Lessons Learned From The Gulf Of Maine Case: The Development Of Maritime Boundary Delimitation Jurisprudence Since UNCLOS III

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I. INTRODUCTION

The Chamber of the International Court of Justice (ICJ) delivered its judgment on the location of the maritime boundary between Canada and the United States in the Gulf of Maine, on October 12, 1984. Less than two years before, after many years consideration, and an almost complete failure of consensus during the Third United Nations Conference on the Law of the Sea (UNCLOS III),¹ the international community adopted the text of Articles 74 and 83 of the United Nations Convention on the Law of the Sea.² These two almost identically-worded articles provided the formula for delimiting the maritime boundaries between States’ exclusive

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economic zones (EEZ) and continental shelves. They provide, in part, as follows:

The delimitation of the exclusive economic zone/continental shelf between States with opposite or adjacent coasts shall be effected by agreement on the basis of international law, as referred to in Article 38 of the Statute of the International Court of Justice, in order to achieve an equitable solution.3

The lack of any objective criteria, or indeed any indicators of utility to those facing a maritime boundary delimitation, reflects the lack of consensus that existed up until the adoption of these articles at the very end of the negotiation process. It also provided a unique opportunity to the ICJ and other international tribunals to frame the construction of a significant area of international law, largely without State interference. It is difficult to think of another area of international law since World War II where international adjudication has had such a clear field in which to operate.

The Delimitation of Maritime Boundary in Gulf of Maine Area4 (Gulf of Maine Case) was the first international maritime boundary case to be decided after the adoption of the Law of the Sea Convention. From the handing down of that first major international maritime boundary delimitation case post-UNCLOS III, over a dozen cases have considered principles to apply to maritime delimitation. This Article will consider the principles that have emerged from those cases, examine to what extent international courts and tribunals have acted effectively upon their opportunity to define this area of law, and explore the impact of the Gulf of Maine Case on the development of that jurisprudence.

II. The Decline of Natural Prolongation

Before the negotiation of the Law of the Sea Convention in 1982 and after 1969, when the ICJ decided North Sea Continental Shelf Cases,5 the ICJ regarded natural prolongation as of paramount concern to questions of delimitation.6 It drew support from the notion that the continental shelf was the natural prolongation, or undersea extension, of land territory, so in delimiting the boundaries of each State’s shelf, they would only have to

3. Law of the Sea Convention, supra note 2, arts. 74, 83.
6. Id. at 23.
allocate to each State the natural prolongation of its own territory. As if to stress their point, the majority of the court expressly indicated that if the natural prolongation of one State was closer to another State, then distance would cease to be relevant in the delimitation of the shelf.

Some of the difficulties with this approach to boundary delimitation became evident in *Anglo-French Channel Arbitration*. There, the Court of Arbitration had chosen to ignore the Hurd Deep (and Hurd Deep Fracture Zone) as geomorphological features, preferring the view that the faults did “not disrupt the essential unity of the continental shelf.” Natural prolongation was held no longer to be paramount, but rather “in certain situations” subject to “equitable principles.”

Since 1977, subsequent cases and developments at UNCLOS III have greatly diminished the importance and relevance of natural prolongation as a factor in delimitation cases and agreements. In *Continental Shelf (Tunisia/Libya Case)*, the ICJ indicated that natural prolongation “would not necessarily be sufficient, or even appropriate, in itself to determine the precise extent of the rights” between States, and expressly rejected a submission by Libya to the effect that one needed only to determine the natural prolongation and follow the lines dictated by nature. Rather, after a detailed review of the extensive geological and geomorphological evidence submitted by both parties, the court concluded that natural prolongation was inapplicable and that maritime delimitation ought to be goal driven, or as the court put it: “the principles are subordinate to the goal.” As Malcolm Evans has indicated, “the entire trend of the *Tunisia/Libya Case* is to play down the role of natural prolongation within the delimitation process.”

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7. Id. at 31.
8. Id.
10. Id. at 428. The Court of Arbitration also noted that the more significant Norwegian trough had been ignored in the *Anglo-Norwegian Fisheries Case*. Id. (referencing Anglo-Norwegian Fisheries (U.K. v. Nor.), 1951 I.C.J. 116 (Dec. 18)).
11. Anglo-French Channel (U.K. v. Fr.), 18 I.L.M. at 427. The Court of Arbitration found such a circumstance in relation to the continental shelf between the Channel Islands and Britain, where the court found that this portion of the shelf would be French, although it might be regarded as the natural prolongation of the Channel Islands. Id.
13. Id. at 47.
14. Id. at 49-58.
15. Id. at 59.
In the *Gulf of Maine Case*, the chamber also noted the decline in importance of natural prolongation since the *North Sea Continental Shelf Cases*. Even more tellingly though, the Chamber indicated that geographic adjacency better expressed the link between a State and its submarine entitlements than natural prolongation, and that any boundary drawn would be derived by operation of international law rather than "physical fact," although the chamber was quick to note that adjacency itself was not to be the basis of title. In the *Guinea/Guinea-Bissau Case*, the Court of Arbitration said that natural prolongation since UNCLOS III represented only one of two bases for title to maritime areas, the other being distance. Further, in that case, it was held that natural prolongation was not applicable to the delimitation because both States were adjacent to the same continuous continental shelf.

This last point is particularly significant in the context of the treatment of geological features in other cases. As previously noted, quite notable features, such as the Hurd Deep, the Pelagian Block, and the Norwegian Trench, on the seabed have been ignored in delimiting areas. It would appear then that without the presence of a major trench or some other equally vast and significant submarine feature, natural prolongation will have little role in delimiting the maritime boundaries. This was expressly spelled out by the ICJ in *Continental Shelf (Libya/Malta Case)*. In that case, the court stated:

The Court . . . considers that since the development of the law enables a State to claim that the continental shelf appertaining to it extends up to as far as 200 miles from its coast, whatever the geological characteristics of the corresponding sea-bed and subsoil, there is no reason to ascribe any role to geological or geophysical factors within that distance either in verifying the legal title of the States concerned or in proceeding to a delimitation as between their claims. This is especially clear where verification of the

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18. Id. at 296.
19. Id.
21. Id. at 300.
validity of title is concerned, since, at least in so far as those areas are situated at a distance under 200 miles from the coasts in question, title depends solely on the distance from the coasts of the claimant States of any areas of sea-bed claimed by way of continental shelf, and the geological or geomorphological characteristics of those areas are completely immaterial.26

