whether these features can be classified as islands in a legal sense. The general assumption is that none of the features would be capable of sustaining human habitation or economic life of their own; being minuscule, with no natural source of water and very limited vegetation. But any attempt to precisely define the conditions stipulated in Article 121(3) of UNCLOS, namely human habitability and economic sustainability, and their application to Senkaku/Diaoyu, must, inevitably, involve a discussion on the functions of technology and economics.¹⁰⁹ By way of example, the reported lack of fresh water on the islands can be immediately overcome through the use of seawater desalination technologies which are increasingly used by states and private corporations to produce fresh water suitable for human consumption or irrigation in places where fresh water is very limited or absent.¹¹⁰ In addition, rainwater harvesting technologies may be used to collect, store, and conserve fresh water in places where there is no surface water or where groundwater is inaccessible or unfit to drink.¹¹¹ Moreover, in relation to the reported absence of cultivable soil on the Senkaku/Diaoyu, greenhouse structures are also well known for their ability to effectively bypass shortcomings in the quality of the soil or poor weather conditions

105. *See Id.* ¶ 546; *see also id.* ¶ 618 ("For the Tribunal, the criterion of human habitation is not met by the temporary inhabitation of the Spratly Islands by fishermen, even for extended periods."); *see also id.* ¶ 620 ("[M]ilitary or other governmental personnel presently stationed on the features in the Spratly Islands by one or another of the littoral States suffice to constitute 'human habitation' for the purposes of Article 121(3).").

106. *Id.* ¶¶ 622-23.

107. *Id.* ¶ 1203(B)(7)(a).

108. *Id.* ¶ 626.

109. Carleton & Schofield, *supra* note 21.

110. *Process and Optimization of the Seawater Desalination Plant*, CONSULAQUA HAMBURG, <http://www.consulaqua.de/projekte-detail/items/41.html> (last visited Oct. 14, 2016); *see also* Akili D. Khawaji, Ibrahim K. Kutubkhanah & Jong-Mihn Wie, *Advances in Seawater Desalination Technologies*, 221 *DESALINATION* 47 (2008).

111. *Rainwater Harvesting*, WATER AID (Jan. 2013), www.wateraid.org/~/-/media/Publications/Rainwater-harvesting.pdf.

and can thereby enable the harvesting of crops or plants even in marginal environments.¹¹² Ultimately, how can one argue with certainty that an offshore feature cannot ever be inhabited in an age when technology has made it theoretically possible to sustain human life in space stations on Mars?¹¹³

As reasonable as the above questions may seem, the phrase “of their own” may be employed to filter down this interpretation in that an island has to, by itself, be able to sustain the inhabitation by providing, at the very least, the basic conditions for inhabitation namely fresh water, cultivable soil, and space to build shelter.¹¹⁴ This was, in fact, one of the central findings of the Tribunal in the South China Sea case as briefly noted above. It is true that any attempt to create an artificial situation by helping a certain feature to sustain human habitation or economic life would certainly fall short of meeting the requirement of human habitability and economic sustainability stipulated in UNCLOS.¹¹⁵

Taken in the round, though it is not possible to draw a definitive conclusion, it is nonetheless highly doubtful that a court would find any of the Senkaku/Diaoyu islands capable of sustaining human habitation or economic life of their own. In fact, given the lack of solid evidence of human habitability and economic sustainability or viability of the said features, it would seem contrary to the intention of UNCLOS drafters if these isolated maritime formations would ever be accorded the same maritime zones as larger inhabited islands or continental territories. But an argument can certainly be made that, notwithstanding the most recent South China Sea Award, there has been no absolute rule or consensus on how Article 121(3) of UNCLOS is to be interpreted and applied.¹¹⁶

Even more so, there is no prescribed method of ascertaining how islands could affect the delimitation of maritime boundaries. Though an island is legally entitled to an EEZ and continental shelf of its own, it is not altogether clear whether it will be accorded a full effect in maritime boundary delimitation. Indeed, it is not unusual in state practice and jurisprudence for proper islands to be granted a significantly reduced effect when delimiting the maritime boundary between islands and larger mainland

112. *10 Greenhouse Gardening Benefits*, SUNDAY GARDENER, <http://www.sundaygardener.net/10-greenhouse-gardening-benefits/> (last visited Oct. 9, 2016).

113. *You Can Eat Vegetables from Mars, Say Scientists after Crop Experiment*, THE GUARDIAN (June 23, 2016), www.theguardian.com/science/2016/jun/24/you-can-eat-vegetables-from-mars-say-scientists-after-crop-experim.

114. See UNCLOS, *supra* note 10.

115. South China Sea Arbitration, *supra* note 82 ¶¶522-525.

116. Brice M. Clagett, *Competing Claims of Vietnam and China in the Vanguard Bank and Blue Dragon Areas of the South China Sea: Part II*, 13 OIL AND GAS L. AND TAX'N REV. 419, 420 (1995); see also Alex G. Oude Elferink, *Clarifying Article 121(3) of the Law of the Sea Convention: The Limits Set by the Nature of International Legal Processes*, 2 IBRU 58, 64 (1998); Barbara Kwiatkowska & Alfred HA Soons, *Entitlement to Maritime Areas of Rocks which Cannot Sustain Human Habitation or Economic Life of their Own*, NETHERLANDS YEARBOOK OF INT'L L. 176 (1990); Van Dyke, *supra* note 19, at 425, 439, 463.

coasts. In several cases, tiny and geographically isolated islands were disallowed from generating any areas of ocean space beyond their territorial sea so as to avoid creating a “disparity or disproportion.”¹¹⁷ Yet, in some others, small and uninhabited islands managed to claim a significant maritime space of continental shelf and fishery zone against a massive opposing mainland.¹¹⁸ All in all, even if Senkaku/Diaoyu were to be found to form islands in a legal sense, the impact of these features on future maritime delimitation would still be rather uncertain.¹¹⁹ All these questions lie at the heart of the Japan/China boundary disputes, and they are questions that matter. After all, they have the potential to cause serious discord among neighbours and act as a trigger for military confrontation.¹²⁰

117. See *Maritime Delimitation in the Area Between Greenland and Jan Mayen*, (Denmark v. Norway), Judgment, 1993 I.C.J. 38 ¶ 61-66 (June 1993); See also *Maritime Delimitation and Territorial Questions (Qatar v. Bahrain)*, Judgment, 2001 I.C.J. 40 ¶ 246 (Mar. 2001); See also *Delimitation of the Maritime Areas (Canada v. France)*, 3 I.L.M. 1145, 1184 ¶18(1992).

118. *Delimitation of the Maritime Areas*, *supra* note 117 ¶¶43-52.

119. Nasu & Rothwell, *supra* note 4, at 76-77.

120. *Japan Says Ties with China “Deteriorating” Over Disputed Islands*, BBC NEWS (Aug. 9, 2016), www.bbc.co.uk/news/world-asia-37019028.

