

**COUNTER-MEMORIAL OF THE
LIBYAN ARAB JAMAHIRIYA
CONTRE-MÉMOIRE
DE LA JAMAHIRIYA ARABE LIBYENNE**

VOLUME I

INTRODUCTION

1. This Counter-Memorial is filed in accordance with Article 4 of the Special Agreement signed by the Socialist People's Libyan Arab Jamahiriya ("Libya") and the Republic of Tunisia ("Tunisia") on 10 June 1977 in Tunis (the "Special Agreement") and the Order made by the President of the Court in the present case on 3 June 1980 fixing 2 February 1981 as the time-limit for the filing of a Counter-Memorial by Libya². The English translation of the Special Agreement prepared by Libya from the original Arabic text is set out at pages 2 and 3 of the Libyan Memorial filed on 30 May 1980 in the present proceedings (the "Libyan Memorial").

2. The purpose of this Counter-Memorial is to reply to the contentions made in the Tunisian Memorial filed on 30 May 1980 in the present proceedings (the "Tunisian Memorial") and, as may be necessary, to supplement the considerations of fact and law set forth in the Libyan Memorial.

SECTION 1. General Assessment of the Tunisian Case as Now Presented

3. The Tunisian Memorial is written in a most elegant style, and with seductive subtlety. Yet, on even a superficial examination, the lack of real substance and pertinence becomes apparent. The slanted account of "The Genesis of the Dispute" in Part I, Chapter I of the Tunisian Memorial is largely based on the unjustified assumption that Tunisia's claims were well-founded while those of Libya were not. Comments criticizing the behavior of the Libyan authorities, such as those made by the authors of the Tunisian Memorial in Chapter I, contribute nothing to the solution of the problem of the delimitation of the areas of continental shelf which appertain to each of the two Parties or to the fulfillment of the task concerning delimitation jointly submitted by them to the Court³. As

¹ By letter dated 14 Feb. 1979, the Secretary of Foreign Affairs of Libya transmitted a copy of the Special Agreement in Arabic, together with a translation in English certified as accurate, to the Registrar. Copies of that letter as well as the original Arabic text and English translation of the Special Agreement were previously filed with the Court as *Annex I-1* to the *Libyan Memorial*.

² The term "Libya" refers to the State of Libya and its government, whatever the form of government at the relevant time, and, as may appear from the context, also to the territory which now belongs to the Socialist People's Libyan Arab Jamahiriya.

³ References in this Counter-Memorial to the *Tunisian Memorial* refer to the official English translation of that Memorial, except for references to maps and figures and quotations of passages in French, which are to the original French text of the *Tunisian Memorial*.

⁴ This attitude is in marked contrast to that expressed by the Tunisian Prime Minister in a speech to the Tunisian press on 29 Dec. 1980 where "cooperation" and the concept of joint exploitation of mineral resources were raised. A copy of this speech is attached as *Annex I*, Vol. II.

indicated in paragraphs 38 to 43 of its Memorial, the purpose of Libya in its discussions with Tunisia was to agree on provisions for joint exploitation in the context of the development of close economic and political cooperation between the two countries. It was Tunisia which from 1968 onwards was trying to insist on delimitation on the basis of what was repeatedly described in terms such as "international law and custom" and the internationally recognized "geographical facts and...economic interests".

4. These words are quoted from paragraph 13 of the English translation of the Tunisian position with respect to the "problem with Libya over the Continental Shelf", as stated in a Memorandum circulated on or about 18 May 1976 to diplomatic missions accredited to Tunisia (other than the Libyan Mission in Tunis) and to various international organizations, including the Secretary-General of the United Nations¹. The text corresponds to that set out in Annex 34 to the Tunisian Memorial. According to paragraph 1.25 of that Memorial, the Memorandum was circulated on 3 May 1976 under the title "Memorandum on the Delimitation of the Continental Shelf between Tunisia and Libya". Whatever the precise date of circulation may have been, the Memorandum can only be regarded as an official statement of the legal position of the Tunisian Government at the time when it was issued. Put briefly, the Tunisian position was delimitation on the basis of the 50 metre isobath and the application of strict equidistance beyond that isobath. This position is made clear by paragraph 13 of the Memorandum which reads as follows:

"13. An examination of maps reveals that the general configuration of the Tunisian and Libyan coastlines is simple and does not create any difficulty in respect of the application of the standards and rules of international law and custom. Thus the delimitation of the continental shelf between Tunisia and Libya beyond the 50 metre isobath should be in conformity with an equidistance line drawn in accordance with international law, taking into account the geographical facts and the zones of economic interests, the long-standing exercise of which stands proof of their reality and importance²."

¹ This theme, which was constantly used by Tunisian spokesmen, ran like a thread through the discussions and was used as a formula in support of the Tunisian claim to delimitation on the basis of a strict equidistance line. Examples may be found in paras. 1.16 and 1.21 of the *Tunisian Memorial* and even in the last paragraph of Art. 1 of the Tunisian Ministerial Decree of 18 Mar. 1976 for which the French translation is given in *Annex 3* to the *Tunisian Memorial*. There is no reference to any claimed territorial sea or fishing zone boundary.

² See *Libyan Memorial*, para. 41.

³ *Ibid.* See *Tunisian Memorial, Annex 34* for a French translation of this Memorandum. The text is given here for convenience of reference.

"13. L'examen des cartes montre que la configuration générale des côtes tunisiennes et libyennes est simple et ne présente aucune difficulté quant à l'application des critères et règles du droit et des usages internationaux. En conséquence, la délimitation du plateau continental entre la Tunisie et la Libye, au-delà de l'isobathe des 50 mètres, doit être constituée par la ligne d'équidistance tracée, conformément au droit international, compte tenu des données géographiques et des zones d'intérêts économiques dont la réalité et l'importance sont attestées par un long usage."

5. It is remarkable that without any explanation or excuse Tunisia has discarded the position both of fact and of law taken in the Memorandum of May 1976 (which was constantly relied upon by Tunisia as a basis for allegations of illegality on the part of Libya). The position of fact taken by Tunisia was that "the general configuration of the Tunisian and Libyan coastlines is simple"¹. As regards Tunisia, this position has been reversed in the Tunisian Memorial which seeks to rely on the complexity of the Tunisian coast². Even more remarkable is the abandonment by Tunisia of the equidistance method of delimitation which is apparently rejected in Chapter VII, Section III of its Memorial and finds no place in the Tunisian submissions, in spite of the prominence given to equidistance in paragraphs 12 and 13 of the May 1976 Memorandum. Of course, the Government of Tunisia is fully entitled to abandon a position previously taken but, when this position has been taken so constantly and has been advertised to the world by diplomatic action as the legally well-founded view of the Tunisian Government, it must throw some doubt on the validity of the new case put forward for the first time in the Tunisian Memorial. Nevertheless, it has the great advantage of simplifying the issues for the purposes of the present proceedings because it is now common ground that the Tunisian coastline as compared with that of Libya is complex and that the equidistance method of delimitation is not applicable in this case. This result accords with Submissions 6 to 10 in the Libyan Memorial (corresponding with Submissions 13, 10, 13³, 9, and 14, respectively, in this Counter-Memorial). In particular, it coincides with Submission 10 which, it may be respectfully recalled, invites the Court to adjudge and declare:

"In the present case, given the particular geographical configuration, the equidistance method would result in a delimitation of the continental shelf which would be inequitable, inappropriate, and not in conformity with international law."

6. In a formal sense the Parties are also in agreement that the continental shelf of a State is the natural prolongation of its land territory into and under the sea and that any delimitation should leave as much as possible to each Party all those parts of the continental shelf that constitute such a natural prolongation⁴. However, this apparent similarity in the meaning attributed by each of the two Parties to the concept of the

¹ See, e.g., para. 13 of the Memorandum of May 1976.

² See, e.g., *Tunisian Memorial*, para. 3.14 and Submission I.4.(d).

³ Submissions 6 and 8 in the *Libyan Memorial* have been combined in Submission 13 in this Counter-Memorial.

⁴ See *Libyan Memorial*, Submissions 1 and 2, which are substantially identical to Submissions 1 and 8 in this Counter-Memorial, and *Tunisian Memorial*, Submission I.1. For the convenience of the Court, *Map 1* facing p. 2 portrays the North African coastal States and their political boundaries. All maps (i.e., *Map 1* through *Map 18*) appearing in this Counter-Memorial have been prepared by the Department of Cartographic Services of the University of Maryland under the direction of Scott B. Edmonds, Director of Cartographic Services at the University of Maryland Baltimore County. For a description of the preparation of these maps see *Annex 7*, Vol. III.

continental shelf is formal rather than real. The development of the Tunisian Memorial discloses a concept of the continental shelf that is both novel and fanciful. This is a point that will have to be examined at some length in this Counter-Memorial. At this juncture, attention is simply called to the introduction by Tunisia of a new concept of the continental shelf as an area divided into "shelf" and "borderland". Any such division is contrary to established State practice and to the existing jurisprudence and other authoritative sources relating to the continental-shelf. It seems to be introduced into the Tunisian Memorial for the purpose of attempting to provide an excuse for notionally shifting part of the coastline of Tunisia eastward as far as Ras Ajdir for the purpose of the truly remarkable geometric constructions which are presented in Chapter IX. This superficial and abstract approach to the concept of the continental shelf and the problem of its delimitation ignores to a large extent the true nature of the continental shelf as the prolongation of the mass of the land territory of a State: that is to say, not only the surface with its contours, whatever they may be but also, and even more important, the subsoil¹. The continental shelf, since it includes the subsoil, clearly comprises the mass below the surface, where one finds the natural resources such as oil and gas which, even according to the Tunisian Memorial itself, are the prime target of Tunisia in this case. It is strange that the Court is asked to look mainly at the surface of the sea-bed with a view to determining rights of the Parties whose greatest interest relates to the subsoil extending far below the surface.

7. There is another sense in which Tunisia misapplies the concept of the continental shelf as the natural prolongation of the territory of a State. It chooses to ignore almost entirely the fact that Tunisia and Libya are adjacent States and that they possess a common land boundary². It is possible to guess at the reason why Tunisia has chosen to do this: Tunisia wishes to ignore the significance of the land boundary as determining the land territory of the two States and to try to relate the continental shelf of Tunisia to rights concerning sedentary fisheries, which traditionally have nothing to do with the continental shelf as such. Tunisia would like the Court to shut its eyes to the existence of the land boundary as determining the land territory whose prolongation must constitute the continental shelf of Libya. It seems to be the aim of Tunisia to make the continental shelf a prolongation of something quite different—namely some kind of fishery zone.

8. Not only does the Tunisian Memorial virtually overlook the fact that Tunisia and Libya are adjacent States, but it also tends to ignore the

¹ The term "subsoil" is used here in a legal sense to include the mass below the surface to an indefinite depth.

² The relative position of Libya and Tunisia as adjacent States is shown on *Map 2* facing this page. As pointed out in the *Libyan Memorial* (paras. 70 and 72), Libya has an area of approximately 1,775,500 sq. km. and Tunisia an area of approximately 164,150 sq. km. It may be observed that to the east, Libya is opposite to the island of Crete and the mainland of Greece and is adjacent to Egypt; to the west, Libya is opposite to Malta and Italy and is adjacent to Tunisia.

northward-facing coast of Tunisia between Ras Ajdir and Gabes¹. In fact, it is obvious from any properly drawn map that the distance from Ras Ajdir to the turning point in the Gulf of Gabes (in its ordinary geographical sense as used in the Libyan Memorial) is almost exactly equal to the distance from that point to Ras Kaboudia. What Tunisia would like to do is to discount the presence and effect of the "northward"-facing coast of Tunisia, which continues the coastline of Libya, and to emphasize the "eastward"-facing² coast of Tunisia in an attempt to paint a picture—a false picture—of its continental shelf extending eastward up the Mediterranean towards the "Ionian Abyssal Plain".

9. This curious attempt at the distortion of geography may be linked to the attempt to exclude from the delimitation the area of sea-bed (and subsoil) out to the 50 metre isobath. This contention will be examined more fully in Chapter III of Part I below but in principle it is unacceptable for the following reasons *inter alia*:

- (i) The area so defined has never been an area of "sovereignty" appertaining to Tunisia.
- (ii) It is contrary to State practice to delimit shelf boundaries by reference to "historic rights" such as those asserted by Tunisia.
- (iii) The claim is based on an assertion of "economic rights" which are, in contemporary times, comparatively unimportant.

10. As will be explained in detail in the evidence given below in this Counter-Memorial and in the technical *Annexes* of Volume III, the Tunisian scientific case, based primarily on geomorphological contentions, is superficial, inaccurate and often fanciful. Much of the Tunisian data adduced to support the conclusion that west/east geomorphological and geological trends exist extending eastward from Tunisia are inaccurate or inadequate. The Tunisian scientific contentions are devoid of any valid geologic foundation. The continental shelf, as the natural prolongation of the land territory, is not determined simply by geomorphological factors, such as slight variations in the contours of the sea-bed or in the depth of water. In determining the nature of "the sea-bed and subsoil of the submarine areas that extend beyond its [i.e., a coastal State's] territorial sea" within the meaning of Article 76(1) of the *DCIT*³, fundamental

¹ Contrary to the assertion in para. 1.22 of the *Tunisian Memorial*, Ras Ajdir is the frontier point between Libya and Tunisia on the Mediterranean Sea and not within Tunisian territory. In fact, the *Mediterranean Pilot* refers to the coast of Libya as starting from Ras Ajdir in the west. *Mediterranean Pilot*: 6th edition. Hydrographer of the Navy, Taunton, England, 1976, Vol. V, p. 39. (A copy of this page is attached as *Annex 2*, Vol. II.)

² It will be pointed out (see para. 209 below and *Annex 2*, Vol. III) that this coast cannot be properly described as "eastward"-facing in any event.

³ All references in this Counter-Memorial to the "DCIT" refer to the *Draft Convention on the Law of the Sea (Informal Text)*, U.N. Doc. A/CONF. 62/WP. 10/Rev. 3, 22 Sep. 1980. In para. 7 of the Explanatory Memorandum by the President of the Conference (U.N. Doc. A/CONF. 62/WP. 10/Rev. 3/Add. 1, 28 Aug. 1980), the title of "Draft Convention (Informal Text)" was authorized, from which "DCIT" is derived. Paragraph 7 reads:

"The Collegium also decided that having regard to the inappropriateness of referring to the revised text as a final negotiating text, since there were some outstanding
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geological factors must be examined. Tunisian arguments attempting to identify the shelf area as the natural prolongation of Tunisia on grounds that are superficial lead inevitably to a scientifically unsound application of the principle of natural prolongation.

11. Another fallacy in the arguments and submissions as presented in the Tunisian Memorial is that they relate to areas which are not included in the area for delimitation as between Libya and Tunisia in the present proceedings. The areas contemplated in the Tunisian Memorial include:

- (i) Areas already delimited between Tunisia and Italy¹. Although that delimitation is not binding on Libya, it must be taken as definitive as against Tunisia. Accordingly, Tunisia is not entitled to bring into account for the purposes of the delimitation in the present case areas which have been effectively excluded by the agreement with Italy.
- (ii) Areas which clearly fall to be delimited in the future between Libya and Malta and which cannot conceivably be the subject of delimitation between Libya and Tunisia².

12. Another misleading inaccuracy in the Tunisian Memorial is the geographical description and use made of the "Gulf of Gabes". As explained in the Libyan Memorial, in its true geographical sense the Gulf of Gabes is entered between Ras Yonga and the Island of Djerba³. There is no true bay entered by a line between the Kerkennah Islands and the Island of Djerba, as can readily be seen from a map. Still less can waters to the seaward of such a line be regarded as properly forming part of the "Gulf of Gabes". The variation in the use of the expression in the Tunisian Memorial is obviously designed to give an impression of the Gulf of Gabes as extending far to the north and the east of its proper area. This

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issues that needed further negotiations, it seemed more appropriate and advisable to give the revised text the title 'Draft Convention (Informal Text)'. This text like its predecessor will be informal in character. It is a negotiating text and not a negotiated text, and does not prejudice the position of any delegation."

Articles of the *DCIT* referred to in this Counter-Memorial are attached as *Annex 3*, Vol. II. Any references to the work of the conference in the Special Agreement, in the *Libyan Memorial*, in this Counter-Memorial, or in these proceedings generally, should be without prejudice to any position taken or to be taken by Libya. It should be noted that Art. 76(10) of the *DCIT* provides: "The provisions of this article are without prejudice to the question of delimitation of the continental shelf between adjacent or opposite States." Both Parties have expressed their reservations (as members of the Arab group in the Third United Nations Conference on the Law of the Sea) to the formulation of Art. 76(1), other than to the words: "The continental shelf of a coastal State comprises the sea-bed and subsoil of the submarine areas that extend beyond its territorial sea throughout the natural prolongation of its land territory ...". Libya also reserves all rights to its position (whether individually or as a member of the group of 29 co-sponsors of NG.7/10) as to the formulation of Arts. 76 and 83 of the *DCIT* as a basis for further negotiations or otherwise.

¹ See the Italo/Tunisian Agreement on the Delimitation of the Continental Shelf. (A copy of this Agreement is attached as *Annex 4*, Vol. II.)

² The sheaf of lines proposed by Tunisia (see *Tunisian Memorial*, Fig. 9.14) even suggests that Tunisia regards itself as an opposite state to Malta.

³ See *Libyan Memorial*, para. 78.

has created an underlying confusion between the Gulf of Gabes in its strict sense and a fictional "region of the Gulf of Gabes", leaving the reader uncertain as to the extent of the area being discussed¹. Along the same line is the attempt to characterize the "region of the Gulf of Gabes" as an economic or ecological unit. This is a conclusion which will not stand up to critical analysis as will be shown in paragraphs 242 through 262 below².

13. Finally, what are described in the Tunisian Memorial as "practical" methods are in fact highly imaginative. They depend on features which are wholly or virtually non-existent and on geometric constructions which are devoid of any foundation in State practice or of any intrinsic value. A critique of these methods is set forth in *Annex 8*, Volume III.

14. Overall, in spite of its extensive pseudoscientific detail and its attractive style, the Tunisian Memorial is an extremely fragile document which falls far short of substantiating the ambitious claims which it is intended to support.

SECTION 2. Irrelevant Aspects of the Tunisian Memorial

15. It is no doubt because Tunisia is conscious of the weakness of the claims presented in its Memorial that it has introduced many pages of extraneous material. Interesting as the information may be, much of it is irrelevant in fact or in law to the question of the delimitation of the continental shelf areas appertaining to each of the Parties. Much of the information is also inaccurate or presented in a one-sided manner which may give rise to false impressions. Therefore, it will be necessary to comment in some detail on certain aspects of this extraneous material, although strictly speaking it has no bearing on the real issues involved in the present case³.

16. Among the subjects raised in the Tunisian Memorial, which fall into this general category, are (*inter alia*) the following:

- (i) Comparative Economics⁴;
- (ii) Flora and Fauna⁵;
- (iii) Climate⁶;
- (iv) Archaeology⁷;

¹ This effort of Tunisia to extend the Gulf of Gabes far beyond its proper geographical bounds is discussed in paras. 81 through 90 below and in *Annex 1*, Vol. III, and is depicted graphically on *Map 9* facing p. 36.

² There is, however, geographical unity in the area, but it is not from Ras Kaboudia to Ras Ajdir. It is, rather, from the vicinity of the town of Gabes to the vicinity of Ras Tajura, just east of Tripoli. In this respect, see paras. 242 through 262 below and *Annex 1*, Vol. III.

³ As to the question of so-called "historic rights", see para. 9 above and paras. 92 through 179 below.

⁴ See *Tunisian Memorial*, paras. 3.32 through 3.51.

⁵ *Ibid.*, paras. 4.14 through 4.31.

⁶ *Ibid.*, paras. 4.19 through 4.23.

⁷ *Ibid.*, paras. 5.06 through 5.10.

(v) The "Ionian Abyssal Plain" as a "Geological" Factor¹.*Comparative Economics*

17. In paragraphs 3.32 to 3.51, the Tunisian Memorial gives a great deal of data concerning economic and human geography and ends with the remarkable comment that neither law nor equity "should have the effect of widening the disparities created by nature". This comment, expressed as it is as a negative proposition, shows that Tunisia is well aware that the observations made by it have no bearing on the question of natural prolongation or delimitation of the continental shelf. The observations can be intended to serve no other purpose than to try to create an atmosphere of sympathy for Tunisia which, although for centuries rich compared with Libya, has now become comparatively less wealthy largely because of the increase of petroleum production by Libya—production which incidentally is for the greater part onshore and not offshore. In order to counter any effect that this one-sided presentation may have created, an expert assessment of the economic factors is submitted with this Counter-Memorial².

Flora and Fauna

18. In paragraphs 4.14ff., the Tunisian Memorial makes considerable play with the richness of the flora and fauna of the "Gulf of Gabes region", which in this context is even said to extend as far as Ras Ajdir³. It is, of course, obvious in this connection that there is no natural geographical cut-off point at Ras Ajdir, as the Tunisian Memorial (especially the maps) repeatedly seems to imply. Moreover, it is difficult to see how the richness of the flora and fauna can affect the question of delimitation of the continental shelf. However, the material seems to be produced for the purpose of attempting to establish the ecological unity of the area in which Tunisia claims historic rights. In fact, there is no such ecological unity as is demonstrated in paragraphs 253 to 258 below and more fully discussed in *Annex I*, Volume III.

Climate

19. In the context of the alleged "ecological unity of the area", some play is made with the climatic conditions in the "region of the Gulf of Gabes". This again clearly has nothing to do with delimitation of the continental shelf and, in any event, does not support the alleged ecological unity of the area. Besides, if for example the map on Figure 4.01 of the Tunisian Memorial were extended into Libya, it would be seen that the average rainfall on the coastal plain follows the same pattern. If anything, this pattern would show an ecological unity from the vicinity of Gabes, along the Jeffara Plain, following the direction of the Libyan coastline to Ras Tajura, just east of Tripoli⁴.

¹ See *Tunisian Memorial*, paras. 5.33, 5.34 and 9.09ff.

² See *Annex 13*, Vol. III.

³ See *Tunisian Memorial*, paras. 4.15 and 4.19.

⁴ See paras. 258 and 259 below; see also *Annex I*, Vol. III and the maps that follow the text of that *Annex*.

Archaeology

20. In paragraphs 5.06ff., the Tunisian Memorial makes much play with evidence that certain archaeological sites along the coast, which were above the surface of the sea, are now either wholly or partially submerged. Using this as evidence, it is claimed that the continental shelf area in question is virtually a submerged Tunisia. In fact, as is shown in paragraphs 220 through 230 below, this evidence shows nothing of the kind. It may be noted that all the sites in question are very near to the mainland coast or the islands¹ and prove nothing regarding the offshore areas with which we are concerned. In any event, the fact that the sea has in the past advanced and receded has nothing to do with the continuity of the landmass into and under the sea.

The "Ionian Abyssal Plain" as a "Geological" Factor

21. The imaginative reach of the Tunisian Memorial, which is remarkable in its reliance on "archaeology", is even greater when it tries to identify a point in the "Ionian Abyssal Plain" as the focal point for the continental shelves of Tunisia and Libya. This attempt to extend Tunisian claims far up the Mediterranean Sea, not only past Libya but past Italian and Maltese territory as well, is as extravagant as it is unreal. As is pointed out in paragraphs 445 through 453 below, this notion is wholly alien to the concept of the continental shelf as the extension of the landmass of the territory of a State, and it is based on the false premise that the "Ionian Abyssal Plain" is a triangle that exists as a geological fact. There are in fact two quite distinct deeps separated by the Medina Bank and joined only by a narrow connection². Each may be regarded as an "abyssal plain" but they are by no means one and the same. Even if one could conceive of the continental shelf of two States extending to a point, as suggested in the Tunisian Memorial, it would be interesting to know in the present case to which "abyssal plain" it would be said to extend.

SECTION 3. General Statement of the Libyan Case

22. It is intended here to give only a very brief indication of the main lines of the Libyan case. For a long time Tripolitania and now Libya has faced continuing pressure eastward by Tunisia³. At the beginning of the last century, the exercise of normal powers of government and control from Tunis did not extend beyond Gabes. During the 19th Century, Tunisian pretensions extended as far as El Biban and, following the establishment of the French Protectorate, were pushed still further east from El Biban to Ras Ajdir. Under strong pressure, the Ottomans finally had to accept Ras Ajdir in the 1910 Convention as the point on the coast from which the boundary ran inland in a generally north/south direction⁴. More recently, this eastward extension has been paralleled by Tunisian claims with respect to sedentary fisheries. The earlier history of the land

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¹ See *Tunisian Memorial*, Fig. 5.02.

² See para. 452 below and the reproduction of a map facing p. 316 below.

³ There has, of course, been pressure by Tunisia southward as well.

⁴ See *Libyan Memorial*, para. 22 and *Annex I-3* to that *Memorial*.

boundary is being repeated at sea, Tunisia having ambitions which reach towards the so-called "Ionian Abyssal Plain" depicted on several Figures in the Tunisian Memorial¹. Nevertheless, there has never been an agreement concerning the boundary seaward of Ras Ajdir and the maritime boundary between Tunisia and Libya is an open question. This is the position as regards both the territorial sea and the continental shelf.

23. Libya has throughout wished to maintain close and friendly relations with Tunisia and to avoid creating a controversial issue. This attitude on the part of Libya is demonstrated by the history of the petroleum concessions and exploitation, and is the true key to the proper understanding of the diplomatic exchanges, which themselves show the earnest wish of Libya to avoid anything in the nature of a "dispute" with Tunisia. In pursuance of this policy, Libya made proposals for joint exploitation and tried to refrain from making protests except where there was actual physical intrusion on the part of Tunisia. It was in this spirit and with this purpose that Colonel Ghadafi, Leader of the First of September Revolution, on 12 January 1974, signed with the President of the Republic of Tunisia the Djerba Declaration of Unity declaring the merger of the two Arab countries². In the light of this historic Declaration, protests and counter-protests were regarded by the Libyan authorities as superficial and meaningless. Libya wanted brotherhood and unity. The crisis that followed was not of its making.

24. Since, contrary to the original wish of Libya, there must now be shelf delimitation, Libya bases its position on established principles and rules of international law: that is to say, delimitation must be in accordance with equitable principles giving full effect to the basic principle of natural prolongation and so as to ensure that the delimitation does not involve encroachment by one State on areas of continental shelf which are the natural prolongation of the other.