Clearly, in the eyes of the ICJ, distance has replaced natural prolongation as the basis for the delimitation of all offshore maritime zones, with the exception of the portions of the continental shelf that may extend beyond the 200 nautical mile line. In 1992, in Delimitation of Maritime Areas between Canada and the French Republic27 (St. Pierre and Miquelon Case), the Court of Arbitration appointed for that dispute did not mention natural prolongation in its initial discussion of how to approach a maritime delimitation. The court also cited with approval the Libya/Malta Case and said that natural prolongation was becoming “more and more a complex and juridical concept.”28 Furthermore, the court added that where a common maritime boundary was to be delimited, the geology and geomorphology of the seabed were of no relevance.29

One reason for the decline in the importance of natural prolongation in the reasoning of international tribunals is the development of the EEZ. From the mid-1970s, when the regime of the EEZ began to receive widespread international acceptance, it permitted coastal States to assert jurisdiction over the seabed out to 200 nautical miles, regardless of water depth or other similar considerations, a circumstance still reflected in the Law of the Sea Convention today.30 The regime of the continental shelf therefore largely became an irrelevancy for all States save those few with broad shelves that extended beyond 200 miles. The growing pre-eminence of the EEZ meant that natural prolongation, the basis of the continental shelf, diminished in importance in boundary delimitation proceedings, while factors associated with the EEZ became more and more central to the determination of such proceedings.31

26. Id. at 35.
30. Law of the Sea Convention, supra note 2, art. 57.
31. See infra Part III (examining the rise of the importance of factors other than natural prolongation).
The decline of natural prolongation can also be traced outside the arena of international tribunals. For example, J.R.V. Prescott has noted that there are scarcely any delimitation agreements between States that are influenced by considerations of the geomorphology of the seabed at the expense of geographical considerations. One exception is the delimitation of the continental shelf boundary between Australia and Indonesia (negotiated in the early 1970s), where the boundary follows the southern side of the trough between the two countries. Given subsequent Indonesian dissatisfaction with the line, it would not appear to be an exception that is likely to be followed.

Similarly, natural prolongation as a concept was of limited value at UNCLOS III. As the ICJ noted in the Liby/Malta Case, distance became an additional and more important criteria for determining the extent of the continental shelf, with natural prolongation being represented by the complex Hedburg/Irish formula contained in Article 76 of the Law of the Sea Convention, and then only to a limit of 350 miles or 100 miles beyond the 2500 meter isobath. The deliberate vagueness of the formulae for the delimitation of the continental shelf and the EEZ permitted the ICJ to limit the relevance of natural prolongation.

The above reference in the Liby/Malta Case concerning the extended continental shelf raises the question as to whether natural prolongation might be restored to importance in delimiting the continental shelf beyond 200 nautical miles. This could be done on the rationale that the physical composition of the seabed and its undersea configuration are of direct relevance in determining its extent. Since the presence of continental sediment is at least one of the possible means available to a State when

32. For example, Prosper Weil has provided a detailed analysis demonstrating the bankruptcy of the utilization of natural prolongation in the delimitation of boundaries. PROSPER WEIL, THE LAW OF MARITIME DELIMITATION—REFLECTIONS 25-45 (Maureen MacGlashan trans., 1989).
34. The Indonesian Foreign Minister, Dr. Mochtar, described the 1971 and 1972 delimitations as Indonesia being “taken to the cleaners.” SASHA STEPAN, CREDIBILITY GAP: AUSTRALIA AND THE TIMOR GAP TREATY 3 (1990).
36. Id.
37. Id. at 35-36.
claiming an extended shelf, arguing the seabed is literally the natural prolongation of the land may again become significant.

There are a number of factors which may militate against the limited re-emergence of natural prolongation. First, logically, this is an argument that would usually only work for opposite rather than adjacent States. Adjacent States rest on the same shelf, and attributing a particular spur or protuberance to one neighbor over another is likely to be hotly disputed. Second, there are far fewer potential extended continental shelf boundaries, decreasing the opportunity for a court to adjudicate. This is increased by the uncertainty injected by the Commission on the Limits of the Continental Shelf into the process. Under Article 76(8) of the Law of the Sea Convention, States asserting rights over an extended shelf must lodge data with the Commission in support of their assertion.38 The Commission may then respond to the data and make a recommendation on the evidence in support of the claim.39 Without the Commission’s imprimatur, States may be reluctant to delimit boundaries in respect of uncertain rights. Further, in areas where a boundary may be disputed, the Commission has determined it will not consider data where there is an international dispute.40 This greatly militates against a resolution, as there are two hurdles to overcome: (1) the determination of the shelf status; and (2) the delimitation itself, both of which act as a deterrent to the other. Third, while there are few examples of negotiated maritime boundaries, those that do exist do not seem to make unalloyed use of natural prolongation as their basis.41

III. RELEVANT FACTORS

A. Geography

While natural prolongation has declined in importance in maritime delimitation, other factors have increased in importance. Chief among these is geography, or more particularly, the geography of the immediate

38. Law of the Sea Convention, supra note 2, art. 76(8).
39. Id.
40. Id.
area where the delimitation is to take place. In fact, in the *Gulf of Maine Case*, the chamber stated:

The Chamber is, furthermore, convinced for the purposes of such a delimitation operation as is here required, international law, as will be shown below, does no more than lay down in general that equitable criteria are to be applied, criteria which are what may be properly called the geographical features of the area.42

In delimitation, a tribunal will first seek to establish the area in which the delimitation is to take place and the geographical features within that area that will impact upon the boundary under consideration.43 This has proven problematic in some delimitations, as the parties have advocated looking at wider or narrower areas, depending on whether it suited their position before the court. For example, in the *Gulf of Maine Case*, the United States urged the chamber to look at the macrogeographical context of the Gulf of Maine on the North American east coast,44 while Canada stressed to the chamber it should look at the gulf as a discrete feature, not as part of a coast extending thousands of miles.45 Similarly, in the *Tunisia/Libya Case*, the ICJ considered only a limited area—where there was overlap between the two States—as relevant to the delimitation,46 not the totality of the coastline or land areas of the two States.47 In the case of *Maritime Delimitation in the Area between Greenland and Jan Mayen*,48