25. In the present case, the great weight of evidence and the relevant circumstances—geological, geomorphological, physiographical and geographical—demonstrate that the area of continental shelf to be delimited is a prolongation northward of the North African landmass. The attempt by Tunisia to divide the Pelagian Sea into different areas is a distortion of nature. For the continental shelf area concerned is basically undifferentiated and forms part of the Pelagian Basin³, a distinct geologic and physiographic unit at the rim of the stable African platform, without marked

¹ See, e.g., *Tunisian Memorial*, Fig. 9.02.

² A copy of the Djerba Declaration of Unity is attached as *Annex 5*, Vol. II.

³ In connection with the use of the term "Pelagian Basin" see fn. 1 at p. 90 below. See also, *Libyan Memorial*, para. 62, which describes the Pelagian Basin as follows:

"Its northern boundary runs along the Pantelleria Trough. On the south, it is bounded by the Gafsa-Jeffara fault, which is a part of a rift valley running from the edge of the Gulf of Sirt in Libya to the longitude of Gafsa in Tunisia. Thus, the Jeffara Plain, which is the northern coastal plain of Libya and which also runs into southeastern Tunisia, is included within the Pelagian Basin. To the east, the Pelagian Basin is cut off by a north/south fault zone at the eastern edge of the Medina Bank, known as the Misratah-Malta Escarpment. To the west, the Pelagian Basin termi-

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features that would affect delimitation or that could be regarded as showing the existence of more than one continental shelf or of a "borderland" area. The Pelagian Basin, which includes part of eastern and southern Tunisia, has an African affinity¹. It is in fact the northward extension of the African plate and hence of the African continent and landmass, a different geologic region from that part of Tunisia which is dominated by the Atlas Mountains. This continuity between the North African landmass to the south and the Pelagian Basin to the north is firmly established by scientific data, as summarized in paragraphs 201 through 203 and 244 below and as developed in greater detail in paragraphs 263 through 274 below and in the special studies appearing as *Annexes 11 and 12A and 12B*, Volume III.

26. The practical method set forth by Libya remains faithful to the northerly projection of the continental shelf from Ras Ajdir and produces a result which, for the reasons given in paragraphs 493 through 531 below, takes account of the relevant circumstances and is equitable.

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nates at the very pronounced north/south fault zone extending from Gabes in the south to Tunis in the north, thus encompassing as part of the Pelagian Basin the eastern part of Tunisia. This western boundary is particularly significant since it marks the division, noted above, between the stable African platform and the Atlas Mountain region, which is part of the mobile Alpine region, a quite different region geologically from the geological unit comprising the Pelagian Basin."

58 ¹ See *Figure 1* facing p. 10, which shows that the Pelagian Basin forms part of the stable North African landmass.

PART I THE HISTORICAL BACKGROUND

CHAPTER I THE NATURE AND ORIGINS OF THE DISPUTE

SECTION 1. The 1955 Libyan Petroleum Law and Regulation No. 1 and Map No. 1

27. Exploration and attempts at exploitation of oil resources are of much more recent origin in Libya than in Tunisia. At the time when the Petroleum Law No. 25 of 1955 came into force, it was still unknown whether the territory of Libya contained any oil. No exploration activities in search of oil had been carried out before the independence of Libya in 1951. The Petroleum Law of 1955 was designed to encourage extensive exploration for petroleum in the shortest possible time in areas over which Libya claimed sovereignty or sovereign rights.

28. The Petroleum Law No. 25 of 1955, read together with Petroleum Regulation No. 1 of 1955 and Map No. 1¹ annexed to the Regulation, made a clear and public claim to sovereign rights for the purpose of exploration and exploitation for petroleum in the area defined by the Regulation and the Map attached. As stated in paragraph 31 of the Libyan Memorial, both the Petroleum Law No. 25 of 1955 and the Petroleum Regulation No. 1 with the official Map of Libya attached were published in the official Gazette for 1955².

29. Article 1 of Law No. 25 of 1955 stated that all petroleum in Libya in its natural state *in strata* was the property of the Libyan State, and prohibited any person from exploring or prospecting for, mining or producing petroleum in any part of "Libya" unless authorized by a permit or concession issued under Law No. 25 of 1955. Then, by Article 1 of the Regulation, it was provided as follows:

"There shall be an official map of Libya for the purposes of the Petroleum Law 1955 to a scale of 1:2,000,000 called Map No. 1, which is attached as the First Schedule hereto. On this map the international frontiers, Petroleum Zones and the grid shall be indicated."

Of course, "Map No. 1" is the Map No. 1 mentioned above, a reduced copy of which is attached to the Libyan Memorial in *Annex I-9C*. So it

⁽⁶⁰⁾ I, 467 ¹ The data appearing on "Map No. 1" has been reproduced on *Map 3*. A copy of "Map No. 1" is also included in the *Libyan Memorial* opposite p. 15 and, as indicated in fn. 3 at that page, the western boundary of the maritime area is outlined by a bold line on that Map. It should be noted that this western boundary is indicated on the map by an international boundary sign running north from Ras Ajdir whereas the limits of other areas are indicated simply by a dotted line.

² Copies of the relevant articles of the Petroleum Law No. 25 of 1955 and of Petroleum Regulation No. 1 of 1955 in the original Arabic, together with a reduced copy of "Map No. 1", are attached as *Annex I-9A* and *I-9C* respectively to the *Libyan Memorial*. English translations are contained in *Annexes I-9B* and *I-9D* to the *Libyan Memorial*.

was made absolutely clear in 1955 that Libya was claiming a maritime boundary continuing northward from Ras Ajdir in the general direction of the land boundary established by the 1910 Convention. There can be no doubt about the general direction of the maritime boundary on Map No. 1. It runs north parallel to the meridian 12° E. (This is in effect a continuation of the land boundary from the boundary marker No. 31 at Ras Ajdir.)

30. It is not conceivable that this legislation was unknown to Tunisia. Not only was it published in the Gazette, but information of this kind was available from other sources. For example, the organization Petroconsultants S.A., with offices in Geneva, Switzerland¹, has for a long period maintained an information service which makes this type of information available to governments and oil companies. Oil and gas information regarding this specific legislation was published in the *Oil and Gas Journal* and thus was common knowledge among the oil companies working in the area, many of which had close relations at the time with both Libya and Tunisia². The Law was also referred to in a booklet published by the Petroleum Commission of Libya entitled "Petroleum Development in Libya 1954 through mid 1961", which was presented to the Third Arab Petroleum Congress in 1961³. Yet Tunisia has made no protest or reservation at any time regarding either the Law or the Regulation.

SECTION 2. History of the Concessions

31. The chronological development of the Tunisian grants of concessions, starting from the "Gulf of Gabes area", shows an ever increasing reach eastward. In fact, according to information received from Petroconsultants, two grants in offshore areas were made by Tunisia in 1964 and two in 1965. These concessions are shown on the Petroconsultants' maps found in *Annex 9*, Volume III, giving the Tunisian concession situation as of 31 December 1965⁴. In addition, *Map 4* facing this page has been prepared for this Counter-Memorial so that the history of Tunisian concessions may more easily be followed. Concession Nos. 1 and 4 to Petropar and Rimrock respectively are of no particular concern for the purposes of the present case, although it is of some interest that the boundary between Concession Nos. 1 and 3 runs seaward from Ras Kaboudia. The two concessions which call for special attention are Nos. 2 and 3. Concession No. 2 was granted in 1964 to the French Société Nationale des Pétroles d'Aquitaine and Régie Autonome des Pétroles⁵;

¹ Referred to hereafter as "Petroconsultants".

² Copies of the relevant articles appearing in the 20 Dec. 1954, 16 May 1955, and 25 July 1955 issues of the *Oil and Gas Journal* and specifically referring to the legislation, are attached as *Annex 6*, Vol. II.

³ In accordance with Art. 50, para. 2 of the Rules of Court, a copy of this booklet has been deposited with the Registrar. Similar booklets were presented to the First and Second Arab Petroleum Congresses in 1958 and 1959.

⁴ The origin of the dash dot line on this and other Petroconsultants' maps is not known. Each of them however bears a note stating, "this map is NOT an authority on the delineation of international boundaries".

⁵ Referred to hereafter as "SNPA/RAP".

Concession No. 3 was granted in 1965 to the "Husky" group formed by Tunisian Husky and several other companies. The point to be noted as (61) *Map 4* shows is that part of the eastern boundary of Concession Nos. 2 and 3 (1964-1965) ran in a direction due north of Ras Ajdir. Although the boundaries in these concessions are not given in the Tunisian Memorial, the direction of this line is very significant having particular regard to the Libyan Petroleum Regulation in force since 1955.

32. In July 1966, the Husky group released its permit No. 3, as shown in the Petroconsultants' map for 1966¹. In 1967², the SNPA/RAP Concession No. 2 was enlarged, as shown on the Petroconsultants' map for 1967³. This Concession was extended eastward by the addition of a triangular area adjoining the northward line mentioned above and shown on the Petroconsultants' maps. It was thus that the stepped eastern boundary of the Concession was introduced by Tunisia. This is the Concession boundary that runs in a direction northward at an angle of 26° from Ras Ajdir. This was the first step eastward by Tunisia into areas of the continental shelf over which Libya had clearly asserted a claim to sovereign rights. However, this move eastward is camouflaged in the Tunisian Memorial by mentioning only the enlarged Concession of 1966 and not the 1964 and 1965 Concessions, part of the eastern limits of which ran in a direction due north of Ras Ajdir. To illustrate this point Libya (59) has prepared *Figure 2*, facing page 18, which consists of an overlay showing the 1964-1965 Tunisian Concessions obscured by the Tunisian presentation in paragraph 1.01 and *Figure 1.01*. It may be observed in passing (1) that the grants of concession by Tunisia took no account of the alleged "ZV 45°" line or of the 50 metre isobath.

33. There was no material change in the boundaries of the concessions granted by Tunisia before the end of 1970⁴. There was, however, a substantial concession granted in 1971. According to the Petroconsultants' map as of 31 December 1971⁵ this grant, to "Murphy-CIGO", followed the coast as far east as Ras Ajdir, but the line from that point to the eastern boundary of the Sofratep concession is not made clear.

34. In 1972, the situation changed dramatically, as appears from the Petroconsultants' map for that year⁶. The Concessions numbered 8 and 9 on that map were granted respectively to CFP-AGIP-AMOCO and SEPEG. The areas covered by these Concessions pushed their boundaries far to the east in the direction of Malta and across the coastal front of Libya. Thereafter, the basic situation remained the same although there were minor adjustments in 1975 that do not seem to affect it materially.

¹ *Annex 9*, Vol. III.

² From *Annex 1* to the *Tunisian Memorial* it appears that the actual date of the grant was 21 Oct. 1966, but apparently this information was not communicated to Petroconsultants until 1967.

³ *Annex 9*, Vol. III.

⁴ It is of interest to note here, however, that discussions about the maritime boundaries between Tunisia and Libya began in July 1968. See *Libyan Memorial*, para. 37.

⁵ A copy of this map is attached in *Annex 9*, Vol. III.

⁶ *Annex 9*, Vol. III.

35. The most significant points in this history of the Tunisian concessions are: the use of the due north line in 1964¹; the use of the 26° line from 1966 onwards; the lunge eastward in 1972; and the complete failure to use the alleged "ZV 45°" boundary or the line of the 50 metre isobath.

36. The situation on the Libyan side is somewhat simpler. As stated in paragraph 36 of the Libyan Memorial, on 30 April 1968, the Libyan authorities granted Concession No. 137 to Aquitaine and Exwarb². The area covered was shown on Map No. 3 facing page 18 of the Libyan Memorial. The western boundary of that Concession followed the direction of the Tunisian Concessions granted in 1967 to SNPA/RAP. No further grants of concessions were made by Libya until 1974. On 28 September 1974, two grants of concession³ were made: NC 41 to the National Oil Corporation⁴/AGIP and NC 53 to N.O.C./Total. The western boundary of both these Concessions followed the 26° line. The areas of these Concessions are shown on *Map 5* facing this page. Following the relinquishment of an area from the original Concession 137, a new Concession NC 76 was granted on 17 February 1977 to N.O.C. Again, the western boundary of this Concession was the 26° line.

37. It will be seen that, notwithstanding a firm belief in the possession of sovereign rights up to the line shown on Map No. 1 attached to the Petroleum Regulation of 1955, Libya has exercised considerable self-restraint in never going west of the original 26° concession line in the grant of further concessions.

SECTION 3. History of Oil Exploration and Exploitation⁵

38. Interest in oil exploration in Tunisia is not new. Petroleum exploration started there in 1894. Exploration activity was limited to geological mapping in the northern part of the country although some shallow wells were drilled in the area of Medjerba in 1919. The first deep test was drilled in 1926. This well was abandoned as dry above the formation, which was proved as gas-bearing 23 years later in the Cape Bon Field. From 1931 onwards, some activity was conducted mainly by the French

¹ A point perhaps made more significant by the complete failure of the *Tunisian Memorial* to mention it. See para. 31 above.

² This was the first offshore concession granted by Libya that could have any possible bearing on the present case. (See reproduction of the Official Map of Concession No. 137, which is attached as *Annex 7*, Vol. II.) To avoid misunderstanding, however, it may be noted that before 1962 Libya granted six marine concessions covering a total area of 28,943 sq. km., but these concessions were in a comparatively narrow strip bordering the Gulf of Sirt. In Dec. 1955, Concession No. 9 was granted by Libya to Mobil Oil Limited of Canada. This was mainly onshore, but had an offshore area whose northern boundary ran east from Ras Ajdir. (See the reproduction of the map attached as *Annex 7*, Vol. II.)

³ The word "concession" is here used to cover both concessions in the strict sense and Exploration and Production Sharing Agreements ("E.P.S.A.").

⁴ Hereinafter the National Oil Corporation is referred to as "N.O.C."

⁵ The facts set forth in paras. 38 and 39 below are based on a Petroconsultants' Report attached as *Annex 9*, Vol. III. Data with regard to Tunisia was taken from Petroconsultants' reports; however, original Libyan data was utilized concerning Libyan concessions and activities.

and Tunisian Governments which after World War II was expanded south into the Sahara. There was further extension of geological and geophysical investigations between 1949 and 1964 in the southern *chotts* area and the most southern part of the Tunisian Sahara.

39. In 1964, seismic exploration began in the offshore "Gulf of Gabes region". Between 1965 and 1980, according to information provided by Petroconsultants, 71 Tunisian offshore wells were drilled. Comparatively few of these have proved to be productive. Probably the most important is the Ashtart Well No. 001 drilled by Aquitaine in 1971. Before then, Tunisian offshore drilling was unproductive. According to the information provided, there were only two wells drilled in 1965, two in 1967, two in 1968, one in 1971 (the Ashtart Well), and three in 1972. Thereafter, the number of offshore wells drilled increased considerably. In 1973 there were five, in 1974 - seven, in 1975 - five, in 1976 - eight, in 1977 - ten, in 1978 - nine and in 1979 - ten. With the increase in the drilling activity, Tunisia began to push eastward¹ and there have been Tunisian drillings in areas to the east of the 26° line, which Libya considers are clearly within its continental shelf. Some of these activities have compelled Libya to register protests. This aspect of the matter will be dealt with further at paragraphs 42 and 52 below. It is particularly interesting to observe the Tunisian push eastward and southward in relation to the known oil trends in the area as portrayed on the *Plate to Annex 10*, Volume III reproduced facing page 20².

40. As already mentioned at paragraph 27 above, Libyan exploration for oil began effectively after the Petroleum Law No. 25 of 1955 came into force, but oil strikes came onshore in mid-1959 and early 1960. Development was so rapid that, in 1961, it was possible to amend the Petroleum Law of 1955 by Royal Decree so as to improve from the Libyan point of view the terms on which concessions were granted, because it was no longer necessary to offer terms that would encourage foreign investment and exploration. An explanation of these changes is given on pages 7 through 16 of the booklet published by the Libyan Petroleum Commission³.

41. The growth of oil production from onshore sources in Libya was rapid and Libya soon took its place among the major oil exporting countries of the world. Offshore, Libya has also been fortunate. Between 1968 and 1976, 15 wells were drilled in the area of Concession 137. (64) Several of these wells, which are portrayed on *Map 6*, are productive. It will be noted that there have been no Tunisian protests against these activities in Concession 137.

¹ This push has been southward toward the Libyan coast as well as eastward. Significantly, Tunisia began expanding its claims to the south and east after the company Aquitaine had discovered oil within Concession 137 granted by Libya. See also, *Map 7* facing p. 26. (65)

² Reference may also be made to the geological evidence and additional plates showing hydrocarbon systems and trends attached as *Annex 10*, Vol. III. (63)

³ See pp. 7 through 16 of the 1961 booklet published by the Libyan Petroleum Commission attached as *Annex 8*, Vol. II.

64 42. It was not until 1976 that Tunisia embarked on a course of protests relating to Libyan activities¹. The protests made have related to activities even when they were considerably on the eastern side of the 26° line and as shown on the overlay to *Map 6* even to the east (and south) of the line of delimitation claimed by Tunisia in its May 1976 Memorandum². As already indicated, Libya on the other hand tried to keep protests to the minimum in view of its paramount interest in joint exploration and exploitation and the status of negotiations between the two States. In fact, the only intergovernmental protest by Libya³ was the one made on 18 April 1976 regarding the buoys placed by Tunisia east of the 26° line. This is a matter to which it will be necessary to revert below in the context of the diplomatic history⁴, but it should be stressed that Libya did not protest the nominal grants of concessions.

43. Before passing to a brief examination of the diplomatic history in Section 4 below, it should be noted that the expression "26° line" is a notional one used for convenience. It represents the direction of the eastern boundary of a concession granted by Tunisia and the western boundary of a concession granted by Libya. It was at no time accepted by Libya as the legal line of delimitation of the areas of continental shelf appertaining *de jure* to Libya⁵. Libyan sovereign rights up to the due north line were declared by the 1955 Petroleum Law and the 1955 Petroleum Regulation issued thereunder and have never been abandoned by Libya nor protested by Tunisia. However, the 26° line and the other lines mentioned in footnote 5 to this page do suggest the kinds of lines that, in the context of negotiations, might have been put forward for discussion. In fact, the 26° line was brought up by Libya in this context at a time when joint exploration was the objective of Libya.

SECTION 4. Relevance of the Diplomatic History

44. Apart from the statement of the Tunisian case in its widely circulated Memorandum of May 1976⁶, the diplomatic history has very little bearing on the question of delimitation of the continental shelf at issue in

¹ To the contrary, during this period Libyan concessionaires regularly used the Tunisian port of Sfax in connection with their petroleum activities. See copies of the correspondence relating to the use of Sfax, attached as *Annex 9*, Vol. II.

² See paras. 52 and 55 below.

³ See, however, para. 55 below.

⁴ See para. 52 below.

⁵ In fact, there have been over the years a number of lines that have had some relevance. In para. 113 below lines of 2° 15' and 8° are mentioned in relation to the 1904 Instruction of Tunisia. The French *Instructions Nautiques* have noted the presence of two unlighted beacons lying offshore, the purpose of which has never been entirely clear, whether as navigational or as boundary markers, but which lie along lines of 8° and 11° respectively from Ras Ajdir. *Instructions Nautiques, Afrique (Côte Nord)—Levant*. Vol. VI, 1968, p. 201. (A copy of this page is attached as *Annex 10*, Vol. II.) These two beacons were inserted on the British Admiralty charts in Nov. 1914 on the authority of a French navigational notice. A line of north/northeast (or approximately 22° 30') is referred to in the 1919 and 1931 Tripolitanian Instructions referred to in paras. 133 and 136 below.

⁶ See para. 4 above.

these proceedings. However, the extensive use made by the Tunisian Memorial of the diplomatic exchanges and truly minor incidents during the discussions (such as the failure of the Parties to draw up agreed minutes or records of meetings) makes it unavoidable that in this Counter-Memorial the diplomatic history should be put into its proper perspective. It might be imagined from the Tunisian Memorial that Libya had adopted a generally spiteful and uncooperative attitude towards Tunisia during the relevant period from 1968 to the signing of the Special Agreement in 1977. Any such impression is completely false.

45. On the contrary, Libya was moved by a deep desire for cooperation and unity. Libya entered into negotiations with Tunisia on a wide range of subjects with that end in view. As a result, there emerged a large number of agreements and related documents dealing with various aspects of cooperation between the two countries. There are 24 such agreements still in force, 16 joint *procès-verbaux* and five joint ventures or enterprises. The aim and object of joint exploration and exploitation of the resources of the continental shelf was no empty dream.

46. A list of these agreements, *procès-verbaux* and joint ventures is given in *Annex 11*, Volume II, but it may be worth mentioning here, in particular the following: Agreement on Economic and Cultural Cooperation signed on 15 August 1970 which came into force on 5 September 1971; Agreement on Agricultural Cooperation signed on 5 September 1971 which came into force on 14 December 1972; two Agreements on Fishing signed on 5 and 6 September 1971 which came into force on signature; Commercial and Customs Agreement signed on 6 June 1973 which came into force on 1 February 1975; Agreement to Facilitate the Transfer of Capital for Investment and its Protection signed on 6 June 1973 which came into force on 1 February 1975; Agreement on Organization of the Work of Tunisian Contracting Companies in Libya signed on 6 June 1973 which came into force on 1 February 1975; Agreement on Property Rights, Work and Professional Activities and Residence signed on 6 June 1973 which came into force on 1 February 1975; and Agreement providing for the Grant of Loans by Libya to Tunisia signed on 2 November 1973 and which came into force on 18 July 1977.

47. Several of these Agreements were the fruit of the work of the Supreme Committee on economic and political cooperation established in accordance with the joint agreements of the leaders of the two countries in December 1972. As indicated in paragraph 38 of the Libyan Memorial, this Supreme Committee was set up for the task of following up and giving effect to the work of a number of specialized technical committees. These included a Committee on the Continental Shelf which, in the spirit of the decision to establish the Supreme Committee on closer economic and political cooperation, was intended to find an appropriate formula for the achievement of all phases of joint exploitation of the maritime areas of the two countries. So far as Libya is concerned, these ventures in cooperation

were undertaken with enthusiasm and in good faith, and expression was given to this general policy by the Djerba Declaration of Unity of 12 January 1974¹.

48. It was no fault of Libya that Tunisia, especially from 1974 onward, pursued a policy of unilateral extension of her maritime claims eastward and seemed almost anxious to find or provoke "incidents". Tunisia seems to have been determined to stretch its grasp into Libyan areas of continental shelf where the prospect of finding oil at commercial depths and in commercial quantities appeared to be better than in areas of the continental shelf appertaining to Tunisia². Even in dealing with Italy in the context of the 1971 Agreement on the Delimitation of the Continental Shelf, Tunisia seemed intent on improving her position against Libya. The line drawn on the map in the region of Lampedusa Island, purporting to be a delimitation between Tunisia and Italy, was extended so as to reach into areas which, in the view of Libya, belonged to it and which it seems clear cannot appertain to Italy or to Tunisia³.

49. Accusations and counter-accusations between the Parties cannot help the Court to solve the problems that have been brought before it by the Special Agreement. Unfortunately, the atmosphere of crisis which, according to Chapter I, Section II, of the Tunisian Memorial, was said to have arisen in 1976-1977 seems to have been carried by Tunisia into the Memorial itself. The so-called crisis was certainly not the creation of Libya which, as the statements made on behalf of Libya show, wished to act in a spirit of brotherhood and conciliation. Tunisia, on the other hand, seeks to cast a shadow of blame over Libya. In paragraph 1.25 of its Memorial, it expresses concern "over the rising tension between the two countries due to the attitude of the Libyan authorities" and, in paragraph 1.21, it accuses the Libyan Government of "expecting Tunisia to agree to a line decided by it alone". Yet it is apparent that it was Tunisia and not Libya that was relying on unilateral extension of its maritime claims both as regards alleged fishery zones and as regards the continental shelf. This is no doubt why the Libyan Government returned the Tunisian *Note Verbale* No. 980 of 15 March 1976⁴. The map attached to that note purports to show "the position of the Republic of Tunisia on the subject of delimitation of the continental shelf between the two countries" and, on the basis of the line shown on that map, to accuse Libya of trespassing on part of the continental shelf belonging to Tunisia. The line shown on that map is arbitrary and drawn unilaterally, running roughly at an angle of 45° from the point where the land boundary meets the sea at Ras Ajdir.

② This line is depicted on the map attached to *Note Verbale* No. 980.

¹ See para. 23 above.

² See para. 39 above and the *Plate* facing p. 20 above.

³ Tunisia has provided no explanation or support for the extension of that line southward on the "1977" Map (O.T.C. 1980) included in the *Tunisian Memorial* in Fig. 1.01 opposite p. 9. See Fig. 3 facing this page which, by overlay, shows the true extent of the line of delimitation. This same distortion appears also in Figs. 1.03 and 1.04 in the *Tunisian Memorial*.

⁴ See *Tunisian Memorial, Annex 24* for a French translation of *Note Verbale* No. 980.

Notice of this "delimitation of the Tunisian Continental Shelf" was given by the Tunisian Minister of National Economy to Groupe Elf-Aquitaine in a letter dated 27 April 1976¹. The letter stated that this delimitation would remain in force until the delimitation of the continental shelf in the region by agreement between the interested parties.

50. One may contrast with this the constant restraint of Libya in using as a point of reference a line drawn in the direction of about 26° from Ras Ajdir which was first adopted by Tunisia in the 1966 concession grant to the French company Aquitaine. However Tunisia may now attempt to present the facts, it is quite clear that Tunisia from 1968 was well aware that a concession following the direction of this line had been granted by Libya to the same company, Aquitaine. This was in spite of the fact that, according to Libyan legislation, Libya regarded the maritime boundary as running due north from Ras Ajdir. It is true that there was never express agreement on the 26° line, but, without any abandonment of legal positions on either side, there was for practical purposes a working arrangement with Aquitaine by virtue of the concessions granted by Tunisia and by Libya to that company. It is, to say the least, an exaggeration to claim, as does the Tunisian *Note Verbale* No. 563 of 13 April 1976², that the Tunisian Government had opposed since 1968 the concession granted by Libya of Concession 137. Where are the protests by Tunisia? They are not to be found in paragraph 1.07 of the Tunisian Memorial; nor even in the unilateral record of the discussions in July 1968 between representatives of the Parties³ which states that a foreign company had signed with the two countries agreements having for their field of activity neighbouring maritime regions. This was obviously a reference to Tunisian Concession No. 17 and the Libyan Concession 137. Indeed, the record seems to show that the discussion was almost entirely related to the claim by Tunisia to a fishery zone extending as far as the 50 metre isobath and the Libyan claim to a due north line. There does not appear to have been any discussion of the line beyond the 50 metre isobath, and the 45° line claimed by Tunisia for the fishery zone would affect only a very small part of the area of Concession 137. It is futile, in the light of this evidence and the facts as they are known, for Tunisia to say, as it does in footnote 1 to paragraph 1.05, that the area of the Concession has never been "officially" publicized by Libya and that the only information given to Tunisia by the Libyan Government regarding the area to which it relates is contained in a *Note Verbale* of 30 March 1976. It is obvious that Tunisia was well aware of the Concession granted to Aquitaine, as appears from the diplomatic history presented by Tunisia itself and in particular the unilateral record of the July 1968 meeting⁴.

¹ A copy of this letter is attached as *Annex 12*, Vol. II.

² See *Tunisian Memorial, Annex 27* for a French translation of *Note Verbale* No. 563.

³ *Ibid.*, *Annex 8*.

⁴ *Ibid.*, *Annex 8*. Libya does not accept the accuracy of this record or any of the unilateral records produced by Tunisia and expressly reserves its position in their detail. It is, however, affirmed that in the Libyan view it was the Tunisian representatives who refused to sign the *Procès-Verbal* of the meeting in July 1968.

51. As appears from the Libyan *Note Verbale* of 30 March 1976¹, the attitude of Libya was conciliatory. Libya believed that there was in fact a common understanding about the use of continental shelf areas on either side of the 26° line, but above all wished to proceed in a cooperative manner. Libya was not in fact relying on a line established unilaterally and in an arbitrary manner, such as the line which Tunisia purported to establish unilaterally as shown on the map attached to its *Note Verbale* of 15 March 1976².

52. This attitude of Tunisia is not due to any accident or oversight but is obviously a sustained and deliberate policy. Reliance on the Tunisian unilateral line of 15 March 1976 emerges again in the Tunisian Memorial. It is used as a basis for objection to the Libyan attitude in connection with three buoys which Tunisia sought to place within the area of Concession 137³ and four buoys which Libya for its part sought to place within the same area⁴. In paragraph 1.23 of the Tunisian Memorial, Tunisia excuses the three buoys on the ground that they were "well to the west of the line shown on the map annexed to the Tunisian Note of 15 March 1976". On the other hand, it should be noted that the Tunisian buoys were well to the east of the 26° line and in an area where drilling in exercise of the Libyan Concession had been going on for some considerable time. The three Tunisian buoys were in an area approximating the location 33° 51' N; 12° 03' E. Yet, as must have been well known to Tunisia, a Libyan oil well had been completed in the region in 1971 in a position 33° 34' 57" N; 12° 06' 32" E. It may be mentioned that, also in exercise of the Libyan Concession, the drilling of a dry hole was completed in 1975 at 33° 51' 41" N; 12° 05' 24" E, and an oil well was completed in 1976 at 33° 51' 41" N; 12° 04' 24" E. These activities, which must have been known to Tunisia, were never the subject of protest. Indeed, the first attempt by Tunisia to interfere with activities of Libya was when it protested to the laying of the four buoys on the Libyan side of the 26° line. Again, in this connection, reliance is placed by Tunisia on the fact that the point where the four buoys were located was "to the west of the line communicated to Libya by the Tunisian Note of 15 March 1976⁵".

53. The incident of the *Maersk Tracker* is in a different category. There was of course never any intention on the part of Libya to trespass in areas falling within the Tunisian territorial sea. However, it is recalled that there were and are differences between the Parties concerning the delimitation of the territorial sea as between their two countries. The intention was that the *Maersk Tracker* (a Danish supply ship equipped to take soundings and not for drilling operations) should take soundings in areas falling within Petroleum Zone No. 1 as established by the Libyan Petroleum Law and Regulation of 1955. The reaction of the Tunisian

¹ See *Tunisian Memorial, Annex 26* for a French translation of the *Note Verbale* of 30 Mar. 1976.

² *Ibid.*, *Annex 24* for a French translation of the *Note Verbale* of 15 Mar. 1976.

³ *Ibid.*, *Annex 31*. See also, *Map 7* facing this page for the location of the Tunisian buoys.

⁴ See *Map 6* facing p. 20 above.

⁵ See *Tunisian Memorial*, para. 1.24.

Government was understandable, but there does not seem to be any reason why the vessel should not take soundings in areas of the high seas, especially in areas which were regarded as being part of the continental shelf of Libya. It was perhaps unfortunate that the coordinates defining the area of operation of the *Maersk Tracker* went slightly west of the boundary of Petroleum Zone No. 1 (1955), but there is no evidence that the ship carried out any operations to the west of the boundary of the Zone, and in particular, in areas that could properly be regarded as part of the Tunisian territorial sea.

54. The activities of the *Maersk Tracker*, the reactions of the Libyan Government in that context, and the incidents of the buoys in areas which for good reason were regarded by Libya as falling clearly within its continental shelf constitute extremely thin justification for the charge made in paragraph 1.25 of the Tunisian Memorial. It is there said: "Concerned over the rising tension between the two countries *due to the attitude of the Libyan authorities*, the Tunisian Government decided to address itself for the first time to international opinion...¹". To that end (says paragraph 1.25) the Tunisian Government, on 3 May 1976, gave wide international distribution to a "Memorandum on the Delimitation of the Continental Shelf between Tunisia and Libya", which placed its main reliance on the application of the equidistance method now rightly abandoned in the Tunisian Memorial. It is difficult to imagine any move more calculated to increase tension than the Tunisian appeal to world opinion without any consultation with the Government of Libya.

55. From paragraph 1.27 of the Tunisian Memorial, it appears that by adopting a "very firm attitude" the Tunisian Government hoped to intimidate the Libyan Government and to deter it from exploration and exploitation of its own continental shelf. Several pages of the Tunisian Memorial are largely devoted to the activities of *Scarabeo IV* which, in June 1976, was to begin drilling and prospecting in an area identified by the coordinates "33° 31' 3" N; 12° 24' 4" E"². It was subsequently moved to an area identified by the coordinates "34° 1' 5", 54 N; 12° 34' 13", 34 E." The latter location was described by Tunisia as "unquestionably" situated within the Tunisian continental shelf³. In fact, as can be seen from *Map 6* facing page 20 above, the drilling activities at both locations (indicated on *Map 6* as the two northernmost sites circled in red) were well to the east of the 26° line and were close to the line unilaterally presented by Tunisia in its note of 15 March 1976. The same dictatorial attitude is reflected in paragraph 1.33 of the Tunisian Memorial where it is stated that the location of operation of drilling of the Isis and Zohra Wells (drilled by

¹ Italics added.

² A photograph of the twin platform to the *Scarabeo IV* is shown facing page 26. The daily rental for this platform, on which some 80 persons work at any one time, has been estimated at U.S. \$54,000. In addition, two supply ships and a helicopter serviced the platform at considerable cost. These realities, considered together with the fact that it takes a platform such as the *Scarabeo IV* ten days from the time drilling is halted to the time when the platform may be moved, highlight the obvious impracticality of Tunisia's demand that a platform of this size "leave immediately" (*Tunisian Memorial*, para. 1.32).

³ See *Tunisian Memorial*, para. 1.31.

Total under Tunisian license) was "undeniably" within its continental shelf as was shown by their coordinates "12° 33' 28" E and 34° 33' 59" N" in the case of Isis and "12° 35' 24" E and 34° 28' 52" N" in the case of Zohra¹. Happily, the French company, Total, acting under Tunisian license, did stop work at those two sites in response to Libyan objections.

56. Following the dangerous activities of the Tunisian navy and the threat of proceedings by the Tunisian authorities², the Italian company SAIPEM (the owners and operators of *Scarabeo IV*) also closed down its operations but without authorization from the Libyan Government. It is untrue, as stated in paragraph 1.34 of the Tunisian Memorial, that SAIPEM was being threatened with nationalization by Libya. It is true that the assets of the company's Libyan subsidiary had, on 19 September 1976, been bought by the N.O.C. of Libya. But, these assets did not include the drilling platform *Scarabeo IV* and there was no question whatever of nationalizing the company. The N.O.C., however, was soon able to engage the interest of the American company Reading & Bates Drilling, and the *J.W. Bates* (a drilling ship) was able to resume drilling operations in the area where *Scarabeo IV* had been operating. As stated on behalf of the Libyan Government at the time, it is not correct to say (as does paragraph 1.37 of the Tunisian Memorial) that the *J.W. Bates* was "escorted" by three Libyan naval vessels including a submarine. In fact, it was Tunisia which sent naval forces to the scene with the ostensible purpose of preventing the *J.W. Bates* from performing the very precise task of "spudding"³ by circling the ship and causing waves that hampered the operation⁴. For this reason, Libya did send naval units to the site as a warning so that the operations could proceed. There could not properly be any ground for objection by Tunisia to the presence of Libyan vessels on the high seas for the purpose of protecting a drilling unit belonging to a foreign company performing services for the N.O.C.

57. It was in the context of the Tunisian demand to SAIPEM to stop the drilling operations of *Scarabeo IV* that Major Jallude in a press interview made the statement of 15 March 1977 attributed to him in paragraph 1.35 of the Tunisian Memorial. Moreover, the statement made was factually correct. Whether, strictly speaking, intended as a delimitation or not, a concession was granted by Tunisia in 1966 to the

65 ¹ See *Map 7* facing p. 26 for the location of the Isis and Zohra Wells. *Map 7* also portrays all Tunisian offshore petroleum activities.

² See the *Procès-Verbal* of 17 Feb. 1977 attached as *Annex 49* to the *Tunisian Memorial*. Within the period between 17 Feb. 1977 (the date of delivery by a Tunisian warship of the *Procès-Verbal*) and 27 April 1977, the Tunisian navy made 14 visits to the site at which the *Scarabeo IV* was stationed. This prompted the Italian authorities to send warships to protect Italian lives and property. Numerous Italian warships were reported to have visited the site. See *Annex 13*, Vol. II.

³ "Spudding" refers to the first boring of the hole in the drilling of a well. WILLIAMS, Howard R. and MEYERS, Charles J.: *Oil and Gas Terms*. 4th edition. New York, Matthew Bender, 1976, pp. 563 and 564. (Copies of these pages are attached as *Annex 14*, Vol. II.)

⁴ The Tunisian warship No. E7 delivered a warning from the Tunisian Ministry of Defense to the drilling ship *J. W. Bates*, and the Tunisian Ambassador in Washington, D.C. threatened the owners of the ship that the Tunisian Government would use any measures under its control to cause the operation to cease. See *Annex 15*, Vol. II.

French company, Aquitaine, the eastern boundary of which followed the direction of the 26° line from Ras Ajdir. In 1968, Libya granted a concession to the same company with the 26° line as its western boundary¹. There could be no doubt that Tunisia was in fact well aware of this grant by Libya², which was the occasion for the talks in July 1968 when, as is shown by the unilateral record of Tunisia, discussion was devoted to the question of Tunisian fishery rights and the Libyan claim to a line running northward from Ras Ajdir. There was no complaint at that meeting about the western boundary of the Libyan concession. Nor was there any attempt by Tunisia to interfere with Libyan operations east of the 26° line until 1974. Tunisian statements to the contrary do not carry conviction³.

58. On 2 June 1977, Colonel Ghadafi made a statement, a French translation of which has been set out in Annex 65 to the Tunisian Memorial⁴. Colonel Ghadafi reiterated the position of Libya based on the corresponding grants of concessions in 1966 by Tunisia and in 1968 by Libya and stressed that the drilling by *Scarabeo IV* was 45 kilometres to the east of the dividing line between the concessions, although Tunisian propaganda had wrongly given the people of Tunisia the impression that the drilling was in the "Gulf of Gabes". While stressing the unreasonableness of the line put forward by Tunisia, which would have extended the Tunisian continental shelf to a point north of Al-Khums⁵, the statement was a model of patience and self-restraint and emphasized that the proper solution lay in Arab unity and the unification of the two States—a reflection of the still pending Djerba Declaration of Unity. Nevertheless, having been in touch with President Bourguiba of Tunisia, Colonel Ghadafi was prepared to accept a settlement of the problem by appeal to "arbitration".

59. If there was any crisis, therefore, it was precipitated by Tunisia rather than by Libya. As the record shows, Libya has throughout adopted a conciliatory attitude without yielding her legal rights to the "firm attitude"⁶ and demands of Tunisia. Libya has been anxious and willing for cooperation as between brother Arab States and in particular wished to reach agreement on joint exploration and exploitation by the two States. In this spirit of conciliation, Libya agreed with Tunisia to submit the matter to judicial settlement and now willingly accepts adjudication by this honourable Court in accordance with the Special Agreement.

¹ See para. 36 above.

² See para. 50 above.

³ In para. 1.39 of the *Tunisian Memorial*, reference is made to a television broadcast on 29 May 1977 by Mr. Atteiga (who had taken part in the discussions with Tunisian experts on the "Continental Shelf Committee") and the map that was shown on this broadcast. This map has been reproduced as *Annex 16*, Vol. II. As the map clearly shows, the limits of the petroleum concessions were set forth therein; however the map, contrary to the assertion made in Fig. 1.05 of the *Tunisian Memorial*, does not refer to these limits as in any way constituting a delimitation boundary. What is said above about Major Jallude's statement applies substantially to Mr. Atteiga's statement.

⁴ A copy of an English translation of Colonel Ghadafi's statement is attached at *Annex 17*, Vol. II.

⁵ Al-Khums is located 56 nautical miles east of Tripoli and 140 nautical miles east of Ras Ajdir.

⁶ See *Tunisian Memorial*, para. 1.27.

CHAPTER II BOUNDARY HISTORY

SECTION 1. Historical Background

60. In Chapters I and II of Part I of the Libyan Memorial very brief references were made to the territorial and political history of Libya and Tunisia. By contrast, the Tunisian Memorial relies extensively on alleged "historic rights"¹ and usage from "time immemorial"². Considerable play is also made with the alleged economic and ecological unity of the "Gulf of Gabes region". Contentions such as these make it necessary to supplement the information given in the Libyan Memorial. In this Chapter, an attempt will be made to outline, as briefly as possible, the history of the boundaries. Other aspects of these matters and a fuller account are set forth in *Annex 6*, Volume III.

61. It is obvious from any good relief map of the whole area that the "Gulf of Gabes region", in the broad sense in which it appears to be used in the Tunisian Memorial, is not in fact a "unit". There is a change in the character of the terrain near the town of Gabes at the western end of the Jeffara Plain and of the Jabal Nefusa which extend westward into Tunisia from a point just east of Tripoli³. This geographical division corresponds approximately to the political position in ancient times⁴. During the Carthaginian period, the territory under the real power of Carthage did not reach as far south even as Gabes. According to the best evidence available, it did not extend beyond the so-called *fossa regia* (the "King's Ditch"), which terminated just south of Sfax.

62. There is no evidence that the Carthaginians ever unified the entire littoral from Ras Kaboudia to Tripolitania under a single political administration. The area from Gabes to the Cyrenaican border was briefly under Carthaginian control but the Carthaginian claim was bitterly disputed by King Masinissa who regarded the entire district of Emporia as his ancestral heritage. Emporia was the whole region from south of the *fossa regia* at Sfax, as far as the eastern Tripolitanian border⁵. The important point is that even when the district of Emporia was briefly under Carthaginian control it was still administered as a separate district from Leptis Magna (Lebda) in Tripolitania, not from Carthage. When annexed by Rome, the *regio Tripolitana* continued as a separate administrative and tax district—separate that is from the main province of Africa whose boundaries followed those of the earlier Carthaginian territory and were defined by the *fossa regia*.

¹ See, e.g., *Tunisian Memorial*, paras. 4.07, 4.13, 4.36, 4.89, and 4.94.

² *Ibid.*, para. 4.13.

³ See *Fig. 4* facing p. 76. In fact, during ancient history the natural dividing boundary of the region corresponded with the Chott el-Djerid - Chott el-Fedjadj region, the area called "Lake Triton" by the Greek historian Herodotus (Fifth Century BC). See *Annex 6*, Vol. III, p. 36.

⁴ Authority for this historical summary may be found in *Annex 6*, Vol. III, and the citations therein contained.

⁵ *Ibid.*, p. 36.

63. In the period of the Roman Empire this boundary was extended by a military road which ran from Gabes to Haidra, near Tebessa, but not beyond Gabes. By the Third Century AD, the *regio Tripolitana* was formally defined by reference to the *limes Tripolitanus*, an inner escarpment of the Djebel Dahar and Jabal Nefusa as far as Leptis Magna, which remained the administrative centre of the region¹. The reforms of Diocletian at the end of the Third Century finally detached Tripolitania as a separate province, which, although it fell within the diocese of Africa, was nonetheless regarded as too distant to be ruled from Carthage and was therefore given a governor (*praeses*) who, unusually, had independent military powers. Despite the name of "Tripolis", which strictly meant the three cities of Leptis Magna, Sabratha and Oea, the province also included the cities of Tacape (Gabes) and Gightis (Bou Grara). The ecclesiastical region of Tripolitania in the Fifth Century likewise was composed of the five bishoprics of Leptis Magna, Sabratha, Oea, Tacape and Girba (Djerba). When the rest of the African diocese was subject to Vandal rule in the Sixth Century, Tripolitania broke away on its own in 533 to rejoin the Byzantine Empire².

64. The historical record of antiquity makes it quite clear that the "natural" frontier on the "Gulf of Gabes" lay at the point where the Mountains of Matmata come down to the coastal plain of the 'Aradh³; and that the territorial unit in ancient history was not the whole "Gulf of Gabes", as alleged by the Tunisian Memorial ("depuis le fond des âges"). On the contrary, the southern half of the "Gulf of Gabes" as far as the region of the *chotts* was often regarded as a nomadic no-man's-land and the coastal strip was often associated with the *regio Tripolitana* to the east rather than with the old African province to the north.

65. In the early Islamic period there is evidence that the border ran well to the north of Gabes and that for short periods Tripolitania extended north of Sfax⁴. Under Ottoman rule, which began in the 16th Century and which extended to what is now the territory both of Tunisia and of Libya, there were no boundaries separating areas of sovereignty. There were only areas of administrative control. The Gabes area was a sort of free zone. The inhabitants along the coast lived and moved their habitation without reference to boundaries, and the areas of Gabes, Djerba and El Biban were not clearly identifiable as Tunisian or Tripolitanian. The local tribes in the south largely ignored the authority of the Beys. Many of the people were nomadic and some of them looked to two masters, one centred at Tunis and one centred at Tripoli.

¹ See the reproduction of a map from the *Journal of Roman Studies*, p. 39 (1949), facing p. 30.

² See *Annex 6*, Vol. III, pp. 36 and 37.

³ *Ibid.*, p. 37.

⁴ *Ibid.*, p. 35, in which reference is made to a Venetian consular treaty dated 9 June 1356 between Ibn Ahmed Ibn Mekki and Bernabo Geraldo which stated, *inter alia*, that Tripoli "... comprenait expressément, outre la ville de Tripoli, les villes de Gabès et Sfax et les Iles de Gerba et Kerkeni, c'est-à-dire la Tripolitaine et la Petite Syrte, ou pays des lotophages".

66. Earlier, during Hafsid times (13th to 15th Centuries) Tunisia (or "Ifriqiya") had been a sovereign entity. However, with the occupation of Tunis by the Turks in 1574, this independent existence ceased, although Hussainid Tunisia was granted wide autonomy by the Sublime Porte. European powers often dealt directly with both Tunis and Tripoli, that is with its officials appointed by the Sublime Porte in these Regencies, but the formal links between the hereditary dynasties (the Qaramanlis in Tripoli; the Hussainid Beys in Tunis) and the Ottoman Empire remained. European powers did not usually consider Tunisia as a sovereign entity, independent of the Ottoman Empire, until the late 19th Century. France, however, as she occupied Algeria, found it convenient to question Ottoman sovereignty as a prelude to her occupancy of the Regency. Great Britain, on the other hand, was most reluctant to accept the French justification of her occupation of Tunisia in 1881 as enshrined in the Treaty of Bardo that the Bey was forced to sign. Great Britain continued to assert that the ultimate power of sovereign decision resided not with the Bey but with the Sublime Porte. Ironically, the Treaty of Bardo (1881) and the subsequent Convention of Al Marsa (1883) made Tunisia into a genuinely sovereign state since the Ottoman claims upon it were implicitly rejected unilaterally. However, it was thereupon relieved of this sovereignty by its assimilation into the French State under the guise of the "Protectorate" theory. Thus, despite the legal fiction of being a Protectorate, in reality after 1883 Tunisia could no longer claim any form of sovereignty, and France acted in its name.

SECTION 2. History of Land Boundaries¹

67. Against this backdrop the matter of land boundaries should be considered. Of course, right up to the start of the 20th Century the very concept of a formal land boundary was by and large a European notion. The question was where the distinctions between areas of jurisdiction lay: where the effectiveness of one authority shaded into and was replaced by that of another. It should be remembered that this did *not* involve questions of sovereignty since, during all but the end of this period, sovereignty remained vested in the Sublime Porte.

68. Beginning in the 17th Century, the situation in the Tunisian Jeffara area followed the fortunes of the two adjacent regencies, the Beys of Tunis and the Pashas of Tripoli. Both sought the support of the tribes in the region in order to extend their respective areas of jurisdiction. Hence early attempts to describe any border between these regencies of the Ottoman Empire were difficult. In a note to the King of France in 1670, the Consul of France in Tunis suggested that the border was at the fortress of "Gerba". In Anthony Knecht's *Guidebook to Tripoli*, probably written in 1767, the border was said to be at Gabes. A Spanish map in the British Museum, dated 1775, placed the border between Gabes and

¹ To aid in locating the various places referred to below in this section, a special map has been prepared and incorporated into this Counter-Memorial, *Map 8* facing this page. Authority for this history is found in *Annex 6*, Vol. III.

² Obviously a reference to Djerba.

"Gerba". A "Mémoire sur Tunis", dated 1777, held by the Ministry of Foreign Affairs in France, suggested the border was located at Djerba. Ali Bey, in 1816, suggested again that the border point was Djerba.

69. The first effective map of Tunisia was drawn by Captain de Sainte-Marie between 1842 and 1849. He was a cartographer sent by King Louis-Philippe of France, but due to ill-health he was unable to map the south in detail. Nevertheless, a year later Djerba was stated to mark the border region in articles on Tunisia and Tripolitania published in a French encyclopedia. Even as late as 1881, after the occupation of Tunisia had begun, the confusion continued. A military itinerary of that year suggested that the border was somewhere south of El Biban. A map accompanying a consular report from Tripoli claimed that the border was at El Biban. A similar report at the end of 1881 from the military attaché in Istanbul also claimed that the border was at El Biban¹. It was only late in 1882 or even 1883 that an undated map (in the French Army archives) shows the border at Ras Ajdir and running down the El Mokta. With this map started the French "maps campaign" which will be discussed in paragraph 73 below.

70. The history of the Tunisian and French eastward thrust after the French occupation and assimilation of Tunisia starting in 1881 is briefly recounted in paragraphs 25 through 29 of the Libyan Memorial. It is necessary to add certain details to this summary. What this history reveals is: first, the expansionist aims of France to push the frontier to the east through a policy of slow encroachment motivated in part (certainly after 1888) by the French "hinterland" policy and her desire to capture the caravan trade from Ghat and Ghadames; second, the inability of a weak Ottoman Empire in its final stage to do more than protest, which it did right down to the final signing of the 1910 Convention; and, third, the difficulties of Italy in intervening on the side of Tripolitania, stemming from a lack both of military strength and of support from European powers, and since it had other interests in Africa which it did not wish to jeopardize, including connections with Tunisia, where a sizeable Italian community existed².

71. By the end of June 1882, French forces had advanced by land to Zarzis and thence up to the Wadi Fessi. Then, based on an investigation and report dated 11 February 1883 of Capitaine Rebillet, a French officer on the spot, the border was asserted to be at the El Mokta. This report became a key document in the French thrust to the east. During the next four years the French unilaterally patrolled the coastal region right up to the claimed border, regularly pushing its advance posts closer and closer to

¹ See also photographic copies of two German maps reproduced in the *Libyan Memorial, Annex 1-6* and the reproduction of a French map entitled "Carte des Côtes de Barbarie" in *Annex 18, Vol. II*. Various border claims during the 17th and 19th Centuries are depicted on *Fig. 9, Annex 6, Vol. III*.

² The Italian community was active economically in Tunisia at this time, and Italy did not wish to jeopardize its position.

the El Mokta and manoeuvred to force the tribes and the Turkish authorities in Tripoli to accept that the border did indeed run along El Mokta. These incursions were not without protest, the most serious being the *Linois* incident.

72. At the start of 1886, the French decided to carry out hydrographic work around the area of Ras Ajdir. Concerned that this might disturb the Ottoman authorities, the Quai d'Orsay asked the Ministère de la Marine to request the Sublime Porte to ensure that his local representatives would not interfere with the work. The Sublime Porte refused. When survey work began, an Ottoman boat appeared and demanded that the buoys positioned off Ras Ajdir by the crew of the *Linois* be removed. The captain of the *Linois* referred back to Tunis, troops were sent from Tripoli but in the end the Ottoman authorities backed down and the buoys remained in place¹. In the aftermath, the French refused to accept the Ottoman protest and privately considered that the authorities at Tripoli had been forced to concede the French claims that the land boundary started at Ras Ajdir. The *Linois* incident is a further example of Ottoman weakness in the face of French tactics of *fait accompli*.

73. The next phase in French manoeuvring involved what may be called the "maps campaign". The story is related in its essence by Martel². Briefly summarized, it is as follows. The Quai d'Orsay in 1887 issued instructions to the French War Department to produce new maps, showing the land boundary as France wanted it to be. An agreement between France and Turkey fixing the start of the boundary at Ras Ajdir was alleged in the first quarterly issue in 1887 of the *Bulletin de la Société de Géographie de Paris*. Subsequently, a German map with the same boundary indication appeared³. This attempt to move the frontier *de facto* came to the attention of the Italian Government which interceded with the Sublime Porte to ask France to disavow the statement of the Société de Géographie and the maps based upon it⁴. The French Government on receipt of contemporaneous enquiries from the British claimed that a proposal had been made to the Sublime Porte but no reply received. The Sublime Porte denied having received any such proposal. Then, in the face of Italian objections, France completely confused the situation by denying that any negotiations with the Sublime Porte were in progress and blaming Italy for inventing this story (in spite of clear evidence in the French archives to the contrary).

¹ According to Martel, after the departure of the *Linois*, the local population pulled down the land marker placed there by the survey team. MARTEL, André: *Les Confins Saharo-Tripolitains de la Tunisie*. Tome Premier. Paris, Presses Universitaires de France, 1965, pp. 372 and 373. (Copies of these pages are attached as *Annex 19*, Vol. II.)