45. Id.
46. Continental Shelf (Tunis. v. Libya), 1982 I.C.J. at 42. The court stated: “The need for the delimitation of areas of the continental shelf between the Parties can only arise within the submarine region in which claims by them to the exercise of sovereign rights are legally possible according to international law.” Id.
47. See the dissenting judgment of Judge Oda and his discussion of the irrelevance of the “hinterland.” Continental Shelf (Tunis. v. Libya), 1982 I.C.J. at 256. This view was subsequently adopted by the court when faced with another relative size of the landmasses argument by Libya. Continental Shelf (Libya v. Malta), 1985 I.C.J. at 40. Similarly, land area was held not to be a relevant factor in determining “maritime territory” in the *Maritime Boundary Arbitration* between Guinea and Guinea-Bissau. Maritime Boundary Arbitration (Guinea v. Guinea-Bissau), 25 I.L.M. 251, 301 (1986).
(Jan Mayen Case), the ICJ introduced another variation to this theme, when it indicated a relevant area, but divided that area into three sectors for the purposes of its analysis.49

While court practice seems to favor the use of the immediate area in dispute rather than its broad geographical context, the ICJ has also considered the macrogeographical context of different features.50 In the Libya/Malta Case, the court expressly stated that it considered relevant the location of Malta in the central Mediterranean, noting that it was “a minor feature of the northern seaboard of the region in question, located substantially to the south of the general direction” of the northern littoral.51 As such, in certain circumstances, it may be appropriate for an international tribunal to consider the geography of the wider region around which the delimitation is to take place.

Once the relevant area has been identified, the international tribunal then has to assess the features that are present in the area, and the effect they can be given in the delimitation. Theoretically, all lands are to be treated in the same fashion. The ideal of this type of model is an equidistance line. However, as has been seen in the discussions dealing with the development of delimitation principles over time, an equidistance line can be disproportionately warped by the presence of a concave coast, foreign islands close offshore of the littoral State, or an unusual peninsula or embayment in the area to be delimited.

Over time, courts have been increasingly explicit in their use of an equidistance line as a starting point for delimitation, once the relevant area has been identified. In the most recent cases, the court has typically proceeded to test such a line to determine whether it meets the court’s notions of equity, or should be varied as a result of other circumstances.52 This approach has the advantage of flexibility, while at the same time giving some guidance as to the approximate location of the boundary. However, it is wise to recall that this method is not an adoption of

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49. Id.


equidistance in the face of the lack of consensus at UNCLOS III,\textsuperscript{53} as this extract from \textit{Land and Maritime Boundary between Cameroon and Nigeria}\textsuperscript{54} (\textit{Cameroon/Nigeria Case}) demonstrates:

The Court will now consider whether there are circumstances that might make it necessary to adjust this equidistance line in order to achieve an equitable result.

As the Court stated in the \textit{Continental Shelf (Libyan Arab Jamahiriya/ Malta)} case:

the equidistance method is not the only method applicable to the present dispute, and it does not even have the benefit of a presumption in its favour. Thus, under existing law, it must be demonstrated that the equidistance method leads to an equitable result in the case in question.

The Court is bound to stress in this connection that delimiting with a concern to achieving an equitable result, as required by current international law, is not the same as delimiting in equity. The Court’s jurisprudence shows that, in disputes relating to maritime delimitation, equity is not a method of delimitation, but solely an aim that should be borne in mind in effecting the delimitation.\textsuperscript{55}

In practice, the courts and tribunals have chosen to view certain geographical formations and configurations as deserving of different treatment, and the circumstances they have considered deserving will be considered below.

1. Islands-Reduced Effect

The impact on a median line of offshore islands held by another State can be quite remarkable and examples in international law abound. The best known examples are those which have given rise to international litigation, such as the Channel Islands in the \textit{Anglo-French Channel Arbitration},\textsuperscript{56} the

\textsuperscript{53} Colson notes that this approach’s “place in customary international law is yet to be decided.” David A. Colson, \textit{The Delimitation of the Continental Shelf between Neighbouring States}, 97 Am. J. Int’l L. 91, 100 (2003).
\textsuperscript{54} Land and Maritime Boundary between Cameroon and Nigeria, 2002 I.C.J. 303 (Oct. 10).
\textsuperscript{55} \textit{Land and Maritime Boundary between Cameroon and Nigeria}, 2002 I.C.J. at 443 (quoting \textit{Continental Shelf (Libya v. Malta)}, 1985 I.C.J. at 47) (internal quotation marks omitted).
\textsuperscript{56} Anglo-French Channel (U.K. v. Fr.), 18 I.L.M. 397 (1979).
Dodecanese in Aegean Sea Continental Shelf\textsuperscript{57} (Aegean Sea Continental Shelf Case), and the French islands off the coast of Newfoundland in Delimitation of Maritime Areas between Canada and the French Republic\textsuperscript{58} (St. Pierre and Miquelon Case). These are by no means the only examples, with a number of instances in the West Indies,\textsuperscript{59} the impact on Cameroon’s EEZ of the Equatorial Guinean island of Fernando Poo,\textsuperscript{60} and the Australian islands in Torres Strait just off the coast of Papua New Guinea.\textsuperscript{61}

Article 121 of the 1982 Law of the Sea Convention deals with the question of islands. It defines an island as “any naturally formed area of land, surrounded by water, which is above water at high tide,”\textsuperscript{62} and provides that all such formations generate a full territorial sea and contiguous zone.\textsuperscript{63} An island may also generate a full EEZ and continental shelf if it can sustain human habitation or an economic life of its own.\textsuperscript{64} While the definitions of “human habitation” and “economic life of [its] own” have occasioned some debate amongst publicists, particularly in the context of formations in the Antarctic,\textsuperscript{65} it is clear that small but permanently inhabited islands are entitled to a full EEZ. This includes islands occupied only by research scientists and their support staff, without any indigenous population, as confirmed by the ICJ in the Jan Mayen Case.\textsuperscript{66} This full entitlement can create the inequity alluded to above, where an island lies close offshore to another State. To remedy the inequity, the ICJ and other international tribunals have developed techniques to negate or diminish the effect of such islands.