² *Ibid.*, p. 375ff. (See *Annex 19*, Vol. II.)

³ *Ibid.*, p. 377. (See *Annex 19*, Vol. II.)

⁴ The Italian intervention is illustrated by a number of documents published among the *Documenti Diplomatici Italiani*, 2d Series Vol. XXI, 1870-1896, pp. 190 and 191, 242 and 243, 275, 282, 316, 325, 333, 351, 372 and 378 through 380. (Copies of these pages are attached as *Annex 20*, Vol. II.)

74. Further incidents occurred leading to the desirability of a formal delimitation of the border. In 1892 France appointed Paul Cambon as its ambassador to the Ottoman Empire. He lost no time in persuading the Porte of the need for a delimitation of the border. In November 1892, the Wali of Tripoli himself proposed to the Bey of Tunis the appointment of a mixed Commission for this purpose after a series of French-inspired border incidents. This proposal led to the Zuara Conference which opened in March 1893.

75. At the Zuara Conference, Tripoli (represented entirely by Ottoman nationals all from the Ottoman army) claimed a border running south from El Biban. Tunisia claimed the El Mokta line. By mid-May the conference had come to an end with no result. In the ensuing months, the French Army moved its garrisons forward almost to the *de facto* frontier. In the ensuing years, while acting cautiously to avoid incidents and to gain the implicit acceptance of the *fait accompli* by the Ottoman authorities, French attention moved south to the Saharan trade routes.

76. Of course, final resolution of the frontier problem came about as a result of the 1910 Convention after the Sublime Porte reluctantly agreed to negotiate, thus implicitly recognizing the Treaty of Bardo. Obviously, the history leading up to this Convention, at which the matter was settled, is recounted here not at all to raise any issue as to the land boundary between Libya and Tunisia which is and remains defined by the Convention itself. It is to put into focus the parallel attempted Tunisian/French thrust to the east starting at the turn of the century in the maritime areas off the Libyan and Tunisian coasts. This policy of expansion has continued down to the present time and to the present dispute¹.

SECTION 3. Growth of the Tunisian Fisheries Claim

77. In the light of the territorial history, it is difficult to see how the claim to fisheries rights in the sense of the exercise of sovereign rights could be regarded as having been exercised by Tunisia from time immemorial in the whole of the region now regarded by Tunisia as coming under the title "Gulf of Gabes". In any event the alleged rights over the fisheries, the claim to which seems to have emerged in comparatively recent times, were initially in the nature of private proprietary rights arising from the practice of fixed fisheries by the inhabitants of the Kerkennah Islands, Kneiss, Zarzis, Djerba and so on².

78. The assertion that these private proprietary rights were subject to the principle of "public domain" only came with the creation of the French Protectorate. It was much resisted by the local inhabitants who by tradition had enjoyed their fisheries in their own right³.

79. It was the sponge and octopus fisheries in which foreign fishermen were interested; but it was only in the 19th Century that the Bey of Tunis

¹ See *Annex 6*, Vol. III, paras. 188 and 189.

² As will be seen in paras. 104 through 107 below, the expansion of Tunisian claims has been not only to the nature of the rights but to the area.

³ For a more detailed discussion see *Annex 6*, Vol. III.

asserted a right to control and license such fisheries as a means of increasing his revenues. This claim, however, was limited to an area which did not extend to places where the depth of water was in excess of 50 metres¹.

80. Tunisian sovereignty was confined to territorial waters. Traditionally the limit of Tunisian territorial waters was three miles along the entire coast including the Gulf of Gabes (in its proper sense). The attempt to extend the outer limit of Tunisian territorial waters to the 50 metre isobath by the short-lived Law of 1962 was opposed by Italy and other maritime powers. Consequently, the Law was repealed. It was replaced by the 1963 Law fixing the limit of Tunisian territorial waters at six miles from the low-water mark along the coast. In 1973, the limit was extended to 12 miles and for the first time the new and controversial baselines purporting to close the "Gulf of Gabes" were introduced², thus again seeking to extend the outer limit of the territorial sea. The 1973 Decree has not been accepted by Libya³.

SECTION 4. The Tunisian Expansion of the Gulf of Gabes

81. There is probably no aspect of the Tunisian Memorial that illustrates better the expansionist attitude and the magical touch of that Memorial than the use of the expression "Gulf of Gabes". The magical touch is seen in the variation in the use of the term "Gulf of Gabes". The meaning attributed to it is by no means constant throughout the Memorial and it is often used without any clear definition or indication of its intended meaning in the particular context. The ultimate objective seems to be to produce a picture of the "Gulf of Gabes region" which is a kind of mirror image of the "Gulf of Gabes" and which extends down the Mediterranean Sea as far as or even beyond the capital of Libya, Tripoli, which lies about 120 kilometres from Ras Ajdir and almost double that distance from the town of Gabes⁴.

82. As to the strict geographical meaning of the Gulf of Gabes, there is no real room for doubt. It is the Gulf whose entrance lies between Ras Yonga on the mainland of Tunisia near the Islet of Kneiss and the Island of Djerba. As pointed out in paragraph 78 of the Libyan Memorial, this is the meaning assigned to the term by both the *Mediterranean Pilot* and the French *Instructions Nautiques*. These are, as stated there, the natural entrance points to the Gulf of Gabes⁵.

¹ Quite to the contrary, as Despois has noted, local Tunisian fishermen lacked the modern equipment to fish for sponges at depths greater than 10 to 12 m. DESPOIS, Jean: *La Tunisie Orientale: Sahel et Basse Steppe*. Paris, Société "Les Belles Lettres", 1940, p. 539. (A copy of this page is attached as Annex 21, Vol. II.)

² These baselines represent a dramatic change from both the 1904 Instruction and the opinion of Sir Travers Twiss relied upon by Tunisia (*Tunisian Memorial, Annexes 77 and 81*) which indicated that closing lines for bays should not exceed 10 miles. See also the discussion of the Tunisian Law of 2 Aug. 1973 in paras. 119 and 126 (iv) below relating to the Tunisian attempt to close the "Gulf of Gabes".

³ See *Libyan Memorial*, para. 141 and Annex I-27.

⁴ See Map 9 facing this page.

⁵ This authoritative definition of the term is nowhere acknowledged in the *Tunisian Memorial*, although it is consistent with the description of the situation of Tunisia and Libya in (footnote continued on the next page)

83. In paragraph 3.14 subparagraph (d), the Tunisian Memorial begins to move away from the more accurate description of the Gulf of Gabes reflected in paragraphs 3.01 through 3.11 and refers to a "vast concavity" which curves landward over a breadth of 90 kilometres. It is there said that the Gulf is bounded by the archipelago of the Kerkennah Islands and on the south by the Island of Djerba.

84. In paragraph 3.17, there is a description of the "region of the Gulf of Gabes" to which it is said many studies have been devoted. This is said to lie between Ras Kaboudia and the Libyan frontier. This description is repeated elsewhere in the Tunisian Memorial, for example in paragraph 4.01. But, as the Memorial proceeds, it appears to be designed to leave the impression that the Gulf of Gabes even in times immemorial extended from Ras Kaboudia to Ras Ajdir¹. Of course, this cannot have been the case because before French pressure eastward and the conclusion of the 1910 Convention, the boundary between Tunisia and Libya was never at Ras Ajdir and there is no particular geographical feature there to mark it as one of the extreme points of the Gulf of Gabes, even if Ras Kaboudia itself could be so regarded.

85. Indeed, this picture of the extent of the Gulf of Gabes is in conflict with the description in paragraphs 4.15 and 4.16 of the Tunisian Memorial, even though they start by a reference to Ras Kaboudia and the Libyan frontier. It is there said that four groups of islands and shoals enclose the waters of the Gulf of Gabes "like a sort of rampart which thus separates them from the high seas". The islands, islets and shoals referred to comprise the archipelago of the Kerkennah Islands, the Kneiss Islets, the Island of Djerba and the shoals of El Biban. Apart from the Kerkennah Islands, which lie offshore between Sfax and Ras Kaboudia, the Kneiss Islets, the Island of Djerba and the shoals of El Biban all lie close inshore. The Kneiss Islets in particular lie close up to the shore in the region of Ras Yonga. So this very description conflicts with the treatment of the Gulf of Gabes as comprising either the whole area whose extremities lie at Ras Kaboudia and Ras Ajdir or even an area enclosed by an imaginary line between the Kerkennah Islands and the Island of Djerba.

- VI 86. The figures and maps produced in the Tunisian Memorial show the same fluctuation and attempted expansion in the use of the expression "Gulf of Gabes". Instances are too numerous to mention. For present purposes it is sufficient to refer to the following examples. In Figure 5.09² "Golfe de Gabès" is written with the letters "GO" starting at the entrance to the Gulf and the word "GABES" ending near the 100 metre isobath.

(footnote continued from the preceding page)

relation with each other in paras. 3.09 to 3.11 of the *Tunisian Memorial*. Para. 3.09, for example, calls attention to the fact that at a considerable distance westward from the frontier point at Ras Ajdir there is a pronounced angle in the direction of the coasts of the two countries; the apex of the angle being "in the hollow of the Gulf of Gabes, to the west of Ras Ajdir".

¹ See, e.g., *Tunisian Memorial*, para. 4.33.

² The attempted expansion is depicted on *Map 9*.

³ See *Tunisian Memorial*, para. 5.27.

In Figure 5.10¹, the words begin in the same place but the word "Gabès" lies east of the frontier point at Ras Ajdir. By contrast, the words "Golfe de Gabès" are written broadly speaking in a triangle formed by the Kerkennah Islands, the Islets of Kneiss and the Island of Djerba on Figure 5.12²; and on Figure 5.13³, the words are written approximately in the same area. On Figure 5.20⁴, the words start in the Gulf proper and continue eastward between the Kerkennah Islands and the Island of Djerba.

39 40 87. Even more remarkable are Maps Nos. 1 and 2 in Volume III of the Tunisian Memorial. Map No. 1 places the words in an arc starting near the entrance to the Gulf of Gabes and ending near the 150 metre isobath north of a point more than half way between Ras Ajdir and Tripoli. On Map No. 2 the words "Golfe de Gabès" start approximately in the same place and end north of Ras Ajdir approximately half way between the 50 and the 100 metre isobath.

88. In the context of the alleged unity of the "ecosystem" of the Gulf of Gabes, it is suggested that "the continental shelf of the Gulf of Gabes" extends at least as far east as longitude 13°E. Apart from the fact that it is not clear what is meant by "the continental shelf of the Gulf of Gabes", this is a remarkable assertion which would seem to extend the area of the Gulf of Gabes, or at least its sea-bed and subsoil, as far east as Tripoli⁵. The use of the expression "Golfe de Gabès" in this sense is without justification.

89. Perhaps the most remarkable stretch or expansion in the use of the expression "Golfe de Gabès" is in the reference to the Gulf of Gabes as "a vast depression" which is said to reach as far as the 250 to 300 metre isobath⁶—that is to say, approximately due north of Tripoli—although not even Map No. 1 in Volume III stretches the lettering "Golfe de Gabès" quite as far as that.

39 90. By this progression, the Tunisian Memorial tries almost literally to turn the Gulf of Gabes (already given an enlarged meaning) inside out so as to create the impression that it covers a large part of the Pelagian Basin. This, of course, is a vital flaw in the Tunisian Memorial because the grossly expanded concept of the Gulf of Gabes is used as a basis for the artificial legal constructions proposed in the latter part of the Tunisian Memorial. The effort is truly ingenious but does not bear examination. It leads to extraordinary statements, such as that made in paragraph 8.20 of the Tunisian Memorial, where it is said: "[W]hereas the Tunisian shelf descends as a whole slowly towards the east over very long distances, that of Libya, on the contrary, sinks quite rapidly towards the greater depths in a general southwest-northeast direction". This statement wholly ignores not only the northward thrust of the African plate but even the bathymetry

¹ See *Tunisian Memorial*, para. 5.36.

² *Ibid.*, para. 5.41.

³ *Ibid.*, para. 5.45.

⁴ *Ibid.*, para. 5.69.

⁵ *Ibid.*, Chap. V, "Supplementary Note No. 4".

⁶ *Ibid.*, paras. 5.29 and 8.23.

in the area with which the Court is concerned. If, for example, one looks seaward from a point such as Marsa Sabratha¹, a fishing port which is a little over halfway in the direction of Tripoli from Ras Ajdir, one sees that the areas lying between the 50 and 100 metre isobaths and between the 100 and 200 metre isobaths stretch northward without change until one reaches the 50 metre isobath somewhere on a level with the Kerkennah Islands and the 100 metre isobath somewhere on the same parallel. The expansion of the Gulf of Gabes into this area is a myth which is apparently used as a device for trying to push the coast of eastern and southeastern Tunisia notionally eastward so as to provide a basis for the geometric constructions that would clearly deprive Libya of a large, even a major, portion of its continental shelf in the area for delimitation in the present case.

SECTION 5. Growth of the Tunisian Continental Shelf Claims

91. Against the background of the observations on the ever-increasing expansionism of Tunisia, note is here made of the steady growth in the continental shelf claims of Tunisia against Libya. For convenience these are given more or less in tabular form:

- (i) Tunisia made no protest against the 1955 Petroleum Law and Regulation of Libya which fixed an international boundary running in a northerly direction from Ras Ajdir².
- (ii) Tunisia granted a petroleum concession in 1964 which included an eastern boundary running in a direction due north of Ras Ajdir³.
- (iii) In late 1966 or early 1967, Tunisia granted a concession to SNPA/RAP with an eastern boundary which was stepped but ran in a direction of 26° from Ras Ajdir⁴.
- (iv) In July 1968, in the negotiations with Libya, Tunisia sought a line in a direction ZV-45° from Ras Ajdir as far as the 50 metre isobath⁵.
- (v) In 1972, Tunisian leaders appeared to welcome proposals for joint exploration and exploitation of the resources of the continental shelf⁶.
- (vi) Nevertheless, starting the same year (1972), Tunisia granted petroleum concessions east of the "26° line"⁷.
- (vii) In 1973, Tunisia rejected the proposal for joint exploration and exploitation and promulgated new controversial baselines⁸.

¹ It may be noted that Marsa Sabratha was formerly known as Marsa Zuaga.

² See para. 30 above and *Tunisian Memorial*, para. 1.19.

³ See para. 31 above.

⁴ See para. 32 above.

⁵ See *Tunisian Memorial*, Annex 8.

⁶ See *Libyan Memorial*, para. 38 and *Tunisian Memorial*, para. 1.12.

⁷ See para. 34 above.

⁸ See *Libyan Memorial*, para. 39; *Tunisian Memorial*, para. 1.14; and para. 80 above.

- (viii) On 26 February 1976, Tunisia issued an informal warning regarding three buoys placed by Tunisia east of the 26° line¹.
- (ix) By the *Note Verbale* No. 980 of 15 March 1976, Tunisia claimed a continental shelf up to a line shown on a map² which ran generally in a northeasterly direction from Ras Ajdir and extended almost as far as longitude 14° E. By a letter, this line was notified to Groupe Elf-Aquitaine as the "delimitation of the Tunisian Continental Shelf"³.
- (x) By its widely circulated memorandum dated 3 May 1976, Tunisia claimed a 43° 21' line from Ras Ajdir to the 50 metre isobath and thereafter an equidistance line measured from (inferentially) the 1973 Tunisian baselines⁴.
- (xi) In the same period, Tunisia objected to Libyan activities east of the 26° line, emplacement of four buoys, scope of operation of the *Maersk Tracker* and drilling by *Scarabeo IV* and the *J. W. Bates*⁵. As noted in paragraph 55 above, some of Tunisia's protests related to Libyan activities in areas well to the east and south of the line of delimitation claimed in Tunisia's Memorandum of May 1976⁶.
- (xii) In 1980, the Tunisian Memorial submitted to the International Court of Justice various "methods" of delimitation each of which would produce a line further east and south than any equidistance line⁷.

¹ See *Tunisian Memorial*, para. 1.23.

² *Ibid.*, para. 1.16.

³ See para. 49 above.

⁴ See *Tunisian Memorial*, para. 1.25 and *Libyan Memorial*, para. 41.

⁵ See *Tunisian Memorial*, para. 1.24, 1.22, 1.31 and 1.37; see also paras. 52 through 58 above.

⁶ See *Tunisian Memorial*, para 1.25.

⁷ *Ibid.*, Chapter IX and Submission II.

CHAPTER III

TUNISIA'S ALLEGED HISTORIC RIGHTS

92. The importance attached by Tunisia to its concept of "historic rights" is manifest. In the terms of Tunisian Submission I.2:

"La délimitation ne doit, en aucun point, empiéter sur la zone à l'intérieur de laquelle la Tunisie possède des droits historiques bien établis et qui est définie latéralement du côté libyen par la ligne ZV - 45° et vers le large, par l'isobathe 50 mètres ...".

The contrast with the *dispositif* of the Court's Judgment in the *North Sea Continental Shelf Cases* is striking. For whereas the Court enjoined that the delimitation of the natural prolongation of each Party should avoid encroachment upon the *natural prolongation* of the other, in the Tunisian Submission it is encroachment upon the area of *historic rights* which is to be avoided. In short, in the Tunisian view, the Tunisian "historic rights" must prevail over the Libyan "natural prolongation".

93. In fact, Chapter IV of the Tunisian Memorial, which is devoted in its entirety to the "historic rights" of Tunisia, concludes with two propositions¹.

94. *First*, that historic titles delimit a maritime zone of which the whole has been recognized at all times as belonging to Tunisia; and, *second*, that the delimitation of the continental shelf cannot bring into question the attachment of this zone to Tunisia.

95. It will be evident that the Tunisian argument rests upon allegations of both fact and law. These need to be examined separately. In the two sections that follow, we shall examine first the question of what, in fact, were the fishing practices upon which Tunisia relies and then turn to the crucial question—which is one of law—of whether, if at all, such practices can dictate the line of delimitation between areas of continental shelf appertaining to Tunisia and areas of continental shelf appertaining to Libya.

SECTION 1. The Alleged Factual Basis for Tunisian Claims

96. Libya would not wish to deny the interest of Tunisia in the coastal fisheries, or the dependence of a limited section of the coastal population upon these fisheries: the relationship between coastal populations and fisheries is a common enough phenomenon, by no means unique to Tunisia. It is nevertheless necessary to examine with some care precisely which fisheries are in question and the actual extent of those fisheries. For although Tunisia stresses the "unity" of the zone in which these so-called "historic rights" existed², it will be seen that, in fact, the fisheries concerned are very different and operate at different depths and in different areas.

¹ See *Tunisian Memorial*, paras. 4.102 and 4.103.

² *Ibid.*, paras. 4.14 through 4.18 and 8.03 through 8.05.

97. The Tunisian Memorial itself distinguishes two types of sedentary fisheries¹: fisheries depending on installations fixed on the sea-bed and fisheries of "sedentary" species.

(a) *Fisheries depending on installations fixed on the sea-bed*

98. These fisheries, undoubtedly of ancient origin and consisting of traps to catch *mobile* species, are in fact—and for obvious reasons—confined to areas very close to the shores of the Kerkennah Islands, Zarzis and Djerba. The point is illustrated quite dramatically by the Tunisian maps, Figures 4.04 and 4.05. The extreme distance from the shore has been variously estimated at 10 to 12 miles². The essential points are, however, that *these fisheries never extended to the 50 metre isobath and even less to the whole shelf area now claimed by Tunisia and, being concerned with a mobile species, do not involve a shelf resource*³. They are, in short, irrelevant to the claim now made by Tunisia⁴.

(b) *Fisheries of "sedentary" species*

99. Paragraphs 4.69 through 4.104 of the Tunisian Memorial are characterized by an obscurity in the definition of the limits of these particular fisheries. The fisheries mentioned in this category appear to be two: sponges and octopus (the langoustes and coral fisheries are in the north and not this area). The octopus, equally, are not a sedentary species and are irrelevant. As to the sponges, although Gidel is cited as saying that the sponge banks extend "environ 15 milles des côtes" and that "[e]lles ne sont pas à cette distance recouvertes de plus de 30 mètres d'eau"⁵, the Tunisian Memorial proceeds not by way of explaining the actual limits of these fisheries, but rather by a description of the way in which the Tunisian surveillance was extended over these fisheries, in the colonial and post-colonial periods. In other words, although the actual limits of these fisheries are not stated, the Court is invited to assume that in fact the limits extended to the 50 metre isobath, the limits of the surveillance zones, or even beyond⁶. Such an assumption would be wholly incorrect.

¹ See *Tunisian Memorial*, para. 4.47.

² *Ibid.* A principal source cited by Tunisia (Despois) points out that fixed fisheries did not exceed a depth of 1.5 to 2 m. DESPOIS, *op. cit.*, p. 534. (See *Annex 21*, Vol.II.)

³ See *Tunisian Memorial*, para. 4.47.

⁴ It may be noted in passing that Tunisia (Fig. 4.04) does not show any fixed fisheries east of a line between the Tunisian coast near Ras Ajdir and the Ras Zira buoy (longitude 11°25' E) and that Tunisia does not give evidence of Tunisian fixed fisheries east of a due north line from Ras Ajdir (longitude 11°33' E) inside the Libyan territorial waters.

⁵ See *Tunisian Memorial*, fn. 2 at p. 107.

⁶ *Ibid.*, para. 4.71. The suggestion is that the Tunisian fisheries extended to 100 m., and that the 1904 Instruction from the Director of Public Works, and the later decree of 1951, actually restricted the Tunisian surveillance to the 50 m. isobath. The only evidence adduced in support of the 100 m. limit is *Annex 80*, a letter of 4 July 1902 from the French Resident-General. Yet the Resident-General refers only to the zone of surveillance as extending in certain places to 100 m. As to the actual fishing practices, he says explicitly, "... la pêche des éponges ne donne guère de résultats pratiques dans des fonds supérieurs à 50
(footnote continued on the next page)

CARTE DES FONDS SPONGIFERES DE LA REGENCE

- - - - - Limite des zones de surveillance
- Baies ou boues
- 1 Baies humides

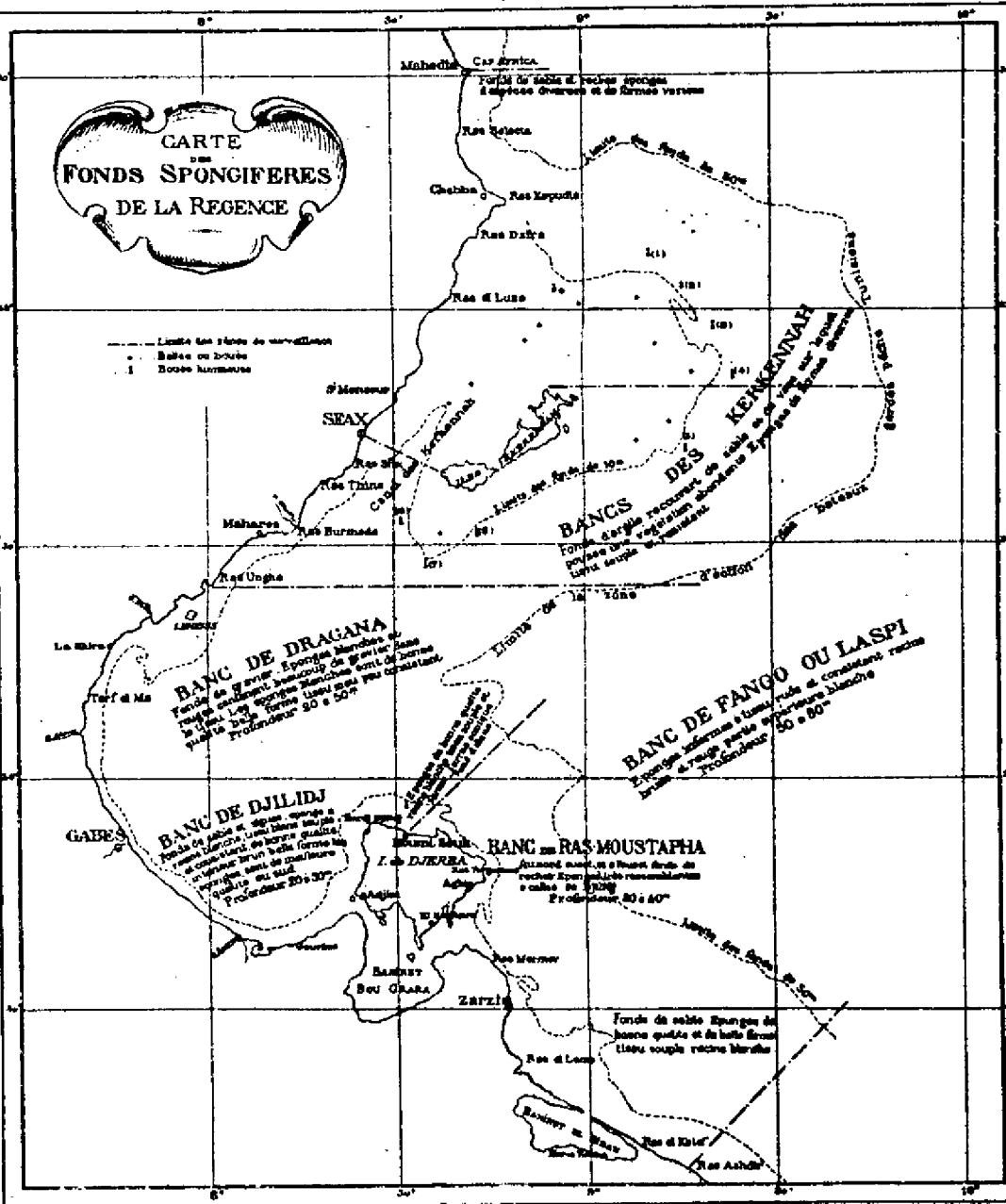
BANC DE DRAGANA
Fonds de gravier, sponges blanches et jaunes, corail, sponges de grande forme et de belle qualité. Les sponges blanches sont de bonne qualité dans les lieux indiqués sur la carte.
Profondeur 20 à 50^m

BANC DE DJILIDI
Fonds de sable et gravier, sponges et corail blanc, sponges de grande forme et de belle qualité. Les sponges sont de meilleure qualité au sud.
Profondeur 20 à 30^m