\textsuperscript{57} Dodecanese in Aegean Sea Continental Shelf (Greece v. Turk.), 1976 I.C.J. 3 (Sept. 11).
\textsuperscript{59} Prescott, \textit{supra} note 33, at 342-43 (see the map of the region).
\textsuperscript{60} Id. at 331-33.
\textsuperscript{61} \textit{See} Stuart B. Kaye, \textit{The Torres Strait} (1997).
\textsuperscript{62} Law of the Sea Convention, \textit{supra} note 2, art. 121.
\textsuperscript{63} Id.
\textsuperscript{64} Id.
\textsuperscript{66} Maritime Delimitation in Area between Greenland and Jan Mayen (Den. v. Nor.), 1993 I.C.J. 38, 73-74 (Jun. 14).
The most common method used by the ICJ, and for that matter in delimitation agreements, is to reduce the effect of the islands on the median line. This was done by the Court of Arbitration in the Anglo-French Channel Arbitration in respect of the Scilly Isles. These islands, inhabited, and therefore at international law entitled to generate a continental shelf, were given only half effect as opposed to the French mainland. Other examples of half, or reduced effect for islands can be seen in the treatment of Seal Island by the Chamber of the ICJ in the Gulf of Maine Case, the St. Pierre and Miquelon Case where the Court of Arbitration reduced the impact of those two islands as against the Newfoundland coast, Qit’at Jaradah in the Qatar/Bahrain Case, and Alcatraz Island in the Guinea/Guinea-Bissau Case. In a variant on the theme in the Tunisia/Libya Case, the Kerkennah Islands off the coast of Tunisia were not given any effect by the ICJ, but the baseline used by the court to represent the Tunisian coast was deliberately angled out into the Mediterranean. The court indicated the baseline was derived by calculating the median of the lines representing the general direction of the coast, and the direction of the Kerkennah Islands if drawn from the same point of origin. As such, the Kerkennah Islands, themselves, were not given any effect, but they did increase the effect of their mainland State’s coastal areas.

A somewhat different approach was taken in the Maritime Delimitation of Eritria and Yemen, (Eritrea/Yemen Arbitration) where the relevant area contained numerous small islands. The Dahlaks, described as a “carpet” of islands extending from the mainland coast, which were heavily populated,
were given effect from the western basepoints of the group in the calculation of an equidistance line, while the small barren and relatively isolated islands of Jabal al-Tayr and the Zubayr Group were given no effect. The much larger and populated island of Kamaran, and fringing islands to its north were given effect as well. This is suggestive that fringing islands and other features which are strongly associated with the coastal State through the presence of a significant population, will increase the likelihood of full effect being given.

2. Islands-Enclaving

Another solution for the dealing with offshore islands is to enclave the islands’ maritime zones within those of the coastal State. In this way, the coastal State does not have its maritime areas divided by those of the islands. Enclaving also limits the disproportionate impact of relatively small features.

Again, the best example of this practice is in the Anglo-French Channel Arbitration. The Channel Islands, because of their proximity to the French coast, and the marked extension of the British continental shelf that would result from the use of a median line, were enclaved within the French continental shelf, only receiving a twelve nautical mile zone. This, the Court of Arbitration noted, preserved the unity of the French continental shelf both north and south of the islands, while not completely depriving the Channel Islands of at least some maritime areas.

Similar arrangements have been found in other agreements and arbitrations. In the St. Pierre and Miquelon Case, the French islands of the same name are enclaved within the Canadian EEZ. The absence of another opposite State, as in the Anglo-French Channel Arbitration, means that while the enclaved zone extends out 200 nautical miles, it does not reach

75. Id. ¶¶ 139-46.
76. Id. ¶¶ 147-48.
77. Id. ¶¶ 149-53.
78. But see Maritime Delimitation and Territorial Questions between Qatar and Bahrain, 2001 I.C.J. 40, 103 (Mar. 16) (where the presence of islands offshore will not necessarily mean they constitute a fringe of islands relevant to delimitation).
79. See id. at 100-03 (specifically looking at the approach of the court to low-tide elevations); see also Hugo Ignacio Llanos, Low-Tide Elevations: Reassessing their Impact on Maritime Delimitation, 14 PACE INT’L. L. REV. 255, 255 (2002).
81. Id. at 444-45.
the high seas.\textsuperscript{82} The Torres Strait Treaty also uses this technique with the Australian islands north of the seabed jurisdiction by having their continental shelves enclaved within that of Papua New Guinea.\textsuperscript{83}

3. Mainland Geographical Features

Aside from islands, other geographical features can be of great relevance in the delimitation of maritime zones. The treatment of different features will naturally vary depending upon the circumstances,\textsuperscript{84} so it is difficult to provide any clear set of rules or guidelines to determine when a particular formation will be treated in an exceptional fashion by a tribunal.\textsuperscript{85} Some of the examples used in earlier cases will be examined below to provide limited assistance in the absence of any formal methodology.

The most useful point to make is that the courts continue to return to their delimitation touchstone: an equitable result. A feature will be used by a court if the results are equitable. While the geographic features in an area provide the elements of the delimitation, ultimately the result determines the relative importance and utility of those features. This result-driven approach is borne out by the statements of the ICJ in the Tunisia/Libya Case:

It is . . . the result which is predominant; the principles are subordinate to the goal. The equitableness of a principle must be assessed in the light of its usefulness for the purpose of arriving at an equitable result. It is not every such principle which is in itself equitable; it may acquire this quality by reference to the equitableness of the solution. The principles to be indicated by the Court have to be selected according to their appropriateness for reaching an equitable result.\textsuperscript{86}

Looking at situations demonstrating this approach, the general shape of the coastline in an area may be of relevance. The court in the North Sea Continental Shelf Cases fixed upon the concavity of the West German

\begin{itemize}
\item \textsuperscript{82} Delimitation of Maritime Areas between Canada and French Republic (Can. v. Fr.), 31 I.L.M. 1148, 1169-71 (1992).
\item \textsuperscript{83} KAYE, supra note 61, at 104-09.
\item \textsuperscript{84} See Delimitation of Maritime Boundary in Gulf of Maine Area (Can. v. U.S.), 1984 I.C.J. 246, 319 (Oct. 12).
\item \textsuperscript{85} In this regard, the feature in question need not be remarkable in itself, but can, in the context in which it is found, cause an inequitable result. See North Sea Continental Shelf (F.R.G. v. Den.; F.R.G. v. Neth.), 1969 I.C.J. 1, 20 (Feb. 20).
\item \textsuperscript{86} Continental Shelf (Tunis. v. Libya), 1982 I.C.J. 18, 59 (Feb. 24).
\end{itemize}
coast, and the impact this concavity would have on an equidistance line. The court felt an equidistance line would produce an inequitable result under the circumstances, and held the general direction of the coastline to be sufficient grounds to justify the non-application of any equidistance line.\textsuperscript{87}

The \textit{North Sea Continental Shelf Cases} are by no means the only example of the use of the general direction of the coast to justify some change in a boundary. The chamber in the \textit{Gulf of Maine Case} faced arguments from both the United States and Canada urging it to treat features such as the peninsulas of Nova Scotia\textsuperscript{88} and Cape Cod\textsuperscript{89} as aberrations in the coastline. In the \textit{Guinea/Guinea-Bissau Case}, the Court of Arbitration felt obliged to draw upon the general direction of the coastlines of the interested States and other States in the West African region.\textsuperscript{90}

In the \textit{Libya/Malta Case}, the court stated it was adjusting the notional median line between the two States northwards.\textsuperscript{91} The reasons given were the disparity between the lengths of coasts under consideration, the placing of basepoints governing any equidistance line, and the general geographical context.\textsuperscript{92} This produced a line which was described by the Court as “equitable, taking into account all relevant circumstances.”\textsuperscript{93} On the other hand, the disparity in the coastal length ratio and the relevant areas was not sufficient to obtain an adjustment in the boundary in the \textit{Qatar/Bahrain Case}.\textsuperscript{94}

While it was stated earlier that there has been little guidance as to the methodology of the ICJ’s approach to maritime delimitation, an outline of the court’s practice has become evident in the cases. Although the median line will, in many cases, be manifestly inequitable, it seems that an equidistance line will at least be the starting point of the court’s analysis in

\textsuperscript{89} \textit{Delimitation of Maritime Boundary in Gulf of Maine Area (Can. v. U.S.)}, 1984 I.C.J. at 322.
\textsuperscript{90} Delimitation of Maritime Boundary (Guinea v. Guinea-Bissau), 25 I.L.M. 251, 294-95 (1986).
\textsuperscript{91} Continental Shelf (Libya v. Malta), 1985 I.C.J. 13, 51 (June 3).
\textsuperscript{92} \textit{Id.} at 50-51.
\textsuperscript{93} \textit{Id.} at 56.
\textsuperscript{94} Maritime Delimitation and Territorial Questions between Qatar and Bahrain, 2001 I.C.J. 40, 114 (Mar. 16).
any case.  The line will then be “tested” to see if it possesses the essential, but elusive, “equitable” nature the court requires. If it is equitable, it may remain, but if it is inequitable the court will alter its path until it is so. The adjustment may be a lateral transformation of the line towards one state, reducing the effect of a formation, or a complete alteration ab initio of the line.

Ultimately, as already stated above, the crucial factor is the equitable nature of the result. To quote the chamber in the Gulf of Maine Case:

> The fundamental rule of general international law governing maritime delimitations, the rule which provided the Chamber with its starting-point for the reasoning so far followed, requires that the delimitation line be established while applying equitable criteria to that operation, with a view to reaching an equitable result.

Notably, the chamber also stated that in the context of the delimitation within the Gulf of Maine:

> It would scarcely be possible to assess the equitable character of the delimitation there carried out on the basis of any other than the predominant parameters provided by the physical and political geography of the area. And it is precisely those parameters which served the Chamber as a guide in determining the parts of the line which are to take effect in this portion of the delimitation area.

In these two passages, the chamber of the ICJ presents the guidelines for the treatment of geographic features. The result is to be equitable, and geographic factors are to be the predominant input into ensuring that the result is in fact equitable.

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95. See Maritime Delimitation in Area between Greenland and Jan Mayen (Den. v. Nor.), 1993 I.C.J. 38, 60 (June 14) (admitting that “[j]udicial decisions on the basis of the customary law governing continental shelf delimitation between opposite coasts have likewise regarded the median line as a provisional line that may then be adjusted or shifted to ensure an equitable result”).


97. See Continental Shelf (Libya v. Malta), 1985 I.C.J. 13 (June 3); see also Maritime Delimitation in Area between Greenland and Jan Mayen (Den. v. Nor.), 1993 I.C.J. 30 (June 14).


101. Id. at 340.
4. Coastal Length

The ICJ has occasionally averred to the relevance of relative coastal lengths in maritime delimitation. The court has generally been mindful to stress that comparing the length of the coasts of the States seeking to delimit a maritime boundary will not be a factor in deciding where the boundary is to go.102

However, the court has made use of coastal lengths in a different context. While professing that coastal length will not be a factor in maritime delimitation, the ICJ has been happy to use the relative coastal lengths to confirm that its delimitation is essentially equitable. Coastal lengths have therefore been used as a test in the North Sea Continental Shelf Cases,103 the Tunisia/Libya Case,104 the Gulf of Maine Case,105 the Libya/Malta Case,106 the Cameroon/Nigeria Case,107 and the Arbitration between Barbados and the Republic of Trinidad and Tobago,108 to ensure that an equitable boundary has been produced. The same test was also adapted and applied by the Court of Arbitration in the St. Pierre and Miquelon Case to test the solution reached by the court.109

This use of coastal lengths as a test begs the question of its relevance as a factor in delimitation. It is certainly possible that the ICJ’s solution to any delimitation question is made keeping a “weather eye” on the relative coastal lengths of the State parties to ensure that the ultimate result can be demonstrated to be an equitable one.110 Nevertheless, while one can entertain suspicions as to the influence that relative coastal lengths might have upon a court’s delimitation, the court has generally denied any such influence. Accordingly, relative coastal lengths must not be treated as a

102. See Continental Shelf (Tunis. v. Libya), 1982 I.C.J. at 9; see also Continental Shelf (Libya v. Malta), 1985 I.C.J. 13, 53-55 (June 3); Delimitation of Maritime Areas (Can. v. Fr.), 31 I.L.M. at 1175-76.
105. But see Delimitation of Maritime Boundary in Gulf of Maine Area (Can. v. U.S.), 1984 I.C.J. at 336 (the chamber appears to draw upon coastal lengths in more than a confirmatory fashion).
110. See Continental Shelf (Libya v. Malta), 1985 I.C.J. at 56.
relevant consideration. However, the *Jan Mayen Case* may have produced some modification of the ICJ’s admitted view of coastal lengths. In that case, there was a nine to one ratio in coastal lengths between the relevant portions of Greenland and Jan Mayen. The court used this disparity as a justification for the shifting of the delimitation line eastwards towards Jan Mayen.