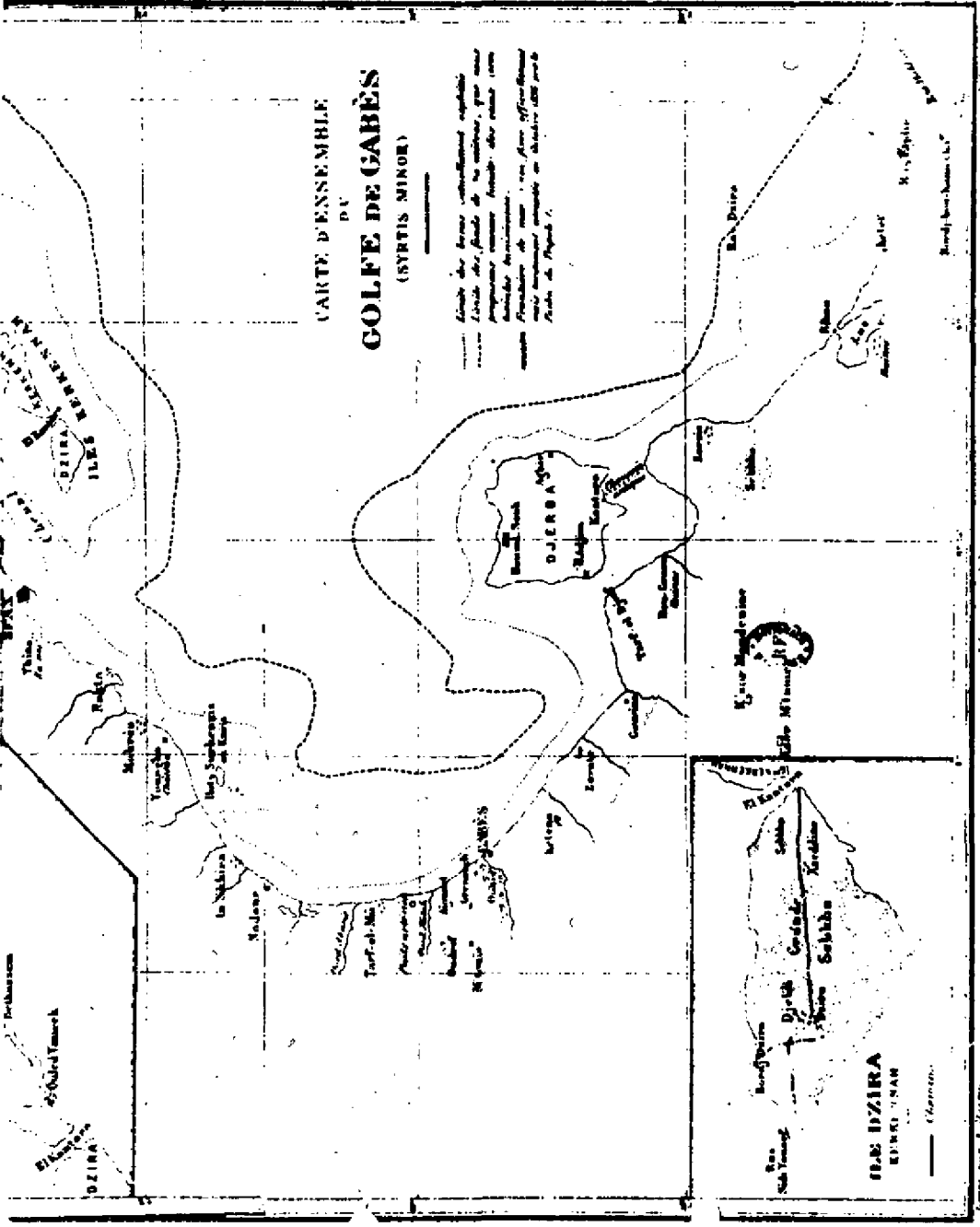
BANC DE RAS MOUSTAPHA
Fonds de sable et gravier, sponges de grande forme et de belle qualité et corail blanc.
Profondeur 20 à 40^m

BANC DE FANGO OU LASPI
Fonds de sable et gravier, sponges et corail blanc.
Profondeur 20 à 80^m

BANCS DES KENKENNAH
Fonds de sable et gravier, sponges de grande forme et de belle qualité.
Profondeur 20 à 50^m



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100. In actual fact, the fixed fisheries were practised in depths up to 3 to 4 metres; fishing on foot by "netcasting" (à l'épervier) was in even shallower waters. The traditional practice of Tunisian sponge-fishing was limited to depths of 10 to 12 metres¹, rarely more; only by the use of diving equipment, a difficult and comparatively modern technique, is it possible to sponge-fish up to depths of 20 to 50 metres. The fishing practiced in depths of more than 50 metres—up to 100 metres—is in fact not fishing of sedentary species². The position emerges rather clearly from the Map dated 1896 and entitled "Carte des Fonds Spongifères de la Régence" which is reproduced from Servonnet and Lafitte facing page 42. This shows the majority of the sponge-banks lying well within the 50 metre isobath, and only poor quality (and in fact widely-dispersed) sponges to the east of that line. As the Map shows, the sponge-banks are not co-extensive with the 50 metre isobath³. A fishing-bank is a precise term⁴ and it will have identifiable limits. The area in question has a number of such banks, some inside and some outside the 50 metre isobath. That isobath is *not* coincident with the banks, but is a limit to the zones of surveillance adopted by Tunisia unilaterally for its own administrative convenience. As can be seen from the Map itself the northeast line starting from Ras Ajdir is not a boundary line but a limit of a "zone de surveillance". This is emphasized by the fact that this Map contains three other similar lines: one starting at the Cape Bon, the second one at Sfax and a third one starting from Djerba.

101. The "zone de surveillance" which is the "zone d'action de l'Etat tunisien en matière de pêches"⁵ was not a zone reserved to nationals but

(footnote continued from the preceding page)

mètres ...". In fact, as noted by Despois (see fn.1 at p. 36 above), sponge fishing was not practiced by Tunisians in depths greater than 10 to 12 m.

¹ See fn. 1 at p. 36 above

² DESPOIS, *op. cit.*, pp. 538 through 540. (Copies of these pages are attached as *Annex 21*, Vol. II.) See also PAPANDEOU, Alexandre: *La situation juridique des pêcheries sédentaires en haute mer*. Extract from *Revue Hellénique de Droit International*, Athens, 1958, p. 63 whose depth figures vary slightly: he would place the sponge-fishing by trident up to 20 m., and by diving equipment up to 50 m., but no more. (A copy of this page is attached as *Annex 22*, Vol. II.) These figures are taken from the Report of François to the International Law Commission. See *Libyan Memorial*, *Annex 1-26*.

³ In fact, in the same book, Servonnet and Lafitte include another map (a reproduction of which also faces p. 42) showing the *actual* limit of Tunisian fishing on these banks in 1888, to be well within even the 20 m. isobath. SERVONNET, Jean and LAFITTE, Fernand: *Le Golfe de Gabès en 1888*. Paris, Challamel et cie., 1888. They proposed a limit of 20 m. to the territorial waters of Tunisia, a proposal which Tunisia did not follow. The following legend appeared on this map: "Frontière de mer non fixée officiellement mais tacitement acceptée en Octobre 1896 [?] par le Pacha de Tripoli". As already noted, at that time the boundary was not fixed at Ras Ajdir. Furthermore, no evidence of tacit acceptance is given either by the authors of the proposal or by Tunisia which, in any event, did not rely on it.

⁴ For an authoritative and scientific definition of bank and fishing-bank, see *Il Mare-Grande Enciclopedia Illustrata*, p. 97, published by the Istituto Geografico de Agostini, Novara. (A copy of this page is attached as *Annex 23*, Vol. II.) It is worthwhile to note that a bank is not a permanent or perpetual feature. It may disappear depending upon various factors. Banks which have existed in the past may well not exist today.

⁵ See *Tunisian Memorial*, *Annex 77*, Sec. 29.

was a zone in which Tunisian authorities controlled fishing methods and equipment used in order to preserve the various species and the banks. The object was not at all the surveillance of maritime areas. This zone in fact was divided into four zones. This can be seen from Article 62 of the 1904 Instructions which reads in part:

“Cette partie de mer est divisée en 4 zones délimitées comme suit: ... *la troisième*: ... Par une ligne partant de Houmt-Souk et se dirigeant vers le Nord-Est jusqu'à la rencontre des fonds de 50 mètres. *la quatrième*: par la ligne partant de Houmt Souk et se dirigeant vers le Nord-Est jusqu'à la rencontre des fonds de 50 mètres; ... Par une ligne partant de ras Ashdir et se dirigeant vers le Nord-Est jusqu'à la rencontre des fonds de 50 mètres¹.”

102. It cannot be supposed that the limits of these zones are all boundaries. And with respect to the Decree of 15 April 1906² Tunisia even omits entirely Articles 2 and 3 (“Divisions du littoral en quartiers maritimes”) from the text set forth in that Annex. Tunisia's selection of the one limit—that is to say the line running northeast from Ras Ajdir—as a boundary is patently arbitrary and self-serving; it is designed to support Tunisia's unilateral decision that such a limit has now become the boundary for continental shelf purposes.

103. The inescapable conclusion is, therefore, that the first Tunisian proposition—namely that Tunisian historic titles existed throughout the *whole* of the maritime zone claimed by Tunisia—is invalid. The truth is that the sedentary species, on which the claim to historic rights depends, were never fished throughout the maritime zone now claimed by Tunisia.

(c) *The nature of the “historic rights”*

104. The absence from the Tunisian Memorial of any analysis of the legal character of the claimed historic rights, arising out of the sedentary fisheries, is designed to serve a purpose. The purpose is to allow a subtle progression of concepts, without subjecting that progression to the rigour of legal analysis. In effect, we have a progression from concepts of possession of the sedentary species³, to concepts of jurisdiction and control over the species⁴, to concepts of ownership over the sea-bed inhabited by the species⁵, to concepts of ownership of the waters above the sea-bed on which

¹ See *Tunisian Memorial, Annex 77*.

² *Ibid.*, Annex 79.

³ *Ibid.*, para. 4.44 (“droit de propriété sur leurs pêcheries”) and paras. 4.57 through 4.61.

⁴ *Ibid.*, paras. 4.50 through 4.56 and 4.63 through 4.66 (“La soumission de principe des anciens titres de propriété aux nouvelles règles de la domanialité publique”).

⁵ *Ibid.*, para. 4.11 (“le fond de la mer ... est susceptible d'appropriation”) and para. 4.12 (“l'Etat acquiert des droits souverains sur le fond de la mer”).

the species are found¹, and finally to a concept of sovereignty over the entire maritime area². The progression is not, of course, presented as such: for that would expose the fallacies which lie behind it.

105. Historically, the rights over sedentary species were essentially proprietary rights belonging to individuals, and Vattel so treated the pearl fisheries of Bahrein and Ceylon³. The transition from individual to State rights was easily made, but they remained property rights. Indeed, it was on this basis that Sir Travers Twiss, Law Officer to the Crown, advised the British Government not to oppose the assertion of rights over sponges and coral by the Bey of Tunis in 1871;

"...there is no objection on principle to the Bey of Tunis asserting an exclusive right to the *fructus* of the banks off the Coast of Tunis, to which Sponges and Polypi attach themselves, although the banks in question are at a greater distance than three miles from the Coast-line, provided the Bey can show a prescriptive enjoyment of such *fructus*. Vattel, lib. i, c. 23, s. 287, admits that nations may acquire a right of property in such *fructus* founded on long continued and exclusive enjoyment, and there are on record many instances of the enjoyment of such right of property⁴."

106. The progression from ownership of the *fructus* to ownership of the sea-bed itself came later, and met with considerable opposition, for it posited the notion of *occupation* of the sea-bed⁵ and this some found to be prejudicial to the overriding principle of the freedom of the seas⁶. Nevertheless, there seemed to be general agreement that, whether or not ownership of the sea-bed was possible, the phenomenon of sedentary fisheries and rights thereto had nothing to do with the more general claim to exclusive fisheries, or with sovereignty over the sea-bed, or with the status of the superjacent waters: these remained high seas, not open to appropriation by a State. As late as 1953, in its Draft Articles on the Continental Shelf, the International Law Commission adopted the following text:

¹ See *Tunisian Memorial*, para. 4.02 ("l'appartenance à la Tunisie des eaux"); paras. 4.46 through 4.89 ("la souveraineté tunisienne sur le Golfe de Gabès"); and para. 4.48 ("la souveraineté tunisienne sur les pêcheries sédentaires").

² *Ibid.*, para. 4.11 ("extensions de souveraineté étatique"); para. 4.83 ("les droits de souveraineté exercés par la Tunisie"); para. 4.88 ("des actes constants de souveraineté exercés de très longue date").

³ See VATTEL, Emmerich de: *Droit des Gens*. Liv. I. London, 1958, Chap. 23, Sec. 287. (A copy of this Sec. is attached as *Annex 24*, Vol. II.)

⁴ See MCNAIR, Sir Arnold D.: *International Law Opinions*. Vol. I. 1956, p. 259. (A copy of this page is attached as *Annex 25*, Vol. II.) Italy took exactly the same view in 1911 in a dispute with France, describing the rights as "les droits de propriété de la Régence de Tunis...". (See *Annex 6*, Vol. III, p. 53.)

⁵ See HURST, Sir Cecil J.B.: "Whose is the bed of the sea?" (*The British Yearbook of International Law*, 1923-1924, pp. 34 through 43.) (In accordance with Art. 50, para. 2 of the Rules of Court, a copy of this article has been deposited with the Registrar.) See also VALLAT, Sir Francis A.: "The Continental Shelf." (*The British Yearbook of International Law*, 1946, p. 334.) (A copy of this page is attached as *Annex 26*, Vol. II.)

⁶ See GUGGENHEIM, Paul: *Traité de Droit International Public*. Vol. I, France, Ministère des Affaires Etrangères, 1953, p. 446. (A copy of this page is attached as *Annex 27*, Vol. II.)

“La réglementation des pêcheries sédentaires dans les régions de la haute mer contiguë à sa mer territoriale peut être entreprise par un Etat lorsque les ressortissants de cet Etat entretiennent et exploitent ces pêcheries depuis longtemps ... Toutefois, cette réglementation ne portera pas atteinte au régime général de ces régions en tant que haute mer¹.”

The Commission's point was patently correct. Powers of control or surveillance, assumed by the coastal State for the protection of fisheries, did not imply sovereignty.

107. It is therefore clear that the Tunisian claim to sovereignty cannot rest on mere evidence of historic rights to sedentary fisheries. Such a claim would require quite separate proof that Tunisian sovereignty had been asserted, and recognized, either in the form of a claim to the maritime areas as *internal* waters (or “historic waters” assimilated to internal waters) or territorial waters.

108. Taking, first, the evidence which might arise from the exclusiveness of the fisheries—for fisheries within the sovereign areas of internal or territorial waters are normally, if not necessarily, exclusive—the facts are that these fisheries have never been exclusive. The Tunisian Memorial itself discloses something of the extent to which concessions to foreigners were made². A more realistic picture emerges from the work of De Fages and Ponzevera³. Although the figures given related to the Tunisian off-shore fisheries as a whole between 1891 and 1893, and not just to the Gulf of Gabes, they are indicative of the extent of foreign fishing. The figures of the annual value of the catch in French Francs are:

	<u>Sponges</u>	<u>Sedentary</u>	<u>Fixed</u>	<u>Free-Swimming</u>
Italians	556,000	214,000	800,000	630,000
Greeks	580,000	—	—	—
French	—	—	—	1,000,000
Tunisians	215,000	165,000	250,000	—

109. The concept behind the Tunisian control was never that of exclusivity. On the contrary, the *Règlement sur la Pêche des Eponges et des Poulpes* of 1892 and 1897 begins, in its first Article, with the statement that “La pêche des éponges et poulpes est libre sur toute l'étendue des bancs tunisiens...⁴”. The policy was to encourage foreign fishing but, by taxes, to derive a revenue from their activities. The Decree of 17 July

¹ U.N. Doc. A/CN. 4/60, p. 49. (A copy of this page is attached as *Annex 28*, Vol. II.) PAPANDREOU, *op. cit.*, p. 104 points out that any relationship between sedentary fisheries and claims to “historic waters” is fortuitous, resulting from the simple fact that such fisheries are often found in bays or gulfs which the coastal State claims as historic waters. (A copy of this page is attached as *Annex 22*, Vol. II.) But the validity of the claim must be sought elsewhere than in the fact of the existence of such fisheries.

² See *Tunisian Memorial*, paras. 4.72 and 4.73.

³ DE FAGES, E. and PONZEVERA, C.: *Les Pêches Maritimes de la Tunisie*. Tunis, Eds. Bouslema, 1908, p. 170. (A copy of this page is attached as *Annex 29*, Vol. II.)

⁴ *Ibid.*, p. 134. (A copy of this page is attached as *Annex 29*, Vol. II.)

1906¹ regarding sponge fishing reiterated the principle of freedom of fishing but in reality it envisaged a system of permits. Foreign fishing was permitted and encouraged subject to a permit being obtained upon payment, and the sponges being landed only at a prescribed Tunisian port. However, this unilateral regulation depended upon an assertion of "Tunisian banks", not of Tunisia's reserved fishing zones, Tunisian territorial waters or sovereign rights².

110. A second category of relevant evidence would be Tunisia's own practice. If, as Tunisia alleges, the whole of the maritime area subject to these historic, sedentary fisheries was under Tunisian *sovereignty*, then one would expect to find that Tunisian legislation reflected such an assertion of sovereignty, and not merely a limited jurisdiction and control sufficient to protect its rights in the sedentary fisheries. As will be seen, the Tunisian practice was to assert a quite limited jurisdiction and control.

111. The Decree of 28 August 1897 concerning the control of sea fishing³ was confined to the territorial sea, then 3 miles. The 1904 Instruction of the Navigation and Sea Fisheries Department distinguished clearly the territorial waters and the sponge-banks⁴ and with regard to the latter claimed, not sovereignty, but rights of "l'exploitation et la police des bancs d'éponges situés sur le littoral, même en dehors de la mer territoriale". The limit of this "zone de surveillance" to the east was "une ligne partant de ras Ashdir et se dirigeant vers le Nord-Est jusqu'à la rencontre des fonds de 50 mètres⁵". The use of Ras Ajdir in 1904 is striking, for it was not until the Convention of 1910 that the boundary was recognized as lying at Ras Ajdir.

112. The notion of a line from Ras Ajdir "vers le Nord-Est" is of further interest, for in 1951, as we shall see, this became "en direction du

¹ See *Tunisian Memorial, Annex 87, II*.

² It is noted that the *Tunisian Memorial* relies heavily on the *Fisheries Case (United Kingdom v. Norway)*, *I.C.J. Reports 1951*, in formulating its "historic rights" argument (paras. 4.07, 4.13, 4.36, 4.89, 4.94). The *Fisheries Case*, however, is clearly not relevant to this case. That case concerned Norwegian baselines and exclusivity of fisheries within territorial waters. The Court there was asked to articulate the principles of international law applicable to the delimitation of *fisheries zones*, an issue quite different from that of continental shelf delimitation. In contrast to the facts in the *Fisheries Case*, Tunisia has never claimed exclusive fisheries in the 50 m. zone. Nor can it be asserted that Tunisia's claims have been acquiesced in by Libya, in contrast to the evidence before the Court in the *Fisheries Case* of British acquiescence in the Norwegian baselines. In addition, Tunisia attempts to show that she has acquired historic title to the entire disputed area—waters to which the concept of historic title simply does not apply. Thus the *mélange* of references and quotations from this case in the *Tunisian Memorial* must be regarded as out of context and inapplicable to this case.

³ See *Tunisian Memorial, Annex 76*.

⁴ *Ibid.*, Annex 77, Arts 28 and 29. This distinction does not emerge from the discussion of this Instruction in the *Tunisian Memorial* (para. 4.76). The same failure to make this distinction between a territorial sea and fishery surveillance zone is seen in the Report by François to the International Law Commission. See *Libyan Memorial, Annex 1-26*.

⁵ *Ibid.*, Sec. 62.

Nord-Est ZV-45°¹⁷". In the 1904 Instruction, Section 62 was addressed exclusively to the four named *Tunisian* vessels charged with surveillance over the fisheries: it was a purely internal, administrative instruction. Moreover, its purpose was to instruct the fishery patrol vessels on the outer limits of "zones de surveillance", defining, as it were, the point at which the patrol vessels were to keep foreign vessels out and inside which to police the activities of fishing vessels in order to protect the species and the banks. It excluded vessels coming from the open sea, and thus had no significance as a line landward of that point, and certainly not as a putative boundary between Tunisia and Tripolitania.

113. In considering what degree of deviation towards the northeast was intended by the 1904 Instruction in using the words "vers le Nord-Est", it seems clear that it did not purport to establish an angle of 45° (as opposed to the 1951 Decree). Article 29 of the Instruction stated that:

"Du temps du fermage, la portion de mer soumise à l'adjudication était limitée par l'usage d'un côté par le rivage, de l'autre par une ligne partant du ras Kapudia, contournant au large les bancs des Kerkennah et de là se dirigeant en ligne droite vers la frontière tripolitaine."

The Tunisian Memorial acknowledges repeatedly that the Instruction did not apply beyond this line (the final point of which was not Ras Ajdir²) but on the contrary limited its application for practical reasons and temporarily to the zone within the 50 metre isobath³. The comparison of the situation of Ras Ajdir (longitude 11°33'E) and the location of the bank which is considered by Tunisia as the easternmost limit of the Kerkennah banks, Ras el Mzebla⁴ (longitude 11°38'14"E), leads to the conclusion that this straight line linking Ras Ajdir and Ras el Mzebla has a northeastern deviation of 2°15' only. The result is much the same even if the comparison is made from Ras Ajdir to Buoy No. 3 which is the easternmost navigational marker in the vicinity of the Kekennah Islands⁵. A straight line linking Ras Ajdir to Buoy No. 3 has a northeast direction of approximately 8°. Therefore, it may be said that when the Director of Public Works mentioned the northeastern direction, he must either have been referring to the small angulation of 2°15' or to an angulation of approximately 8° representing the directions between Ras Ajdir and Buoy No. 3 and not a line ZV-45°⁶.

¹ The 45° line is certainly not identical with a line "vers le Nord-Est" which has no definitive content. Indeed, the 1904 Instruction has referred to this "line" as "toute fictive". For more detailed discussion of the 45° bearing, see para. 115 below.

² See *Libyan Memorial*, para. 120.

³ See *Tunisian Memorial*, paras. 4.80 and 8.03.

⁴ *Ibid.*, para. 3.22

⁵ Buoy No. 3 is located at 34°54'30"N, 11°50'15"E; and a straight line joining it with Ras Ajdir intersects with one of the buoys mentioned at fn. 5 at p. 22 above.

⁶ These locations are portrayed on *Map 10* facing this page.

114. By the decree of 26 July 1951¹, Tunisia established a "reserved zone" of fishing exclusive to Tunisian or French vessels: the zone was defined thus:

"Article 3

... La zone de pêche réservée comprend:

a) de la frontière algéro-tunisienne au Ras-Kapoudia et autour des îles adjacentes, la partie de la mer comprise entre la laisse de basse mer et une ligne parallèle tracée à 3 milles au large, à l'exception du golfe de Tunis, qui à l'intérieur de la ligne Cap Farina, île Plane, île Zembra, Cap Bon est entièrement compris dans ladite zone;

b) du Ras Kapoudia à la frontière de Tripolitaine, la partie de la mer limitée par une ligne qui, partant du point d'aboutissement de la ligne des 3 milles décrite ci-dessus, rejoint sur le parallèle du Ras-Kapoudia l'isobathe de 50 mètres et suit cette isobathe jusqu'à son point de rencontre avec une ligne partant du Ras-Ajdîr en direction du Nord-Est ZV-45°."

115. It will be noted that the zone does not purport to be part of territorial waters. It will also be noted that the eastern limit of the zone was changed from "vers le Nord-Est" in the 1904 Instruction, to "en direction du Nord-Est ZV-45°". This angle of 45° which appeared only in 1951 has been in effect rejected by Libya's Petroleum Regulation of 1955. It obviously cannot be resurrected now. The transition from "vers le Nord-Est" to "en direction du Nord-Est ZV-45°"² would seem to have been made for the purpose of locating more accurately the precise point on the 50 metre isobath at which the zone of surveillance ended. The 1951 Decree does not purport to be establishing a lateral boundary with Libya, nor would it be expected that one of two adjacent States would attempt to achieve a maritime boundary by a *fait accompli* in a unilateral legislative act with respect to fishing.

116. That Tunisia claimed a contiguous fishing zone quite distinct from the territorial sea over which it had sovereignty was made abundantly clear by the Tunisian Law No. 63-49 of 30 December 1963 (perhaps for this very reason a law not cited very prominently by the Tunisian Memorial). Article 1 of the 1963 Law provided as follows³:

"Article 3 (nouveau)

Est dénommée mer territoriale tunisienne: de la frontière tuniso-algérienne à la frontière tuniso-libyenne et autour des îles adjacentes,

¹ See *Tunisian Memorial, Annex 84*.

² The initials ZV appear to mean "Zénith Vertical", a measurement of the true, geographical north, likely to be used by mariners as a means of getting their true location by a sun-sight. The reason for the selection of 45° appears to be that on this bearing the vessel above the 50 m. isobath would be at the shortest distance from Ras Ajdîr compared to any other point on that particular isobath. In any event, it is clearly directed towards informing vessels on the high seas of the point beyond which they may not fish and *not* to providing a lateral boundary between the two coastal States.

³ See *Libyan Memorial, Annex I-16*.

la partie de la mer comprise entre la laisse de basse mer et une ligne parallèle tracée à six milles au large, à l'exception du Golfe de Tunis qui, à l'intérieur de la ligne Cap-Farina, Ile Plane, Ile Zembra et Cap-Bon est entièrement compris dans ladite mer.

Une zone contiguë à la mer territoriale tunisienne telle qu'elle est définie ci-dessus est réservée, dans laquelle seuls des navires battant pavillon tunisien pourront être autorisés à pratiquer la pêche.

Cette zone est définie:

- a) de la frontière tuniso-algérienne à Ras-Kapoudia par la partie de la mer comprise entre la ligne des six milles et celle des [douze] milles marins mesurés à partir de la laisse de basse mer;
- b) de Ras-Kapoudia à la frontière tuniso-libyenne: par la partie de la mer limitée par une ligne qui, partant du point d'aboutissement de la ligne des douze milles marins mentionnés au paragraphe a) ci-dessus, rejoint sur le parallèle de Ras-Kapoudia, l'isobathe de cinquante mètres et suit cet isobathe jusqu'à son point de rencontre avec une ligne partant de Ras Aghadir en direction du Nord-Est $ZV = 45^\circ$."