While it appears that in the *Jan Mayen Case* the court chose to apply its test of the equitable nature to the median line in the style of previous decisions, there is a point of difference. Rather than being applied as a confirmation of a solution, the ICJ in the *Jan Mayen Case* is using coastal length as a basis for the formulation of the boundary. Further, although coastal length did force the boundary eastwards, the ultimate line still does not reflect, even approximately, the relevant coastal lengths of the two islands. As such, coastal length was a “factor” in the formulation of a line, but coastal length was not used to test the equitable nature of the ultimate solution. The ICJ may, therefore, finally be moving towards the explicit recognition of coastal length as a relevant consideration, although this proposition would certainly need to be tested in future cases before the court.

**B. Economic Factors**

The ICJ has been asked in a number of cases to deal with economic factors as relevant to the delimitation of maritime boundaries between States. Two types of economic-based arguments have been made to the court, and, given that each is distinct, they are dealt with separately.

The first argument is that where there is an economic disparity between the parties involved in the delimitation, the boundary should, after accounting for all other factors, be placed in a more favourable position for

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111. *See Arbitration between Guyana and Suriname, ¶ 392 (2007),* http://www.pca-cpa.org/upload/files/Guyana-Suriname%20Award.pdf; *see also Evans, supra* note 16, at 153; 224-31 (suggesting that coastal lengths may have some impact in so far as they are an indicator of proportionality, which as a factor may not determine the method used in a delimitation but may be of assistance in determining whether a particular feature has a disproportionate influence on a delimitation line).


113. *Id.* at 65.

114. *Id.* at 67.

115. *See id.*


117. *Id.* at 65 (explicitly referring to coastal length as a “factor”).
the “poorer” State. In this way, presumably, the weaker economic State receives a greater share of the potential resources because it has a more pressing need for them.

The ICJ has persistently rejected such an argument. When first raised in the Tunisia/Libya Case by Tunisia, the court stated it was:

. . . of the view that these economic considerations cannot be taken into account for the delimitation of the continental shelf areas appertaining to each Party. They are virtually extraneous factors since they are variables which unpredictable national fortune or calamity, as the case may be, might any time cause to tilt the scale one way or the other.118

This initial rejection has been reinforced in the cases since 1982. The tribunal in the Guinea/Guinea-Bissau Case expressly cited the above quoted paragraph with approval when dismissing the claims of both Guinea and Guinea-Bissau that were both based on their economic needs as developing countries.119 In the Gulf of Maine Case, the chamber preferred geography to any other factors, including economic considerations.120 In the Libya/Malta Case, the ICJ indicated explicitly that the economic standing of the affected States was not a relevant consideration in any maritime delimitation.121 However, in the Jan Mayen Case, the ICJ rejected an argument put forward by Denmark that Greenland should be entitled to a greater proportion of the delimitation area because Jan Mayen had no indigenous population, no local industry, and was far smaller than that of even the sparsely inhabited eastern coast of the huge island.122 The court expressly stated that neither population nor socio-economic factors were circumstances to be taken into account.123

The second argument based on economic factors concerns the economic dependence of one or both States on the seabed or water column

120. Delimitation of Maritime Boundary in Gulf of Maine Area (Can. v. U.S.), 1984 I.C.J. 246, 278 (Oct. 12) (expressing that the chamber was unimpressed by the “gloomy” economic consequences of the various positions the boundary might fall, given that both Canada and the United States had only claimed EEZs for a period of eight years).
121. See Continental Shelf (Libya v. Malta), 1985 I.C.J. 13, 56 (June 3) (stating that “[s]uch considerations are totally unrelated to the underlying intention of the applicable rules of international law”).
122. Maritime Delimitation in Area between Greenland and Jan Mayen (Den. v. Nor.), 1993 I.C.J. at 73.
123. Id. at 74.
of the area to be delimited. As a relevant consideration, this argument has received a more sympathetic hearing from international tribunals. The economic importance of the mid-channel route to French ports was noted by the Court of Arbitration as being a point stressed by France in the *Anglo-French Channel Arbitration*. While the court there did not expressly deal with this argument, it did accept that France had established that there were special circumstances to justify a non-equidistance solution.

However, such factors have not always been considered to be of great importance in a maritime delimitation. The historic fishing rights of Tunisian fishermen were considered by the ICJ in the *Tunisia/Libya Case*. The court ultimately found it did not have to determine whether the areas fished over time by Tunisian nationals affected the boundary, as the areas were all on the Tunisian side of the line. However, the court did indicate that perhaps notions of “historic rights” were more appropriately appraised with the concept of an EEZ, but that in the case before them “other considerations [were] governing.” Evans suggests that the place of such “historic rights” is best assessed as the provision of yet another factor to test the equitable nature of the boundary ultimately delimited. This conclusion draws support from the chamber in the *Gulf of Maine Case*, in the wider context of historic and recent economic activity. The impact of economic activity on a delimitation was expressly stated by the chamber in the following terms:

> It is, therefore, in the Chamber’s view, evident that the respective scale of activities connected with fishing—or navigation, defence or, for that matter, petroleum exploration and exploitation—cannot be taken into account as a relevant circumstance or, if the term is preferred, as an equitable criterion to be applied in determining the delimitation line. What the Chamber would regard as a legitimate scruple lies rather in concern lest the overall result, even though achieved through the application of equitable criteria and the use of appropriate methods for giving them concrete effect, should unexpectedly be revealed as radically inequitable, that is to say, as likely to entail catastrophic reper-

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125. *Id.*
127. *Id.* at 73-74.
129. *See id.* at 202-03.
cussions for the livelihood and economic well-being of the population of the countries concerned.130

This relatively harsh position may have started to moderate in the *Jan Mayen Case*. In that case, the ICJ considered the effect on access to the capelin fishery between Greenland and Jan Mayen that a median line would have on the people of Eastern Greenland.131 Evidence had been presented to the court that the Greenlanders were economically dependent on the fishery and similar evidence was presented by Norway in relation to its fishing communities.132 After reviewing the extent of the capelin fishery, the court stated that “[i]t appears however . . . that the median line is too far to the west for Denmark to be assured of an equitable access to the capelin stock. . . . For this reason also the median line thus requires to be adjusted or shifted eastwards.”133 As such, an economic consideration was perceived by the court to be a significant factor in the adjustment of the boundary. Admittedly, the court had first considered geographical factors, and had found other reasons for shifting the line to the east, but the court still regarded the economic considerations as sufficiently important to be an influence on the boundary’s ultimate course.

The boundary will not necessarily be affected by economic factors where both parties’ nationals are equally dependent upon an economic resource. In the *Eritrea/Yemen Arbitration*, the tribunal held that because both sides were affected by the presence of fish stocks in the area of the Red Sea in issue, the boundary would not be altered to take the fish stocks into account.134 The tribunal stated that it:

... finds no significant reason on any other grounds concerning fishing—whether related to the historical practice of fishing in general, to matters of asserted economic dependency on fishing, to the location of fishing grounds, or to the patterns of fish consumption by the populations—for accepting, or rejecting, the arguments of either Party on the line of delimitation proposed by itself or by the other Party. Neither Party has succeeded in demonstrating that the line of delimitation proposed by the other would produce a

132. Id. at 71-72.
133. Id. at 72.
catastrophic or inequitable effect on the fishing activity of its nationals or detrimental effects on fishing communities and economic dislocation of its nationals. . . . For these reasons, it is not possible for the Tribunal to accept or reject the line of delimitation proposed by either Party on fisheries grounds. Nor can the Tribunal find any relevant effect on the legal reasons supporting its own selection of a delimitation line arising from its consideration of the general past fishing practice of either Party or the potential deprivation of fishing areas or access to fishing resources, or arising from nutritional or other grounds.135

This is suggestive that existing economic factors only become relevant where there would be substantial dislocation to only one of the parties through the loss of access to important resources, and that the result in the Jan Mayen Case should be treated as exceptional.136

C. Geology and Geomorphology

Geology and geomorphology, in the context of the seabed, are the studies of the structure and form of the seabed. Potentially, following the judgment in the North Sea Continental Shelf Cases, with the stressing of natural prolongation, both geology and geomorphology could have been of paramount importance. Geological factors would have been of importance in identifying which areas of the continental shelf were the natural prolongation of the littoral State, while geomorphological data could also have been used to identify points dividing natural prolongations of a continental shelf.

As already noted above, natural prolongation has not proved to be the touchstone of maritime delimitation, and this is reflected in the treatment of geological and geomorphological evidence in a number of more recent cases. While swamped with such data in the Tunisia/Libya Case, the ICJ did not consider any of the material of relevance in its delimitation.137 Similarly, in the Gulf of Maine Case, geology was held not to be relevant

135. Id.
136. See Arbitration between Barbados and Republic of Trinidad and Tobago, ¶¶ 235-40 (2006), http://www.pca-cpa.org/upload/files/Final%20Award.pdf; see also Maritime Delimitation and Territorial Questions between Qatar and Bahrain, 2001 I.C.J. 40, 113 (Mar. 16) (declining to consider the existence of pearling banks “as forming a circumstance that would justify” the shifting of a maritime boundary line).
137. Continental Shelf (Tunis. v. Libya), 1982 I.C.J. 18, 64 (Feb. 24) (ruling that natural prolongation was not a relevant consideration, and accordingly geological and geomorphological evidence could be dismissed).
under the circumstances, and geomorphology was treated likewise, given that the Northeast Channel was not deemed significant enough to influence the ultimate course of the boundary.

It is clear the geomorphological and geological factors have not been of great assistance in the delimiting of boundaries in cases before international tribunals. However, none of the recent cases have involved the delimitation of a continental shelf boundary in an area with a geomorphological feature of such vast significance that a court would have great difficulty not taking note of it. However, given the comments, as noted above, by the ICJ in the Malta/Libya Case concerning the relevance of seabed data within 200 nautical miles of the coast, it seems unlikely that geology or geomorphology will be of much assistance in the delimitation of the continental shelf within that distance.

D. Political Factors

One factor that has proved relevant in at least some situations is the political status of the territories between which the boundary is to run. In the Anglo-French Channel Arbitration, one reason why the boundary delimited by the Court of Arbitration reduced the effect of the Channel Islands was because they were not an independent sovereign State. As they were only a dependency of Great Britain, they could not receive the same entitlement to a continental shelf as metropolitan France. The same principle was implied by the ICJ in the Libya/Malta Case. There, the court indicated that had Malta not been a sovereign State, the boundary would have been pushed further north, in favor of Libya.

However, the principle may not always operate, and political factors have not been in evidence in more contemporary cases. In the St Pierre and Miquelon Case, the tiny French colonial islands lay just offshore of the Canadian province of Newfoundland. Despite the fact that Newfoundland had been an independent dominion prior to 1948 and was a full and equal participant in the Dominion of Canada, the Court of Arbitration

139. Id. at 274-75.
140. For example, a deep oceanic trench forming an obvious break between two tectonic plates.
143. Id.
distinguished the *Anglo-French Channel Arbitration*, noting that Newfoundland was merely a Canadian island; therefore, it was no different than St. Pierre or Miquelon, which were French islands. The court also held that the ICJ in the *Libya/Malta Case* had suggested “equality of treatment, rather than diminished treatment for politically dependent islands,” which must be reckoned a strange interpretation. Not surprisingly, this was a finding criticized in the dissenting judgment of the Canadian *ad hoc* judge. It is submitted that in its interpretation of the *Anglo-French Channel Arbitration* and the *Libya/Malta Case*, the decision of the majority in the *St Pierre and Miquelon Case* was probably not an accurate one, and the judgment may be distinguished by further tribunals in the future.

In summary, political status may be a factor in justifying the effect that a particular piece of territory may have in any delimitation. However, it is clear that a tribunal may be most selective in exactly how it wishes to categorize a particular area. Therefore, it cannot be stated with certainty whether political status would have an impact on a maritime boundary delimitation.