117. The clear distinction in this 1963 Law between Tunisia's 6-mile territorial sea and the contiguous fishery zone, an area of the high seas claimed out to the 50 metre isobath, is put beyond any possible doubt by the fact that the 1963 Law abrogated not only Article 3 of the 1951 Decree but also the Law of 16 October 1962. The 1962 Law is not mentioned in the Tunisian Memorial: but its text is given in the Libyan Memorial, *Annex I-15*. This Law was, in fact, an attempt to claim the whole area out to the 50 metre isobath as *territorial waters*¹. It met with immediate protest from Italy² and the attempt was therefore abandoned, with the repeal of the controversial claim by the 1963 Law. There could scarcely be clearer confirmation of the fact that, under the 1963 Law, Tunisia's sovereignty—its territorial limits—was confined to a six-mile territorial sea.

¹ It is worthwhile to note that the extent of the territorial sea as stated in the 1962 Law is totally in opposition to the position taken by the Tunisian delegation at the conferences on the law of the sea in 1958 and 1960: "le gouvernement Tunisien considère qu'il doit être permis à chaque Etat riverain de fixer la largeur de sa mer territoriale dans la limite d'un maximum de douze milles" cited by ATALLAH, Yassine: *La Tunisie et le Droit de la Mer*. Mémoire de DEA sous la direction du Professeur René-Jean Dupuy. Université de Nice, Institut du Droit de la Paix et du Développement, 1972, p. 28. (A copy of this page is attached as *Annex 30*, Vol. II.)

² The 1963 Italo/Tunisian Fishing Agreement (see *Tunisian Memorial, Annex 5*) in fact preserved Italian fishing rights in the area out to the 50 m. isobath. It was these fishing rights which Italy considered to be jeopardized by the Tunisian claim to the area as territorial sea, given the normal rule of exclusivity of a coastal State's fishing rights in the territorial sea. See "Le Relazioni tra Italia e Tunisia", which gives an account of the Italian protest against the 1962 Law and indicates that other States also protested against the Tunisian claim to sovereignty out to 50 m. (*Relazioni Internazionali*, Vol. I, 25 May 1963, pp. 639 and 640.) (A copy of this Article is attached as *Annex 31*, Vol. II.)

118. Apart from its repeal of the 1962 Law, the 1963 Law is of interest on two counts. It makes clear that, unlike the Gulf of Tunis (an accepted and recognized "historic bay"), the Gulf of Gabes was not included within territorial waters: that fact alone casts doubt on any Tunisian claim that the Gulf of Gabes has always been "historic waters". It also establishes that the area now claimed by Tunisia as subject to her sovereignty was in 1963 nothing more than a contiguous fishing zone, *on the high seas*.

119. The new Law of 2 August 1973—the current legislation—is portrayed in the Tunisian Memorial as simply a repetition of Article 3 of the 1951 Decree, as modified by the 1963 Law¹. That is scarcely accurate, for it was the 1973 Law which, *for the first time*, purported to embrace the "Gulf of Gabes" within Tunisia's internal waters as a result of the controversial straight baselines adopted in the 1973 Law, and decreed a 12-mile territorial sea from those baselines². The novel treatment of the Gulf of Gabes is particularly striking, for whereas the Gulfs of Tunis and Gabes had previously been treated separately, it was only in 1973 that Tunisia assimilated the two, claiming that the "Gulf of Gabes" was internal waters, on "historic" grounds. Libya does not accept the validity of the 1973 baselines, and Tunisia does not rely upon them in its Memorial for the purpose of drawing a shelf-boundary. To that extent, the 1973 baselines are not in issue in the present case. If, however, it is to be suggested that the 1973 Law in any way gives support to the argument that Tunisia has sovereign rights out to the 50 metre isobath, then Libya must reject that suggestion as being contrary to the whole history of Tunisia's claims in this regard.

120. In reality, it is evident that the legal regime of the maritime jurisdiction of coastal Tunisia does not reflect any unity or stability. As prescribed by the various texts—the Decree of 1951, the Law of 1962, the Law of 1963, the Law of 1973, and the Decree of 1973³—one perceives the successive variations in the size of the territorial sea⁴, of the methods of establishing the baselines, and of the designation of the reserved and contiguous fishery zone. These successive variations in the legislation and regulations clearly contradict the idea of historic rights established since time immemorial and widely recognized since ancient times. An objective analysis leads one to conclude that the contradictory and recent affirmations of territorial sovereignty are quite different from the earlier assertions of the existence of a zone of regulation and surveillance for the protection of certain fishery interests, whether Tunisian or foreign. The "historic" regime only concerned extremely shallow waters and the so-called "historic rights" never consisted of a monopoly of exploitation for Tunisia's benefit. On the contrary, so far as the sedentary species like

¹ See *Tunisian Memorial*, para. 4.82.

² In contrast, both the 1904 Instruction and the opinion of Sir Travers Twiss, relied upon by the authors of the *Tunisian Memorial*, indicated that a gulf could only be regarded as internal waters if its entrance did not exceed ten miles in breadth.

³ It should be noted that the 1962 Law was not annexed to the *Tunisian Memorial* and the 1973 Decree was not even mentioned.

⁴ See *Map 11*.

sponges are concerned, these rights were a legislative, reglementary and jurisdictional power designed to ensure the surveillance of fishing. These rights did not include the exclusion of foreign fishermen. Such exclusion does not appear until 1951. A policy that has been in existence less than 30 years cannot be considered as having an immemorial nature. Until 1973, the various maritime areas considered as the territorial foundation of the historic rights were not territorial waters but zones of high seas¹.

121. The other aspect of Tunisian practice which constitutes relevant evidence, apart from the legislative activity we have just considered, is, of course, the surveillance and control by Tunisian vessels. The description of such surveillance and control² is entirely consistent with a contiguous *fishery zone*: it has no evidentiary weight as a claim of sovereignty. The forms of control—fishery regulations³, fiscal regulations applicable to the fisheries⁴, and arrest of foreign fishing vessels⁵—are all consistent with a fishery zone rather than a claim to internal or territorial waters. We have, for example, nothing to show that Tunisia regulated innocent passage⁶ or navigation, or exercised customs or sanitary control in the sea, which is the kind of control one would expect in a territorial sea.

122. Even the description of the degree and area of control is misleading. The Tunisian Memorial refers to the arrest and trial of 69 vessels "en majorité italiens, mais aussi grecs et tripolitains"⁷. *Map 12* facing this page has been compiled by taking the coordinates given in the Tunisian Annex 89 and plotting them on a standard chart. It can be seen that the record of control, even over fishing, in no way supports the present exaggerated claim to sovereignty far beyond the 50 metre isobath.

123. Annex 89 in fact mentions only one Tripolitanian vessel⁸ - the *I Tre Amici*, but no coordinates are given⁹. However, based on the description "16 milles dans le 90 de la bouée de Ras Zira"¹⁰, it is possible to identify the location of the vessel. For the buoy must be the light buoy off Ras Zira¹¹ and allowing for the possibilities that the location might have been given either by reference to true north or to magnetic north, one has an approximate position of 33° 27' 30" N; 11° 39' E. This would also

¹ It may be noted in passing that the grants of petroleum concessions by Tunisia took no account of the alleged ZV-45° line or of the 50 m. isobath (see para. 32 above).

² See *Tunisian Memorial*, paras. 4.83 through 4.88.

³ *Ibid.*, para. 4.84.

⁴ *Ibid.*, paras. 4.85 through 4.87.

⁵ *Ibid.*, paras. 4.86.

⁶ The curious definition of "innocent passage" in the 1976 bilateral fishing agreement between Italy and Tunisia is discussed in fn. 2 at p. 60 below.

⁷ See *Tunisian Memorial*, para. 4.86.

⁸ *Ibid.*, Annex 89, Entry No. 65.

⁹ In contrast, para. 4.95 of the *Tunisian Memorial* refers to many Tripolitanian vessels. Nonetheless, despite the fact that the *Tunisian Memorial* indicates that this vessel was "Tripolitaine", its owner was apparently Italian. Furthermore, no indication is given in Annex 89 as to the basis for this vessel's alleged seizure.

¹⁰ *Mediterranean Pilot*: 9th edition. Hydrographer of the Navy, Taunton, England, 1974, Vol. 1, pp. 174 and 175. In accordance with Art. 50, para. 2 of the Rules of Court, a copy of this volume was previously deposited with the Registrar. For convenience of reference copies of the foregoing pages are attached as Annex 2, Vol. II.

coincide with the water depth given in the Tunisian Annex (35 mètres). Thus, this one Tripolitanian-registered vessel, owned by an Italian, was seized 16 miles north/northeast of the frontier at Ras Ajdir, outside Libyan territorial waters and on the high seas. No notification of this arrest was ever communicated by the owner to the Libyan authorities, and accordingly no action was taken by them. Moreover, it is significant, as (70) *Map 12* clearly shows, that no vessel was seized by Tunisia in the Libyan territorial waters within the area between the due north line from Ras Ajdir and the alleged 45° bearing¹.

124. The third category of evidence in support of the Tunisian claim is the alleged acquiescence of other States: this is adduced under the sub-title "La tolérance internationale de la souveraineté tunisienne sur le Golfe de Gabès"². As that sub-title suggests, the evidence, such as it is, is related to the Gulf of Gabes and does not support the claims to sovereignty over a very much larger area now made by Tunisia. Even within the limits of the Gulf of Gabes, however, the evidence is unpersuasive.

125. Evidence on the general recognition of Tunisian proprietary rights and ancillary rights to protection and control over the sedentary species asserted is not in issue. For the fact that such rights existed is not disputed. What is disputed is the *geographical extent* of those rights and the *nature* of those rights. Specifically, the relevant evidence must relate to the questions whether such rights ever extended to the whole area now claimed by Tunisia, or even the whole of the area up to the 50 metre isobath, and whether they were rights of *sovereignty* over the area.

126. Reviewing the evidence so far adduced by Tunisia, paragraph by paragraph, it will be seen that the texts cited by Tunisia are not of the same legal order: some are purely internal, administrative instructions, some are acts of legislation and three are treaties. The various texts, discussed below in the somewhat loose order in which they are set forth in the Tunisian Memorial, call for the following observations.

(i) *Instruction by the Director of Public Works of 31 December 1904*³.

As indicated above, Article 29 of this internal, administrative Instruction is limited to an assertion of a fishery zone, not a claim of sovereignty; the 50 metre limit was advocated to simplify surveillance⁴.

(ii) *Decree of 26 July 1951*.

(70) ¹ *Map 12* indicates that most vessel arrests were made in the vicinity of the Kerkennah Islands where the most productive fishing banks exist; and no arrests were made in the Gulf of Gabes.

² See *Tunisian Memorial*, paras. 4.89 through 4.104.

³ *Ibid.*, para. 4.93.

⁴ See fn. 6 at p. 42 above.

As indicated above, this, too, had nothing to do with sovereignty but was expressly stated to be a "reserved" fishing zone.

(iii) *The Law of 30 December 1963*¹.

This, too, stated the zone out to 50 metres to be a contiguous fishing zone, expressly distinguished from territorial waters.

(iv) *The Law of 2 August 1973*².

This, for the first time, claimed to enclosed the Gulf of Gabes, and much besides, within new straight baselines². This was the first attempt so to do, and this certainly raised the issue of sovereignty. The text of the law of 2 August 1973 is in reality a text of circumstance. It was adopted during the spring of 1973 after several months of work in the beginning of the year by the Mixed Tunisian-Libyan Commission. Its goal, as clearly shown in its Article 4, was to assert the Tunisian sovereignty inherent in the idea of a territorial sea. This, in turn, would promote the Tunisian shelf claims then in contention. Not surprisingly, the Law was the subject of express protest by Libya in 1973 and 1979³, and the Tunisian statement that no protest was received is incorrect.

(v) *The "Convention" of 23 March 1870*⁴.

This "Convention"⁵ was an agreement concerning debts. Although certain revenues related to the Bey's proprietary rights in sedentary fisheries ("fermage des poulpes et éponges", "droit sur la pêche du corail", "ferme du poisson"), the "Convention" says nothing about sovereignty or the geographical limits of these rights: it is, therefore, irrelevant to the present argument. The suggestion in the Tunisian Memorial⁶ that the "Convention" demonstrates an indirect consecration of "les droits territoriaux de la puissance côtière" is, therefore, wholly unsupported. One may note, in passing, that of the total

¹ See *Tunisian Memorial*, para. 4.93. It should be noted that the Law of 16 Oct. 1962 has been totally omitted from the Tunisian Memorial. See *Libyan Memorial*, para. 50 and *Annex I-15*.

² See *Tunisian Memorial*, *Annex 86*. The straight baseline purporting to close the "Gulf of Gabes" (without legal justification) does not coincide with the 50 m. isobath, much of which lies outside. Moreover a considerable part of the area within the 50 m. isobath lies outside the alleged territorial waters of Tunisia.

³ See *Libyan Memorial*, para. 141.

⁴ See *Tunisian Memorial*, para. 4.97.

⁵ This is not an international convention in the proper sense of the term, as alleged in the *Tunisian Memorial*. It is an arrangement concluded and signed by the members of an Executive Committee deriving its powers from a Decree of 5 July 1869. See DE CLERCQ, Jules and DE CLERCQ, Alexandre: *Recueil des Traités de la France*. Ministère des Affaires Etrangères, Vol. 15, Paris, 1888, Supp., p. 540. (A copy of this page is attached as *Annex 32*, Vol. II.)

⁶ See *Tunisian Memorial*, para. 4.98.

income envisaged by this arrangement (6,505,000 francs), the "fermage des poulpes et éponges" was 55,000 francs, i.e., less than one per cent.

- (vi) *The Treaty of Fraternity and Neighborly Relations of 6 January 1957 and the Establishment Convention of 14 June 1961*¹.

Neither treaty has anything to do with the delimitation of frontiers, whether land or maritime, and the Tunisian argument that they imply recognition by Libya of the 45° maritime frontier is patently false.

- (vii) *The 1910 Turkish/Tunisian Convention*¹.

This concerned only the land frontier and, as such, is not in issue in the present case, so the Tunisian suggestion that Libya seeks to evade obligations assumed by the Ottoman Empire, contrary to the rules of international law on State succession, is a gratuitous irrelevance.

In light of the above, it must be said that the Tunisian assertion of international recognition of its sovereignty over the area now claimed is without foundation.

- (d) *The factual evidence for Libyan (Tripolitanian) fishing rights in the area*

127. The impression conveyed by the Tunisian Memorial is that Tunisia, and only Tunisia, has rights in the sponge fisheries in the area. It is important to realize that, in the days when the sponge fisheries were more significant economically than today, the sponge-banks were fished right along the coast². These fisheries were never exclusively Tunisian. Indeed, at least prior to 1887, the frontier lay at El Biban so that the fishermen along the coast as far as El Biban were Tripolitanian, not Tunisian.

128. The existence of the Libyan sponge fisheries can easily be demonstrated. Shortly after Libyan independence, in 1952 to be exact, the F.A.O. submitted a Report to the Government of Libya³ under the Expanded Technical Assistance Program. That Report was intended to explore the fishing potential of the Libyan offshore areas generally, but it dealt specifically with the sponge fisheries and illustrated the extent of those fisheries⁴. It will be seen that the sponge fisheries extended along the whole length of the Libyan coast, but were of particularly high quality between Ras Ajdir and Tripoli. Indeed, immediately north of Ras Ajdir

¹ See *Tunisian Memorial*, para. 4.99.

² Pliny records sponge fishing in the Greater Syrtis. PLINY: *Natural History*. Bk. XXXI, para. 131, Cambridge, Massachusetts, Harvard University Press, 1942. (A copy of this page is attached as *Annex 33*, Vol. II.) However, it was only after 1887, as a result of French expertise, that the sponge fisheries were developed and became economically significant. See *Annex 6*, Vol. III, p. 51.

³ SERBETIS, C. D.: *Report to the Government of Libya on the Fisheries of Libya*, F.A.O. Report No. 18. Rome, 1952. (In accordance with Art. 50, para.2 of the Rules of Court, a copy of this Report has been deposited with the Registrar.)

⁴ *Map 13* portrays information relative to sponges set forth in the map accompanying the F.A.O. Report, cited in the preceding footnote.

and extending eastward lay a particularly valuable sponge-bank, originally called the Bank of Farwah¹ and later the "Greco Bank". This appears to have been fished exclusively by Libyans since 1961². In 1951 Italian, Greek and Libyan vessels were involved in the fishery³. In the year 1950, immediately preceding the Report, the annual value of sponge exports from Tripolitania and Cyrenaica combined was 357,700 Libyan pounds⁴, and there existed no evidence of a decline in production.

129. The existence of these sponge fisheries had created the need for an effective jurisdiction and control parallel, in many ways, to that exercised by Tunisia to the west. It was the fact that Libyan fisheries existed in the area, and had given rise to this parallel jurisdiction—exercised successively by Tripolitania, Italy and Libya—that accounted for the lack of any international recognition of Tunisian rights in the same area.

130. From the time of the Italian occupation of Libya in 1911, certain general legislative acts defined the limits of jurisdiction in Libyan waters. Incidental to the Italian invasion of Tripolitania, in 1911, the Italian Government declared a blockade of the Tripolitanian coast, bounded in the west by Ras Ajdir and in the east by Mersa Matruh. The clear indication was that the limit of the blockade seawards lay along the

¹ Farwah is a peninsula of the Libyan coast approximately 7 nautical miles east of Ras Ajdir.

² "Jusqu'en 1961, une vingtaine de gangaviers avaient des autorisations pour aller pêcher dans les eaux libyennes sur le banco greco, très riche en éponge. Ce banc, à cheval sur les deux pays, permet encore des cucifettes intéressantes pour les bateaux, moins nombreux ayant ou non des autorisations." SAIX, Etienne: *Etude des possibilités de développement du secteur des pêches en Tunisie*. Tunisie, Secrétariat d'Etat au Plan et aux Finances. Jan. 1965, p. 26, 1.1.3.4. See also, the Memorandum by Blake and Anderson, published in *Annex 3*, Vol. III, to this Counter-Memorial.

³ The figures given for 1951 are: diver-operating vessels, Greek (56), Libyan (4); Fernez-operating vessels, Greek (11); Gangava vessels, Libyan (6), Italian (22); other boats, Greek (8), Libyan (8), Tunisian (1). SERBETIS, *op. cit.*, p. 24. (A copy of this page is attached as *Annex 34*, Vol. II.)

There was more extensive fishing by foreign vessels than by Libyan vessels, as the figures for the immediately preceding years indicate:

Year	Total Production (kg)	Landed by local boats (kg)
1947	138,665	20,195
1948	75,036	29,994
1949	98,887	8,439
1950	120,628	25,000
1951	100,723	34,954

Sources: SERBETIS, *op. cit.*, p. 37. (See fn. 3 at p. 55 above.) Kingdom of Libya: *Statistical Abstract 1963 Tripoli*, Ministry of National Economy, 1974, p. 165. (A copy of this page is attached as *Annex 35*, Vol. II.)

By 1973, the Libyan fishing population was approximately 900, of whom nearly 400 were foreigners established there. (See SOGREAH: *Study for a General Master Plan for the Development of the Fishing Ports in the Libyan Arab Republic*. Part I, Grenoble, 1973, p. 25.) (A copy of this page is attached as *Annex 36*, Vol. II.) The current estimate of the Libyan fishing population is in excess of 1,000.

⁴ SERBETIS, *op. cit.*, p. 36. (See fn. 3 at p. 55 above.)

meridian of longitude, that is to say due north¹. The Italian Royal Decree of 4 February 1913, No. 85² adopted a 12-mile customs zone, and was made to apply to Libyan waters.

131. A similar 12-mile zone was used for purposes of neutrality legislation in the Royal Decree of 6 June 1940, No. 595³, and again included Libyan waters under the heading of waters of Northern Africa. However, there existed no specific legislation regarding the extent of territorial waters off the Libyan coast and in particular there was no legislative act defining the lateral maritime boundary between Libya and Tunisia.

132. It was in relation to the regulation of fishing that legislative activity was most conspicuous. A Royal Decree of 27 March 1913, No. 312⁴, promulgated a reserved or exclusive fishing zone off the coasts of Tripolitania and Cyrenaica. Sponge and coral fishing was subject to particular rules. For sponge fishing beyond the territorial sea a special license was required and, indeed, fishing throughout the sponge-banks of Tripolitania and Cyrenaica was subject to licensing control, with licenses to foreigners requiring ministerial authorizations⁵. The extent of this licensing control was defined simply by reference to the actual extent of the sponge-banks. The only specific reference to a limit was to the 20 metre isobath, the limit within which dredge or diving-suit fishing was prohibited⁶.

133. The fact that the sponge-banks lay off both the Tunisian and the Libyan coasts obviously required some form of delimitation of jurisdiction, and this seems to have been attempted by the Instructions for the Surveillance of Maritime Fishing in the waters of Tripolitania and Cyrenaica, issued by the Governor of Libya on 16 April 1919. The Instruction provided that:

¹ See the Italian Declaration of 29 Sep. 1911 in *Rivista di Diritto Internazionale*, 1912, p. 557. This Declaration referred to the littoral situated between Longitudes 11° 32' and 27° 54' East of Greenwich. The eastern limit of the blockade was modified by the Italian Declaration of 19 Oct. 1911 following protest by Great Britain. No modification of the Italian Declaration was either asked for by France or unilaterally decided by Italy as to the western limits of the blockade. (A copy of this page is attached as *Annex 37*, Vol. II.)

² Royal Decree of 4 Feb. 1913, No. 85. (A copy of this Decree is attached as *Annex 38*, Vol. II.) This Decree was confirmed in its application to Libya by the subsequent Decree of 18 Mar. 1915, No. 402. (A copy of this Decree is attached as *Annex 39*, Vol. II.)

³ Royal Decree of 6 June 1940, No. 595. (A copy of this Decree is attached as *Annex 40*, Vol. II.)

⁴ Royal Decree of 27 Mar. 1913, No. 312. (A copy of this Decree is attached as *Annex 41*, Vol. II.) This Decree was slightly amended by the Royal Decree of 22 Nov. 1925, No. 2273, but the essential features of the licensing system remained unchanged. (A copy of this Decree is attached as *Annex 42*, Vol. II.)

⁵ Royal Decree of 27 Mar. 1913, No. 312, Arts. 17.4, 19 and 20. These provisions therefore applied outside the customary limits of territorial waters. (See *Annex 41*, Vol. II.)

⁶ *Ibid.*, Art. 25. Accordingly, in the case of both Libya and Tunisia, this was not an assertion of jurisdiction over maritime areas.

“As far as the sea border between Tripolitania and Tunisia, is concerned, it was agreed to adopt as a line of delimitation the line perpendicular to the coast at the border point, which is, in this case, the approximate bearing North-North-East from Ras Adgir¹.”

134. The adoption of a line “normal”—that is to say perpendicular—to the coast at Ras Ajdir was doubtless influenced by the fact that some years earlier, in 1913, the Port Authorities of the Zuara District² had enforced the Decree of 27 March 1913 and had exercised jurisdiction up to this same “normal” line. In that instance³, three Greek fishing boats, equipped with licenses to fish from the Tunisian authorities, had been arrested by the Italian torpedo-boat “*Orfeo*” whilst sponge-fishing some 11.7 miles offshore at a point 33° 19' North latitude and 9° 22' East of Paris⁴. The Zuara Court found that the sponge-banks extended more than 25 miles offshore at that point, and the vessels were therefore within the jurisdictional limits of the 1913 decree. As to whether the jurisdiction was Libyan or Tunisian, the Court found that the vessels were on the Tripolitanian side of the “normal” line and, notwithstanding the Tunisian license, were therefore guilty of violations of the 1913 Decree⁵.

135. There seems little doubt that this assertion of jurisdiction explains the origin of the Italian Governor's Instructions of 16 April 1919. It seems clear that the French had not so far made any reference to any northeast boundary line on the sea. Italy was in fact asserting a jurisdiction incompatible with any such line. It is, therefore, also clear that there was no agreed, lateral boundary but only, so far as Italy was concerned, a provisional demarcation of the two jurisdictions, pending an agreement. The purely provisional nature of the “normal” line was emphasized by the fact that Section 4 of the 1919 Instructions provided that, unless the position of a foreign vessel suspected of illegal fishing could be proved irrefutably, if found within a zone parallel to the provisional boundary and bounded by a line starting at Ras Makabez⁶, the vessels should be expelled rather than seized. This measure was obviously designed to decrease the risk of friction over seizures of vessels, pending an agreed delimitation of the lateral boundary.

¹ Art. 3. (A copy of these Instructions is attached as *Annex 43*, Vol. II.)

² Zuara is a Libyan town located 31 nautical miles from Ras Ajdir and 57 nautical miles west of Tripoli. The headquarters of the maritime district west of Tripoli is located there.

³ See *Annex 44*, Vol. II for unofficial translation of the appropriate part of the Court's sentence.

⁴ To convert the Meridian of Paris to the Meridian of Greenwich one adds 2° 20' 14”.

⁵ It should be noted that the Zuara Court declared the fishermen guilty not of violating Libyan territorial waters or of fishing inside the 20 m. isobath but of trespassing on the sponge-bank itself, since every such bank was regarded as subject to Libyan jurisdiction. This paralleled the Tunisian practice west of Ras Ajdir.

⁶ Ras Makabez is located 7 nautical miles east of Ras Ajdir and 78 nautical miles west of Tripoli.

136. Such an agreement did not materialize, and on 25 June 1931 the Governor issued new Instructions¹, embodying (so far as the lateral boundary is concerned) the same features of a provisional boundary and a "buffer" zone to avoid unnecessary friction with France. The text read:

"[T]he sea border line between Tripolitania and Tunisia is established by an approximate north-north east bearing from Ras Adgir, but in order to avoid any possible disputes, it has been agreed that the demarcation line originate with the same bearing from Ras Makabez in order to establish an area of approximately 8 miles in front of the Ras Adgir-Ras Makabez coastline, in which foreign flag boats that do not have a permit from the Italian maritime authorities must not be sequestered but asked to move on, unless the location in which they were spotted fishing illegally, can be established without any doubt to fall within the boundary."

The exact import of the phrase "it is agreed" is not clear. Certainly there was no formal agreement on delimitation, but it may refer to some inter-governmental agency agreement between the Italian Governorate of Tripoli and the central Government in Rome or tacit *modus vivendi* reached between the Italian and French authorities on the spot. In any event, what is quite clear is that there was no reference to, or acceptance of, any maritime boundary running northeast.

137. As indicated above, it was in the Tunisian Decree of 26 July 1951 that the reference to a 45° line first appeared. The Tunisian 1904 Instruction had defined the terminal point on the 50 metre isobath of the surveillance zone by means of a bearing from Ras Ajdir "vers le Nord-Est"². In 1951 this became "en direction Nord-Est ZV-45°". In the light of the Italian practice, summarized above, it is surprising to find in the Tunisian Memorial³ the assertion that the 45° line was by 1904 internationally established as the Tunisian/Libyan maritime frontier and that it had received the acquiescence of neighboring States, and especially of Italy. Italy, it is said, expressly confirmed its acceptance of such a boundary in the Italo/Tunisian Fishing Agreement of 1 February 1963⁴.

138. The short answer to this contention is that Italy had certainly not recognized or accepted any lateral maritime boundary with Tunisia—whether northeast or at 45°—prior to Libyan independence on 24 December 1951. And Italian conduct after that date is entirely irrelevant, for Italy was no longer in a position to commit the independent State of Libya. However, even if subsequent Italian conduct is looked upon simply as part of an alleged international acquiescence, the statements made in the Tunisian Memorial remain highly misleading and require a short excursus into Italian practice. For it was Italy which protested against the Tunisian Law of 1962, attempting to define the waters within the 50 metre isobath as territorial waters, and it was Italy's protest which

¹ A copy of these Instructions is attached as *Annex 45*, Vol. II.

² See *Map 10* facing p. 48 above.

³ See *Tunisian Memorial*, para. 1.07.

⁴ See fn. 2 at p. 50 above.

brought about the repeal of that Law in 1963. The 1963 Italo/Tunisian Fishing Agreement was a consequence of Italy's opposition to the Tunisian attempt to monopolize the offshore fisheries, and although it brought about the repeal of the 1962 Tunisian Law, it did provide for Italy's recognition of the zone limited by the 50 metre isobath and the 45° line as a reserved fishing zone. Why Italy's recognition of this line was sought must remain a matter for conjecture. What is certain is that the "recognition" was of no practical significance, for such a line concerned Italy not at all. Not one of the four areas in which Italian nationals were granted the right to fish under the 1963 Agreement came into contact at any point with the 45° line.

139. The 1963 Agreement was replaced by a new fisheries treaty in 1971 and this in turn was replaced by a treaty of 1976¹. This, too, contains a reference to the 45° line and in this Treaty the line did have practical effect, for it defined the exclusive fishery zone of Tunisia, which Italy recognized, and within which Italian fishing vessels were granted a right of "innocent passage"². None of the treaties continues in force. The 1963 and 1971 Treaties were terminated, only to be replaced³. But the 1976 Treaty expired in 1979, and is unlikely to be replaced by any further bilateral treaty since the European Economic Community has asserted competence in fishery matters. The contemporary attitude of Italy, insofar as this may be regarded as indicative of international recognition of the Tunisian claims, is illustrated by two Decrees of 24 and 25 September, 1979⁴. Both are concerned with the prohibition of fishing in zones of the high seas, in which a manifest need for conservation of fish stocks appears. And, in the second decree of 25 September 1979, the text in translation provides as follows:

"The Minister of the Merchant Navy

Considering the necessity to ensure the defense of the biological resources existing in certain zones of the high sea in order to guarantee the fishingsness of waters in which operate the Italian fishing-boats;

¹ With respect to the 1971 and 1976 treaties, one should note that *Annexes 6 and 7* of the *Tunisian Memorial*, which reproduce those documents, do not contain the full text of the treaties. These extracts omit the important provision regarding duration which brings into question Tunisia's assertions that these treaties constitute international recognition of the 50 m. isobath - 45° line claims.

² Article XII of the 1976 Treaty speaks of "le passage inoffensif, c'est-à-dire sans pêche. . .". The concept of innocent passage is properly confined to territorial waters and its use in this area is perhaps the legacy of Tunisia's attempt in 1962, checked by Italy, to categorize the area as territorial waters.

³ Italy's retention of fishing rights became steadily more costly under these agreements. Under the 1963 Treaty Italy paid 154 million lire per year; under the 1971 Treaty 1 billion lire per year; and under the 1976 Treaty 2.5 billion lire per year, with other collateral obligations in addition.

⁴ Copies of these Decrees are attached as *Annex 46*, Vol II.

Considering his own decree dated September 24, 1979, which deferred to further legislation the definition of the sea-zones where it is prohibited to Italian ships and nationals to carry on fishing activities;

Considering that the part of the sea delimited by a line which, starting from the point [of] arrival of the line of the twelve miles of the Tunisian territorial waters connects, on the parallel of Ras Kapoudia, with the 50 m. isobath and follows that isobath to its meeting-point with the line departing from Ras Agadir to the North-East-ZV=45°, is traditionally recognized as a zone of fishing restocking;

D e c r e e s :

It is prohibited to Italian nationals and to fishing-boats flying the Italian flag to carry on fishing activities in the zone of the sea as defined in the premises."

140. Thus, whilst as a matter of contemporary practice Italy restrains its nationals and vessels from fishing in the Tunisian reserved zone, Italy regards the zone beyond the 12-mile limit *as an area of high seas*. Nothing could be further from a recognition of the zone as part of the Tunisian national waters, which is what the Tunisian Memorial implies Italy has recognized.

141. Whatever the Italian reaction to Tunisian claims, it can be stated categorically that Libya has never recognized those claims and specifically has never accepted the idea of a lateral boundary with Tunisia on a bearing of 45° from Ras Ajdir¹; for Libya, the maritime boundary has been regarded as running north from Ras Ajdir². In pursuance of this view, Libya has arrested Tunisian fishing vessels trespassing into Libyan waters. However, Tunisia herself would seem to have avoided any overt claim, based upon activity by Tunisian vessels, in the area east of a due north line. For example, Tunisia has pursued oceanographic research, the results of which were published in 1971³. These disclose that none of the research vessels was authorized to operate in the area between the due north line

¹ See *inter alia* the 1913 Royal Decree referred to in para. 132, the 1919 Instructions referred to in para. 133 and the Zuara judgment referred to in para. 134 above.

² See also Law No. 12 of 1959 and the two Decisions enacted thereunder in 1960 and 1961 by the Libyan Nazir of Communication concerning sponge fishing. (Copies of this Law and the Decrees are attached as *Annex 47*, Vol. II). As depicted in *Map 14* facing p. 60, these regulations created a fishing zone the western limits of which ran northward from Ras Ajdir. Although a Tunisian delegation under the supervision of the Tunisian Minister of Foreign Affairs was in Tripoli at the time in connection with negotiations concerning a number of bilateral agreements, no Tunisian protest was made to Law No. 12 of 1959 or the two Decrees.

³ *Bulletin de l'Institut National Scientifique et Technique d'Océanographie et du Pêche*, Salammbô, 1971, Vol. 2, No. 1, pp. 41 through 47, attached as *Annex 48*, Vol. II.

74 and the claimed 45° line¹. This is verified by *Map 15* facing this page on which are plotted the location of the trawls from the tables given at pages 41 through 47 of the official report.

142. Libya has also asserted in light of "considerations of international air navigation and national territorial integrity" that the airspace to the east of a line north of Ras Ajdir up to 36° 30' N is the "firm, inalienable and inviolable" airspace of Libya².

143. In fact, the area to the east of the due north line is an area over which Libya exercises a particular surveillance. For it is one of four offshore areas defined as a security area, an area in which Libyan naval vessels and aircraft conduct military exercises³. During the period of such exercises, all vessels are excluded from these areas.

(e) *The contemporary reality, and economic significance, of the asserted "historic rights"*

144. The Tunisian Memorial portrays the sedentary fisheries as vital both for the population around the Gulf of Gabes and for the economy of Tunisia as a whole⁴. Indeed, it would be only on such a view of their importance that the great emphasis placed on historic rights in the Tunisian Memorial would seem justifiable.

145. In truth, however, the reality of the situation is very different. The coastal areas around the "Gulf of Gabes region" are not uniformly arid, forcing the population to look to the sea for their sustenance. They are areas which have long been and remain today of considerable agricultural significance, producing olives, dates⁵, vegetables and fruit, and also supporting livestock (mainly goats and sheep)⁶. Olives are perhaps the most important agricultural product, and the extent of production is indicated by the following table:

¹ The same organization which carried out the oceanographic research for Tunisia undertook similar research for Libya. At no time was a so-called line of 45° from Ras Ajdir suggested as a delimitation or other boundary line in the course of this research.

² Libyan *Working Paper on Agenda Item 6 for the Forthcoming AFI Regional Air Navigation Meeting in Tanzania from 20 Nov. through 13 Dec., 1979*, p. 2, attached as *Annex 49*, Vol. II. Tunisian efforts to interject the 45° line from Ras Ajdir were firmly rejected by Libya.

³ Libyan Navigation. 9 July 1974. *Portolano del Mediterraneo*. Vol. III, p. 65.

⁴ The material in paras. 144 through 150 is based on a memorandum prepared by Dr. Allan, Senior Lecturer in Geography, School of Oriental and African Studies, University of London, and is included as *Annex 1*, Vol. III.

⁵ See *Tunisian Memorial*, para. 4.32.

⁶ In 1938 southern Tunisia produced 32 per cent. of the country's olive trees. Exports of olive oil from Tunisia were valued at around 8 million dinars in the years 1968 through 1972. The value of date exports in the years 1972 and 1973 was approximately 2.4 million dinars. See *Annex 1*, Vol. III.

⁷ In the 1930s Tunisia exported sheep to Libya, some 65,000 of them in 1938. See *Annex 1*, Vol. III, p. 4.

Southern Tunisia¹
Olive-producing Areas

'000 ha²

	Sfax			Gafsa		
	1971	1972	1973	1971	1972	1973
Olives alone	244.3	219.0	236.5	41.5	41.5	44.0
Olives in association with other crops	68.6	143.5	115.5	77.8	78.0	75.5
	312.9	362.5	352.0	119.3	119.5	119.5

146. The dominance of agriculture over sponge-fishing, or indeed fishing generally, is reflected in the occupations of the inhabitants of the region. The fishing community for the region as a whole (including Sfax and the Kerkennah Islands) is estimated to be around 1.6 per cent. of the population at the present time, and only a fraction of this would be involved in the sponge-fisheries. Yet, whilst one can assert the dominance of agriculture over fisheries as long-established, it is the newer sectors of industry and tourism which have made the contemporary significance of the sponge-fisheries so slight³.

147. Tunisian industry is by no means confined to the extractive industries concerned with phosphates and petroleum: wine, cement, tiles, ceramics, automobile manufacturing, wool, cotton, shoes—all these are examples of the progressive diversification of the Tunisian economy.

¹ SEKLANI, Mahmoud: *Economie et Population du Sud Tunisien*. Paris. Editions du Centre National de la Recherche Scientifique, 1976, p. 73. (A copy of this page is attached as *Annex 50*, Vol. II.)

² ha: hectares.

³ A general picture of the relative importance of the various sectors of the economy can be gained from the following table:

Estimates of the value of production for some
important economic sectors for the South
(million dinars)

	Sfax	Gabes	Gafsa	Medenine	The South	Tunisia
Agriculture (1972)	11.0	5.0	7.0	4.0	27.0	154.0
Industry (1969)	65.2	5.2	12.8	30.5	114.8	463.3
Tourism (1971)	?	?	?	?	11.6	53.8
Fishing (1969)	1.4	0.1	—	0.3	1.8	3.7

Source: SEKLANI, *op. cit.*, pp. 79, 123, 137, 140. (Copies of these pages are attached as *Annex 50*, Vol. II.)

In reading the above table it must be remembered that the figure for fishing includes *all* fishing. Of this, sponge-fishing is but a small fraction, as can be seen from the following figures for the value (thousands of dinars) of production in 1975: inshore fishery (4,771); trawling (2,806); light fishing (1,470); lagoon fishing (686); tuna fish (453); shell-fish (837); sponges (170); coral (99). Source: Tunisian Secretariat of State for Information: *Tunisia's Fishing Production and Value Added 1971-1975*. Tunisia, 1978, p. 156. (A copy of this page is attached as *Annex 51*, Vol. II.)

148. So far as tourism is concerned¹, it must be said that, in dealing with the region of the Gulf of Gabes and Djerba, for the Tunisian Memorial to omit all mention of this highly important sector of the economy is to give a seriously distorted picture. By 1973 some 19,900 Tunisians were employed in the tourist industry, and in the following three years this figure rose by 68 per cent. to some 33,500 persons². It is likely that those employed in sponge-fishing did not exceed 1,000.

149. In economic terms, receipts from tourism rose from 3.7 million dinars in 1963 to 115.2 million dinars in 1975³. To set this in perspective, the value of the production of the sponge fisheries in 1975 was 181,000 dinars⁴ or 0.15 per cent. of the value of the receipts from tourism.

150. We thus have a highly misleading picture presented in the Tunisian Memorial. The whole edifice of argument, designed to demonstrate the antiquity and the reality of the Tunisian interest and suggesting an overwhelming dependence of the coastal population on these fisheries, particularly along the southern coast of the Gulf of Gabes, is totally divorced from the realities of the present situation. The sponge-fisheries are really a legacy from the past, of almost trivial relevance to the economy of the country or the well-being of its population, and they concern a

¹ Note in this connection that Libya has cooperated with Tunisia in promoting the growth of its tourism and its fishing industry (see paras. 45 and 46 above). For example, the Libyan Investment Corporation and the Libyan Arab Foreign Bank participate to the extent of 45 per cent. in the Turqueness Company, owner of the Dar Djerba Hotel.

² Tunisian Secretariat of State for Information, *op. cit.*, p. 99. (A copy of this page is attached as *Annex 51*, Vol. II.)

³ The growth in tourism can be seen in the table below.

Some data on Tunisian tourism							
Receipts TDmn							
1963	3.7	1964	5.4	1965	9.2	1966	13.6
1967	16.4	1968	22.2	1969	26.1	1970*	
1971	53.8	1972	67.4	1973	72.1	1974	79.1
						1975	115.2

* not available.

Source: *Annuaire Statistique de la Tunisie 1974-1975*. Tunis, Service Tunisien des Statistiques, 1975, p. 250. (A copy of this page is attached as *Annex 52*, Vol. II.) See also *Annex 1*, Vol. III.

⁴ The production and value of the sponge-fisheries fluctuates from year to year as can be seen from the following table:

	Sponges	
	tonnes	value TD'000
1969	74	246
1970	32	82
1971	56	205
1972	62	240
1973	64	248
1974	43	167
1975	47	181
1976	70	271

Sources: 1968-1973 *Ministère du Plan*. Tunis, 1975; 1972-1976 *Ministère du Plan*. Tunis, 1976, *Annex VIII*. (A copy of this page is attached as *Annex 53*, Vol. II.)

very small number of people. It is quite extraordinary that, in a contemporary dispute over the delimitation of the continental shelf in which the concern of both parties is patently with the mineral resources of the shelf¹, the Court should be invited to base its decision on interests so trivial as the Tunisian interests in sponge-fisheries.

SECTION 2. "Historic Fishing Rights" and the Delimitation of Maritime Boundaries

151. Traditionally, the existence of "historic" rights, of established fishing practices in sea areas outside the territorial sea, might be found to lie with either coastal or non-coastal States. In the case of coastal States, the rights would be based upon evidence of long-established possession of the *fructus* (these rights justifying a degree of legislative and administrative control); in the case of the non-coastal States, the rights would be based upon established fishing practices. In order to reconcile the two potentially competing sets of rights, the coastal State would proceed by way of licensing, or concession, or agreement. It was exactly in this way that Tunisia reconciled its own rights to the offshore sedentary fisheries and the rights of French, Italian and Greek fishermen.

152. No question of boundary delimitation was involved, for the very obvious reason that, being essentially a high seas fishery, there were no boundaries. There were, necessarily, limits to be established for the areas within which the rights of property, and of surveillance and control, existed. Yet these could *never* be regarded as boundaries in the accepted sense of limits to *sovereignty*. The difference was essentially one between areas of *sovereignty*, reflecting a true boundary as the limit of territorial claims, and areas of *surveillance and control* for limited and specific purposes. That the change to a concept of sovereignty is a very recent change is, indeed, acknowledged by Tunisia in its Memorial:

"Alors qu'autrefois, même des droits exclusifs comme ceux portant sur les pêcheries sédentaires pouvaient être exercés dans des eaux appartenant à la haute mer et non susceptibles, pour cette raison, d'être soumises à des droits souverains..."².

153. This situation changed with the establishment of the doctrine of the continental shelf, that is to say in the period after 1945, the date of the Truman Proclamation³, and probably even after 1950. Initially, it seemed that the continental shelf doctrine might best be regarded as a special form of maritime jurisdiction, rather than an assertion of sovereignty: and this was reflected in the terms of the 1945 Truman Proclamation. However, with the adoption of the 1958 Convention and the rapid growth of State practice in concluding shelf boundary agreements, it became clear that the doctrine was based upon a concept of sovereign rights, albeit limited to the purposes of exploring and exploiting shelf resources. This, however, was a

¹ See para. 6 above.

² See *Tunisian Memorial*, para. 7.15.

³ Presidential Proclamation No. 2667, *Code of Federal Regulations*, Vol. 3, 1943-1948, p. 67. (A copy of this page is attached as *Annex 54*, Vol. II.)

very recent development¹, and it has nothing in common with the kind of historic rights on which Tunisia relies. Not only is it impossible to postulate Tunisian historic rights affecting the continental shelf boundary prior to the establishment of the legal regime of the continental shelf but, equally, it cannot be said that any acquiescence² by Libya in Tunisian fishery claims could affect Libya's position regarding the shelf boundary. For, prior to the establishment of the shelf regime, there could be no assertion of sovereignty in which Libya might be said to acquiesce. It might also be said that it is difficult to establish "acquiescence" in relation to a shelf boundary. For the rights of the State exist *de jure* and are not dependent on occupation or proclamation. Hence, such rights cannot be effected by "acquiescence" in the same way as territorial rights depending upon physical occupation.

154. There certainly remained a question of how far the boundaries to be established under the new shelf regime should be influenced by such historic, traditional fishing rights. In the paragraphs that follow, the evidence of how this question was answered in the discussions in the International Law Commission, in the 1958 Conference, and in subsequent State practice, will be summarized.

155. It cannot be said that, in elaborating the draft Articles on the continental shelf, the International Law Commission gave detailed study to the effect of traditional fishing practices on shelf boundaries. In his Second Report, Professor François, as Special Rapporteur, suggested that in relation to delimitation of the territorial sea the median line might be varied where there were special reasons "telles que des intérêts de navigation ou de pêche"³. However, as his Third Report made clear, such variation was to be embodied in an agreement, and by implication could not be adopted unilaterally⁴. He was, in fact, referring to opposite rather than adjacent States and draft Article 17 on adjacent States made no corresponding reference to fishing interests. It was, however, clear that the Commission felt that analogous rules should be applied to the continental shelf⁵.

¹ In the *Abu Dhabi Arbitration* (*International Law Reports 1951*, pp. 151 and 152) Lord Asquith regarded the shelf regime as not having been established in 1939. (Copies of these pages are attached as *Annex 55*, Vol. II.) The early records of the International Law Commission show the reluctance of the Commission to regard it as an established regime in 1951.

² Libya, of course, denies that there was any such acquiescence in Tunisian claims to sovereign rights. See paras. 127 through 143 above for a description of Libya's own practice and claims to fisheries in the area.

³ U.N. Doc. A/CN.4/61, *Yearbook of the International Law Commission 1953*, Vol. II, p. 77, obviously reflecting the ideas contained in the Report of the Committee of Experts, *ibid.*, pp. 77 through 79. (Copies of these pages are attached as *Annex 56*, Vol. II.)

⁴ U.N. Doc. A/CN.4/77, *Yearbook of the International Law Commission 1954*, Vol. II, p. 6: "Exceptionnellement, les intérêts de navigation ou de pêche pourront justifier un autre tracé de la frontière, à fixer d'un commun accord entre les parties intéressées." (Italics added.) (A copy of this page is attached as *Annex 57*, Vol. II.)

⁵ *Ibid.*, p. 6. (See *Annex 57*, Vol. II.)

156. François' subsequent Reports¹ dealt with sedentary fisheries, but made no reference to their effect on boundaries, and in the Final Draft Articles the express reference to fisheries appeared in neither the articles on delimitation of the territorial sea nor the articles on delimitation of the continental shelf. The reason was that the Commission preferred to use the broader formula of "special circumstances", developed in connection with draft Article 72 on the continental shelf². Indeed, in its Commentary on the Final Draft Articles, the Commission's description of "special circumstances" was confined to "exceptional configuration of the coast, as well as the presence of islands, or of navigable channels"³. There was no mention of fishing interests.

157. The lack of express reference to fisheries continued during the discussions on shelf delimitation in the Fourth Committee of the 1958 United Nations Conference on the Law of the Sea. During the entire discussion only one delegate (Kennedy (United Kingdom)) mentioned fishery rights as a possible "special circumstance" which might justify departure from the equidistance principle⁴.

158. This review of the legislative history of the delimitation provision in the 1958 Convention on the Continental Shelf suggests the following conclusions. The possibility of fishing rights operating as a "special circumstance" was recognized, but the paucity of discussion suggests that the problem was not regarded as a serious one, and the International Law Commission regarded it as one which should be resolved by agreement.

159. Insofar as the 1958 Convention is not the applicable law in the present dispute, the legislative history of Article 6 of that Convention may be said to be irrelevant. There is, however, authority to suggest that the notion of "special circumstances" plays a role in Article 6 which is similar to that of equity under customary international law⁵. It may be helpful to consider how far, in State practice, established fishing rights over sedentary fisheries have influenced continental shelf delimitations. For such State practice will illustrate the application of equitable principles, whether under Article 6 of the 1958 Convention or under customary international law.

¹ U.N. Doc. A/CN.4/97, *Yearbook of the International Law Commission 1956*, Vol. I, pp. 7 and 8. (Copies of these pages are attached as *Annex 58*, Vol. II.)

² U.N. Doc. A/CN.4/Sér. A/1954/Vol. I, *Yearbook of the International Law Commission 1954*, Vol. I, p. 103. (A copy of this page is attached as *Annex 59*, Vol. II.) See also, the resultant formula in Arts. 12 and 72 in the Final Draft Articles, U.N. Doc. A/3159, *Yearbook of the International Law Commission 1956*, Vol. II, pp. 257, 258 and 300. (Copies of these pages are attached as *Annex 60*, Vol. II.)

³ U.N. Doc. A/3159, *Yearbook of the International Law Commission 1956*, Vol. II, p. 300. (See *Annex 60*, Vol. II.)

⁴ U.N. Doc. A/CONF.13/42, *Yearbook of the International Law Commission 1958*, p. 93. (A copy of this page is attached as *Annex 61*, Vol. II.)

⁵ See *Anglo-French Arbitration* (Cmd. 7438), pp. 47 and 48, paras. 65 and 70.

(a) *The relevance of "historic rights" to the delimitation of maritime boundaries as reflected in the practice of States*

160. The location of some of the most famous sedentary fisheries happily coincides with maritime areas in which shelf delimitation agreements exist. Hence, by reference to these agreements, it should be possible to test the Tunisian hypothesis that in matters of shelf delimitation historic rights to these fisheries should prevail, and should exclude the area of these fisheries from the delimitation exercise. It is proposed to take these areas in turn¹.

(i) *The Ceylon Pearl and Chank Fisheries*

161. These chank beds and pearl grounds lie in the Gulf of Manaar and Palk Bay, the latter being regarded by Great Britain as an area of historic waters². By an Agreement of 26-28 June, 1974, India and Sri Lanka agreed on a boundary in Palk Bay, delimiting the continental shelf and subsoil of the Bay³. The preamble recites that the parties have "examined the entire question from all angles and taken into account the historical and other evidence and legal aspects thereof". The Agreement resolved the dispute over Kachativu Island, by allocating it to Sri Lanka and placing it on the Sri Lankan side of the boundary; and by preserving a right of access to it for Indian fishermen. There is, however, no mention of the sedentary fisheries and no suggestion that they affected the boundary in any way. The boundary is in fact a modified equidistance boundary.

162. Likewise in the Agreement of 23 March 1976⁴, establishing a maritime boundary in the Gulf of Manaar, there is no mention of the sedentary fisheries, and the boundary is a modified equidistance line.

(ii) *The Australian (Queensland) Pearl Fisheries*

163. These sedentary fisheries lie off the north coast of Queensland⁵. The sea-bed boundary agreements in the area are the following:

¹ Although the examples of State practice cited below may differ in many respects from the present case, it is interesting to note that these examples involved situations where sedentary fishing was of great importance and yet this factor was not accorded significance in arriving at a delimitation of the continental shelf.

² *Annakumara Pillai v. Muthupayal*, 27 Indian Law Reports, Madras Series, 1903, p. 558. (A copy of this page is attached as Annex 62, Vol. II.) For evidence that H.M.G. regarded the area of chank and pearl jurisdiction, including a right to control foreign fishermen, as extending to 25 mi., see *Parl. Debates* H.C. 5th Ser., Vol. 163, cols. 1417-1418. (Copies of these pages are attached as Annex 63, Vol. II.)

³ *Limits in the Seas*. Washington, D.C., Office of the Geographer, United States Department of State, No. 66, 12 Dec. 1975. (In accordance with Art. 50, para. 2 of the Rules of Court, a copy of this document has been deposited with the Registrar.)

⁴ *Limits in the Seas*, No. 77, 16 Feb. 1978. (In accordance with Art. 50, para. 2 of the Rules of Court, a copy of this document has been deposited with the Registrar.)

⁵ These fisheries also lie off the western coasts, but since there are no delimitation agreements in that area, they are irrelevant to this demonstration. See GOLDIE, L.F.E.: "Australia's Continental Shelf" (*International and Comparative Law Quarterly*, Vol. 3, 1954, pp. 536 and 537) for a map showing the extent of the pearl fisheries jurisdiction. (Copies of these pages are attached as Annex 64, Vol. II.)

(a) *Indonesia/Australia Agreement of 18 May 1971*¹
(the Arafura Sea): this uses equidistance but, in the west, takes account of existing Australian hydrocarbon concessions and the geomorphology of the ocean floor².

(b) *Indonesia/Australia Agreement of 9 October 1972*³
(Arafura and Timor Seas): this delimitation was based on equitable principles relating to the geomorphology of the seafloor and, in part, on the existing Australian petroleum concessions⁴.