**E. Other Considerations**

There are a number of other factors that may be relevant in the charting of any boundary delimitation, although these do not fall neatly into clear categories. Each is dealt with below.

The position of the land boundary between the States involved in the maritime delimitation may be of some importance in that delimitation. While it is unusual for delimitation treaties merely to continue the land boundary into the sea (as a technique in delimitation, the ICJ has expressly

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146. Id.
147. Id. at 1193-94.
148. The majority judgment in the *St. Pierre and Miquelon Case* has drawn criticism from a number of publicists, and particularly from the two dissenting judges. See *Id.* (Professor Weil and Doctor Gottlieb dissenting); see generally Louise de La Fayette, *The Award in the Canada-France Maritime Boundary Arbitration, 8 INT’L J. MAR. & COASTAL L. 77, 94-103* (1993); Geoffrey Marston, *St. Pierre-Miquelon Arbitration: Canada-France Maritime Delimitation Award, 17 MAR. POL’Y* 155 (1993); George P. Politakis, *The French-Canadian Arbitration Around St Pierre and Miquelon: Unmasked Opportunism and the Triumph of the Unexpected, 8 INT’L J. MAR. & COASTAL L. 105* (1993) (arguing that the reasoning of the reward and the method of delimitation raised a number of questions and grounds for criticism).
rejected this method as far too arbitrary).\(^{149}\) the location of the land boundary itself must be relevant if it is used as the starting point for a complete delimitation of the territorial sea as well as the continental shelf and EEZ.\(^{150}\) Beyond providing the court with a starting point, the land boundary appears to be of little import.\(^{151}\) The presence of a pre-existing maritime boundary might also be a relevant consideration, although not one explored to any great extent by international tribunals. To some degree, the question overlaps with the issue of a single maritime boundary for the continental shelf and the EEZ.\(^{152}\)

State practice with regard to other boundaries has been the subject of ICJ consideration. In the Jan Mayen Case, the question of the relevance of other maritime delimitation agreements entered into by the parties and internal legislation was raised.\(^{153}\) After examining the agreements and legislation of the parties, the court chose not to use it in determining the appropriate boundary.\(^{154}\) The implication of the court appears to be that unless state practice clearly relates to the specific boundary in question, it will not be a factor in its deliberations.\(^{155}\)

While geological factors do not appear to be of great utility in the current state of international maritime boundary delimitation, this is not strictly true of one geology-based consideration. The position and size of deposits of valuable oil and/or minerals have been deemed a relevant factor by the ICJ.\(^{156}\) In the Libya/Malta Case, the ICJ confirmed this by stating that ‘the natural resources of the continental shelf under delimitation ‘so far as known or readily ascertainable’ might well constitute relevant factors’.

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149. See Continental Shelf (Tunis. v. Libya), 1982 I.C.J.18, 308-09 (Feb. 24) (dissenting Judge Evensen agreeing with the majority on the point discussing the extension of land boundaries seawards).
150. See id. at 64-65 (conceding that the actual position of the starting point, which the land boundary represented, was a relevant consideration); see also Delimitation of the Maritime Boundary (Guinea v. Guinea-Bissau), 25 I.L.M. 251, 295-96 (1986); EVANS, supra note 16, at 161.
154. Id.
155. Id. at 56.
156. But see Delimitation of Maritime Boundary in Gulf of Maine Area (Can. v. U.S.), 1984 I.C.J. 246 at 343-44 (stressing that the location of fisheries resources could not be a relevant consideration in the context of a single maritime boundary).
circumstances which it would be reasonable to take into account in a delimitation.”157 Given this, it is unlikely that a court will be prepared to alter a boundary to preserve the unity of anything but a known deposit.158

Security is another factor that has figured into a number of decisions. As noted above, in the Anglo-French Channel Arbitration, France pleaded its security interests as a legitimate reason for the enclosing of the Channel Islands. The Court of Arbitration in that case did not clarify whether security was decisive in its adoption of much of the French position, but certainly it did appear to be relevant to the court.

However, in subsequent cases before the ICJ, advocates of security as an important factor in maritime delimitation have not been successful. In the Libya/Malta Case, the court chose to ignore Maltese submissions that the location of the boundary should take into account the potential threat to the security of that State.159 A similar argument by Norway in the Jan Mayen Case saw the ICJ respond by quoting the previously cited portion of the Libya/Malta Case, and indicating that the same result should be reached for Jan Mayen.160

From these two cases, the ICJ has indicated that where a significant distance exists between two States, the security concerns of one will not affect the location of the boundary between them. The logic in such an approach is obvious. As the twentieth century has progressed, technology has permitted States to hurl deadly force greater and greater distances, and is now to the extent that if the old cannon shot rule were still in operation and applied to the intercontinental ballistic missile, all seas would be part of the territorial sea. It therefore makes little sense to alter a maritime boundary ten or even twenty miles when such a distance could only represent an additional five minutes flight of a helicopter, and far less for a jet fighter or missile. Technological development has removed much of the relevancy from security as a consideration in boundary delimitation.

158. See Maritime Delimitation in Area between Greenland and Jan Mayen (Den. v. Nor.), 1993 I.C.J. at 70.
IV. CONCLUSION

There is little doubt that geographic factors are regarded as of fundamental importance in the drawing of any maritime delimitation line. The ICJ and other international tribunals have fixed upon notions of an equitable solution to boundary delimitation, largely derived through an analysis of the geography of the area adjacent to the dispute, and to a lesser extent the geographic context in which the delimitation is to take place. Other factors, while tangentially relevant, at least so far as the courts still pay them lip service, are now increasingly overlooked, and appear to be of diminishing value. Certainly within 200 nautical miles of any coastline, where the largest proportions of delimitations have taken place and are to take place in the future, geographic factors are of paramount importance.161

The decision of the chamber in the Gulf of Maine Case occupies a significant position in the development of international maritime boundary delimitation. Its significance comes not merely from the matters discussed by the chamber in the case and their influence and precedent value in other cases,162 but in the fact that the case marked the first decision of an international tribunal since the adoption of the United Nations Convention on the Law of the Sea. With a largely blank canvas to work, given the lack of meaningful assistance in the texts of Articles 76 and 83, the ICJ and other international tribunals have sought to clarify the rules pertaining to maritime delimitation, albeit with mixed success.