(c) *Australia/Papua New Guinea Agreement of 18 December 1978*⁵ (Torres Straits)

164. Whereas the first two agreements make no mention of sedentary fisheries, and ignore them for boundary purposes, the recent 1978 Agreement between Australia and Papua New Guinea is of extreme interest. Article 1, the "Definitions" Article, makes clear that sedentary fisheries are involved, for it gives a definition identical to that used in Article 2(4) of the 1958 Geneva Convention on the Continental Shelf. Moreover, Article 10(3) of the Agreement established a "Protected Zone" within the Torres Strait which has as its principal purpose "to acknowledge and protect the traditional way of life and livelihood of the traditional inhabitants, including their traditional fishing ...". There is no doubt that this traditional fishing includes the traditional, sedentary fisheries, for the "Definitions" Article defines traditional fishing as the taking "of the living natural resources of the sea [and] seabed...⁶". Under the guidance of a Joint Advisory Council, the Parties agree to permit the continuation of such traditional fishing, subject to catch quotas when the full allowable catch is taken. Under Article 22 of the Agreement, these quotas envisage specifically that the inhabitants of the one party can fish in the area under the jurisdiction of the other Party. In the result, therefore, the Parties have established a shelf boundary different from, and without reference to, the quite separate boundaries of this Protected Zone⁷. In short, the traditional, sedentary fisheries have not influenced the shelf boundary in any way. The problems created by these fisheries have been resolved in a quite different manner, by special zones, catch quotas, and a supervisory body.

¹ *Limits in the Seas*, No. 87, 20 Aug. 1979. (In accordance with Art. 50, para. 2 of the Rules of Court, a copy of this document has been deposited with the Registrar.)

² *Ibid.*, p. 7. (A copy of this page is attached as *Annex 65*, Vol. II.)

³ *Limits in the Seas*, No. 87, 20 Aug. 1979.

⁴ *Ibid.*, p. 9. (See *Annex 65*, Vol. II.)

⁵ *International Legal Materials*, Vol. 18, 1979, pp. 291 through 331. (In accordance with Art. 50, para. 2 of the Rules of Court, a copy of this document has been deposited with the Registrar.)

⁶ Italics added.

⁷ See Annexes 6 and 7 to this Agreement, pp. 324 through 327, containing the relevant Maps. (Copies of these pages are attached as *Annex 66*, Vol. II.)

(iii) *The Panamanian Pearl Fisheries*

165. These lie in Panama Bay, around the "Archipelago de las Perlas". The Agreement of 20 November 1976¹ establishing a maritime boundary between Panama and Colombia adopts a modified equidistance line which bears no relation to these sedentary fisheries.

(iv) *The Persian Gulf Pearl Fisheries*

166. The western shores of the Persian Gulf are the location of one of the best-known pearl fisheries in the world. The Gulf, however, has proved to be rich in mineral resources and, as a common, uniform shelf, has been the subject of a number of delimitation agreements. These will be examined below to see whether the delimitations were influenced in any way by the existence of these traditional, sedentary fisheries².

(a) *Bahrein/Saudi Arabia Agreement of 22 February 1958*³

This Agreement uses a modified equidistance line, ignoring certain small islands, and establishing the Fasht bu Saafa Hexagon as an area owned jointly by the Parties. There is no mention of sedentary fisheries.

(b) *Abu Dhabi/Qatar Agreement of 20 March 1969*⁴

This Agreement broadly uses equidistance, but has special features showing that account was taken of the location of an oil-well (al-Bunduq), of the need to ignore the island of Dayyinah except to the extent of giving it a 3-mile territorial sea, and of the establishment of joint ownership of the al-Bunduq field. There is no reference to sedentary fisheries.

(c) *Iran/Oman Agreement of 25 July 1974*⁵

167. This is a modified equidistance boundary through the Straits of Hormuz. There is no mention of sedentary fisheries.

(v) *Sponge fisheries in the Gulf of Mexico*⁶

168. The existence of these fisheries has resulted in measures taken by the Government of the United States to control fishing of these sponges, outside the limits of territorial waters, by United States citizens⁷. Despite

¹ *Limits in the Seas*, No. 79, 3 Nov. 1978. (In accordance with Art. 50, para. 2 of the Rules of Court, a copy of this document was previously deposited with the Registrar.)

² The 1949 Shelf Proclamations, issued by the Trucial States in almost identical terms, expressly preserved not only the character of the superjacent waters as high seas, but also the traditional freedom of pearl fishing by the peoples of the Gulf. See *American Journal of International Law*, Vol. 43, Supp., 1949, pp. 185 and 186. (Copies of these pages are attached as Annex 67, Vol. II.)

³ *Limits in the Seas*, No. 12, 10 Mar. 1970. (In accordance with Art. 50, para. 2 of the Rules of Court, a copy of this document has been deposited with the Registrar.)

⁴ *Limits in the Seas*, No. 18, 29 May 1970. (In accordance with Art. 50, para. 2 of the Rules of Court, a copy of this document has been deposited with the Registrar.)

⁵ *Limits in the Seas*, No. 67, 1 Jan. 1976. (In accordance with Art. 50, para. 2 of the Rules of Court, a copy of this document has been deposited with the Registrar.)

⁶ This is an example of the fact that the geographical name of a gulf has no legal significance.

⁷ See, e.g., Act of Congress of 20 June 1906, *Statutes at Large of the United States*, Vol. XXXIV, pp. 313 and 314; Act of Congress of 15 Aug. 1914, *Statutes at Large of the United*

(footnote continued on the next page)

the existence of these sedentary fisheries, the United States/Mexican Treaty on Maritime Boundaries of 4 May 1978¹ establishes a maritime boundary described as "practical and equitable" without reference to these sedentary fisheries.

169. The conclusion which emerges from this brief analysis of actual delimitation agreements is clear. There is no evidence whatever to indicate that, in practice, States regard sedentary fisheries as a factor which should influence delimitation agreements with regard to the continental shelf.

(b) *The relevance of "historic rights" in the context of the contemporary application of equitable principles and the new accepted trends in the Third Conference on the Law of the Sea*

170. Having seen that, in the actual practice of States, delimitation agreements have made no reference to sedentary fisheries and, so far as can be ascertained, have never been influenced by them, it remains to be seen whether this remains true under contemporary law and in the light of the new accepted trends in the Third United Nations Conference on the Law of the Sea.

171. It must first be said that the new concept of the Exclusive Economic Zone is irrelevant to the issue. This is because, as Article 68 of the *DCIT* makes clear, sedentary species are a shelf resource and are not governed at all by Part V of the *DCIT* on the Exclusive Economic Zone.

172. Confining ourselves to Part VI of the *DCIT* on the continental shelf it may be said that this part reflects certain new accepted trends which depart from the established customary law in varying degrees. This is true of Article 82 (payments and contributions with respect to the exploitation of the shelf beyond 200 miles) and arguably true of Article 76 defining the shelf. Yet neither provision has anything to do with delimitation of the shelf between adjacent States: this is said expressly with regard to Article 76 in paragraph 10 of that Article, and it is patently true of Article 82.

173. Confining ourselves to the provisions which may affect delimitation then, on the Tunisian hypothesis, Article 77 (which defines "natural resources") may be relevant. This is identical with Article 2 of the 1958 Convention on the Continental Shelf and in conformity with customary law, in treating sedentary species as a shelf resource.

(footnote continued from the preceding page)

States, Vol. XXXVIII, pp. 692 and 693. (Copies of these pages are attached as *Annex 68*, Vol. II.) See also the construction of the 1914 Act in *The Abby Dodge*, 223 U.S. 166, 175 through 177 (1912), and generally HACKWORTH, Green Haywood (ed.): *Digest of International Law*. Vol. II. Washington, D.C., United States Government Printing Office, 1941, Chaps. VI through VII, and in particular pp. 672 through 675. (Copies of these pages are attached as *Annex 69*, Vol. II.) See also para. 132 above, referring to similar practices on the part of Libya and Tunisia.

¹ *International Legal Materials*, Vol. 17, 1978, pp. 1073 through 1075. (Copies of these pages are attached as *Annex 70*, Vol. II.)

174. The most obviously relevant provision is, of course, Article 83 itself, for it is this Article of the *DCIT* which deals with delimitation of the shelf between adjacent States. While the text of this Article may well be regarded as controversial within the context of the Third United Nations Conference on the Law of the Sea negotiations, those features of the text which appear novel in comparison to Article 6 of the 1958 Convention¹ appear far less novel in comparison to the evolution of customary law, as reflected in State practice, in the Court's Judgment in the *North Sea Continental Shelf Cases*, and in the Award of the Court of Arbitration in the *Anglo-French Arbitration*. In fact the evolution of customary law coincides with the dominant features of Article 83 in three major respects, all of which are directly relevant to the issue at hand.

175. *First*, not only is equidistance perceived as simply a method of delimitation, to be used "where appropriate", rather than to be applied as a rule of law, but it is in no sense a legally binding method². From this it follows that the "exception" of "special circumstances" (assuming those to include sedentary fisheries) loses its significance. Its particular force lay in modifying the equidistance principle, but if that principle is not obligatory, then the significance of the "exception" is diminished.

176. *Second*, the factors to be taken into account in achieving an equitable delimitation include all relevant factors³, not just those which might fall within the narrower concept of "special circumstances". This being so, the argument that one single factor, such as the existence of sedentary fisheries, can predominate to the extent of foreclosing the issue of delimitation—to use the Tunisian terms, to "define an area as to which the operation of delimitation cannot prejudice its appurtenance to Tunisia"⁴—is quite untenable. It is, moreover, as we shall see, quite incompatible with the basic concept of the shelf as a legal doctrine.

177. *Third*, the primary aim in a delimitation in accordance with equitable principles is to accord to each State its own natural prolongation⁵. There is no disagreement between the Parties on this principle⁶. The shelf area that so constitutes the "natural prolongation" of a State is

¹ The significant textual changes are perhaps three: the first is the introduction into Art. 83 of the concept of "equitable principles", the second is the demotion of the equidistance principle to a method to be used only "where appropriate", and the third is the replacement of "special circumstances" by the broader phrase "all circumstances prevailing in the area". Although significant textually, in the light of the application of Art. 6 in the *Anglo-French Arbitration* (Cmnd. 7438), it can be argued that the differences between Art. 6, the rules of customary international law, and Art. 83 of the *DCIT* are minimal.

² Authority for this proposition derives from the *North Sea Continental Shelf Cases*, *I.C.J. Reports 1969*, pp. 41, 46 and 53, paras. 69, 85 and 101; the *Anglo-French Arbitration* (Cmnd. 7438), pp. 59 and 112, paras. 97 and 239; and Art. 83 itself.

³ *I.C.J. Reports 1969*, pp. 47, 50 and 53, paras. 85(b), 93 and 101; *Anglo-French Arbitration* (Cmnd. 7438), p. 112, para. 239; Art. 83, "all circumstances prevailing in the area".

⁴ See *Tunisian Memorial*, para. 4.103.

⁵ *I.C.J. Reports 1969*, p. 53, para. 101; *Anglo-French Arbitration* (Cmnd. 7438), pp. 51, 52 and 60, paras. 77, 79 and 100; Arts. 76 and 83 of the *DCIT*.

⁶ See *Tunisian Memorial*, Ch. VII, and Submission I.1; *Libyan Memorial*, Part II, Ch. I and Submissions I and 2; and Submissions I and 8 of this Counter-Memorial.

that area which *as a physical fact* is the extension of the State's territory under the sea, and over which the State's rights exist "*ipso facto* and *ab initio*, by virtue of its sovereignty over the land". This is the concept which lies at the very heart of the shelf doctrine. Yet it is immediately apparent that the Tunisian argument on sedentary fisheries is incompatible with it.

178. For the location of an area of sedentary fisheries, and even the fact that one State rather than another may, in the past, have asserted control over such fisheries has absolutely nothing to do with the physical attachment of the sea-bed to the adjacent landmass. Whether the "historic rights" are those of a coastal, or a non-coastal, State, such rights cannot affect in any way the facts of physical attachment or the *ipso jure* rights of the State arising from those facts. The Tunisian argument in effect attempts to use a minor factor, of possible relevance in modifying an equidistance boundary or in choosing an appropriate method of delimitation, as a principle of so overriding an effect that it would challenge the *ipso jure* title of Libya, the basic concept of the continental shelf doctrine, and, indeed, exclude a large area of shelf from the whole exercise of delimitation. It is, as one might say, an attempt to have the "tail wag the dog". The Tunisian argument takes a point which, legally, is of marginal significance and attempts to use it to overthrow the very foundations of the shelf regime.

179. It is no accident that, in State practice, no support can be found for the Tunisian argument. States have a clear grasp of the essentials of the shelf regime. It would not occur to them to overturn it by elevating sedentary fisheries into an overriding principle. They are, moreover, realistic enough to know that, in contemporary times, the resources at issue are not the sedentary fisheries and it would be patently absurd to delimit areas rich in mineral resources by reference to the existence in the past, or even in the present, of sedentary fisheries of marginal concern. The practice of the coastal States in the Persian Gulf and elsewhere is eloquent testimony to the rationality of their practice and assessment of the reality of their interests in resources, and the irrationality of the Tunisian argument based on "historic rights".

¹ I.C.J. Reports 1969, p. 22, para. 19.

PART II

THE SCIENTIFIC BACKGROUND

INTRODUCTION¹

180. As mentioned in paragraph 6 above, there appears to be common cause with Tunisia that the controlling principle in delimiting the continental shelf is a State's entitlement to the natural prolongation of its land territory into and under the sea. As stated in paragraph 89 of the Libyan Memorial:

¹ This Part II has been prepared with the assistance of Prof. Omar S. Hammuda, Prof. Amin A. Missallati, and Dr. Mohammed Alawar of Libya and a number of independent experts in the fields of geology, geography and history with a specific knowledge of North Africa. A list of these experts is contained in the List of *Annexes*, Vol. III, and is set forth in attenuated form here:

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Dr. Gerald Blake
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Chairman, Middle East Studies
School of Oriental and African Studies
University of London

Scott B. Edmonds
Director of Cartographic Services
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Dr. Frank H. Fabricius
Professor of Geology
Director of the Marine Geological and Sedimentological Division at the
Institute of Geology and Mineralogy, Technical University, Munich, Germany
Member, Editorial Board, International Bathymetric Chart of the Mediterranean Sea

Dr. J. M. Anketell
Lecturer in Geology
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To assist in understanding the following technical material, a table of the geologic time scale is set forth at para. 188 below and definitions of some of the principal scientific terms used are set forth at para. 189 below. *Fig. 5* facing p. 81 portrays in graphic form the relative duration of major subdivisions of geologic time.

“The principle of natural prolongation must necessarily be applied, not in the abstract, but in relation to the geographical, geological and other relevant circumstances of the particular area.”

Similarly, in the Tunisian Memorial, geographical, geomorphological and geological factors¹ were alleged in attempting to establish the areas of continental shelf that constituted the natural prolongation of Tunisia and of Libya. Hence, here as well, there appears to be common cause with Tunisia as to the importance of these scientific factors in delimiting the area of continental shelf in question.

181. Despite the apparent existence of substantial agreement between Libya and Tunisia regarding the importance of these scientific factors in effecting a delimitation, there are fundamental differences as to the relevance and meaning of scientific data. To take just one example for purposes of illustration here, much is made of the thesis that Tunisia has “lost” extensive areas to the marine advances of the Quaternary Period². Quite apart from the anachronism of relating the political entity of modern Tunisia to events in the 12th Century—let alone to those of 16,000 (or even 100,000) years ago—and the awesome implications of applying that principle to other areas of the globe³, Tunisia’s selection and presentation of its scientific material is vulnerable, especially since an objective analysis of that claim⁴ demonstrates that “Tunisia” has, if anything, *gained* territory as a result of the latest fluctuations of the Quaternary Period⁵. A rather substantial number of other factual and scientific assertions in the Tunisian Memorial are erroneous or at best misleading. They are examined in detail at the appropriate juncture in the paragraphs that follow.

182. There is an essential difference between the nature and content of the scientific contentions set forth in the Tunisian Memorial and the scientific case presented by Libya in its Memorial. The Tunisian Memorial stresses fluctuating and continuously changing factors, e.g., the modern morphology of the coasts and the offshore bathymetry, and draws upon the record of the Quaternary and earlier periods to support or amplify the conclusions purportedly resulting from these factors. In sharp contrast, the Libyan Memorial is chiefly concerned with more permanent physical features—the stratigraphical⁶ and structural evidence derived from sections and boreholes—and relegates present submarine topography to a subordinate position.

¹ It must be noted, however, that the Tunisian contentions are based largely on purported geomorphological factors and hardly rely on geological evidence at all.

² See Fig. 5 facing p. 82, and para. 188 below.

³ According to Wyllie, the shelf edge lies at depths of between 20 and 550 m. and its width ranges from 0 to 1500 km. WYLLIE, Peter J.: *The Dynamic Earth*. New York, John Wiley, 1971, p. 11 and 12. (Copies of these pages are attached as *Annex 71*, Vol. 11.)

⁴ See para. 230 below.

⁵ The evidence adduced to refute the Tunisian marine transgression thesis discussed in paras. 220 through 230 below should not, however, be regarded as an endorsement of the thesis itself.

⁶ See para. 183 below.

183. In the following discussion of scientific factors, a chronological structure has been adopted, with the present-day geography and offshore physiography as starting points, so that the Tunisian assertions may be evaluated before passing to the more fundamental scientific evidence supporting the Libyan case. The scientific validity of this approach is unquestionable. In dividing up the discussion, it should be observed that the fields of study that contribute to an understanding of this area of science are taught and pursued separately solely for convenience. *Geology* embraces *physical geology*, *structural geology* and *historical geology*. Each of these can be further subdivided if the need arises: thus, *historical geology* breaks down into *paleogeography* (which deals with successive changes of surface relief during geologic time) and *stratigraphy* (which is concerned with the succession of rocks and fossils during geological time). *Physical geology* involves the study of processes of change at the global scale; *physiography*¹ is concerned with the analysis of processes acting locally. All of them enter the interpretation of *geomorphology* (the study of land forms), and this in turn is an important component of *geography* (which seeks to describe all aspects, inanimate and living, of the earth's surface²). A static view of the landscape that ignores its genesis and persistent patterns is incomplete, inexact and therefore likely to mislead.

184. The topography observed by the eye or recorded on maps and charts includes features that are, in human terms, ephemeral, as in the case of a series of coastal dunes or subtidal sand bars. The degree to which these features are likely to change during a specified period can only be gauged by an understanding of the mechanisms responsible for the change. Maps and charts will always incorporate a measure of interpretation, especially when techniques such as aerial photography or depth-sounding provide part or all of the requisite data. To illustrate, the distinction between a submarine sand dune and the surface of a folded rock horizon is more dependably made if the local environment is known. Field observation and mapping call for interpolation between data points and extrapolation beyond them, especially in the offshore zone where the acquisition of additional readings is difficult and expensive, and both procedures are facilitated by a knowledge of the processes which shaped and continue to affect this area. Finally, a distinction may need to be drawn between the observed topography and the bedrock beneath. In the absence of adequate geophysical data, or a dense network of boreholes, an informed and reliable reconstruction of the buried landforms is needed to fully understand the events that caused and led to their burial.

185. Recent developments in geology have made possible the interpretation of phenomena that previously appeared inexplicable or unrelated to the physical and geological structure of the continental shelf. The approach to the nature of global structure, dating from the late 1960s,

¹ See the comment in the definition of physiography in para. 189 below regarding use of this term in this Counter-Memorial.

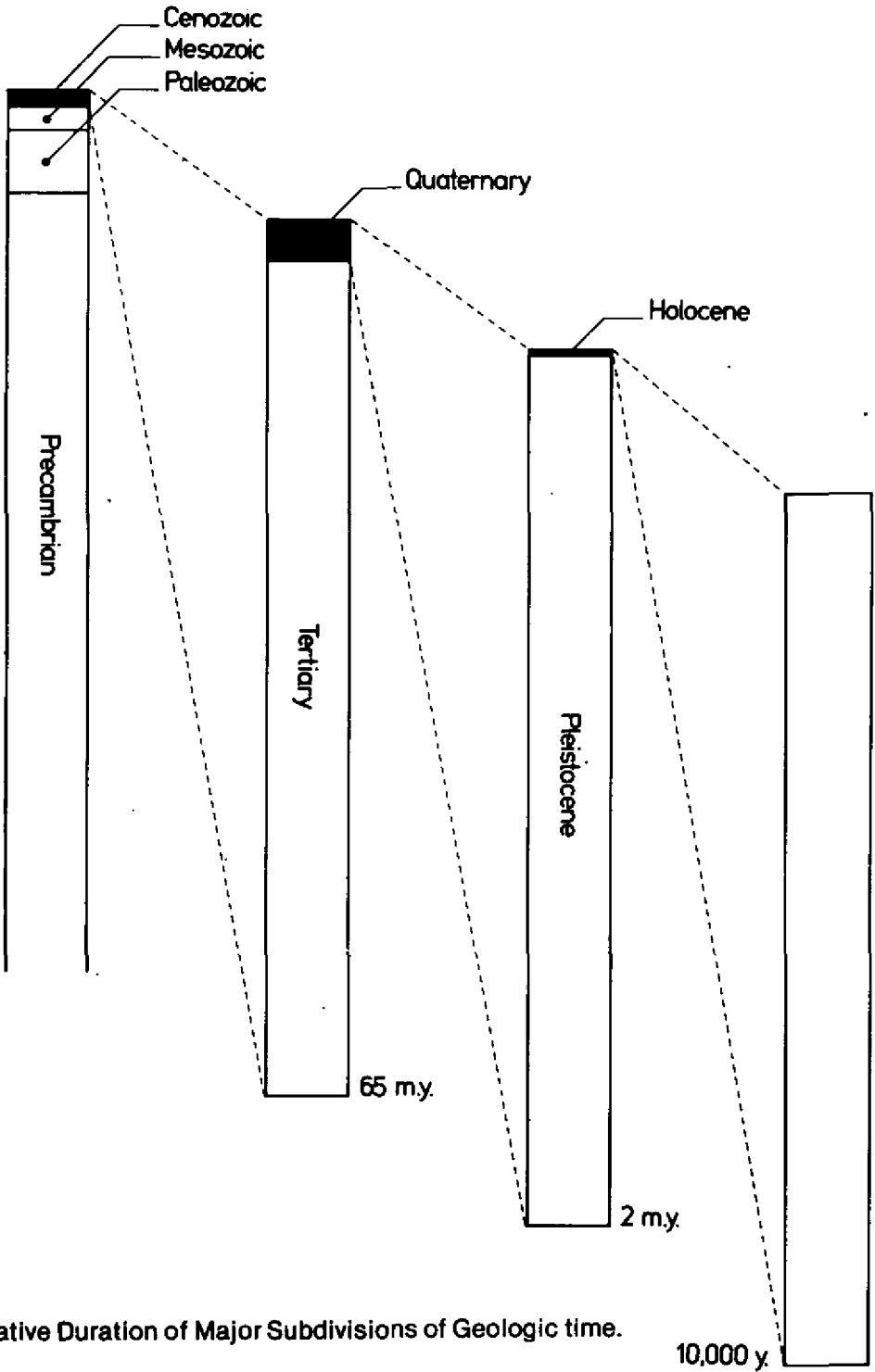
² As noted above (fn. 1 at p. 79), more complete definitions of the principal scientific terms used in the Counter-Memorial are set forth in para. 189 below.

known as *plate tectonics* embodies the division of the earth's surface into a small number of relatively rigid blocks, interaction of which is responsible for mountain-building, faulting, earthquakes and the remaining subject matter of physical geology. As a consequence of the advances in the field of plate tectonics, adoption of a long-term view of landscape evolution is essential. To interpret topography solely in terms of physiographic agencies, such as erosion and deposition, is no longer admissible; it follows that, in effectuating a delimitation, the physical and geological structure of the continental shelf must be taken into account to the extent that such factors are known or readily ascertainable¹. Tunisia's reliance on topographic maps and bathymetric charts for objective evidence in this case is therefore clearly insufficient.

186. The movement of large blocks of the ocean floor indicates dynamic crustal processes on a scale that was less obvious from studies of the more accessible continental crust. Observation of crustal rocks exposed at the earth's surface, coupled with seismic data on the deep crust and upper mantle, has convincingly demonstrated that the earth's crust and attendant geologic features are formed and shaped by plate motions. Because continental rocks are significantly lighter than both the moving oceanic crust and the underlying mantle, continents remain "floating" at the earth's surface while the adjacent heavier oceanic crust descends into the mantle. The structure of continental rocks is therefore far more complex than that of the ocean floor. The rocks of the ocean floor are created all of a uniform composition, and are moved and destroyed relatively quickly, and thus are both generally younger and less complex than continental rocks. These geologic conditions are present today in the crust of the earth. Advances in geology have given us an ability to understand their evolution and meaning. Claims based essentially on more superficial data such as topographic and bathymetric charts ignore these basic geologic factors.

187. It is a fortunate corollary of the youth of plate tectonics that its language remains straightforward and its conclusions easy to comprehend. What is more, although there may be disagreement over the detailed history of the area under discussion, its main strands are not in dispute. In essence, many of the ambiguities resulting from the partitioning of territory on the basis of pure topography are eliminated by an integrated geological perspective.

¹ It should be noted that the scientific study of plate tectonics was not fully developed at the time of the Court's Judgment in the *North Sea Continental Shelf Cases*, *I.C.J. Reports* 1969.



Relative Duration of Major Subdivisions of Geologic time.

SOURCE: The Phanerozoic Time-Scale, *Quarterly Journal, Geological Society of London*, 120s, 1964.

188. As noted in footnote 1 at page 79 above, a table of geologic time-
 P. 221 scale is set forth below¹ and is illustrated in *Figure 5*.

CENOZOIC	Quaternary		1.5-2.0 million years ago
		Neogene	<u>Pliocene</u> c.7
			<u>Miocene</u>
		Tertiary	_____ 26
			Paleogene <u>Oligocene</u> 37-38
			<u>Eocene</u> 53-54
			<u>Paleocene</u>
			_____ 65
MESOZOIC			
	Cretaceous		_____ 136
		Jurassic	_____ 190-195
		Triassic	_____ 225
PALEOZOIC			
	Permian		_____ 280
		Carboniferous	_____ 345
		Devonian	_____ 395
		Silurian	_____ 430-440
		Ordovician	_____ c.500
		Cambrian	_____ 570

¹ The data contained in this table are derived in part from the 1964 (120 s) issue of the *Quarterly Journal*, pp. 260 through 262, published by the Geological Society of London. (Copies of the relevant pages are attached as *Annex 72*, Vol. II.)

189. Definitions of the principal scientific terms most frequently used in this Counter-Memorial are set forth below:

Geology: Modern geology has for its aim the deciphering of the whole evolution of the earth and its inhabitants from the time of the earliest records that can be recognized in the rocks right down to the present day¹.

Geography: The discipline which describes the earth's changing surface—its physical features, climates, products, peoples, etc., and their distribution. For its data it has drawn extensively from the results of specialized sciences, such as geology, meteorology, astronomy, anthropology and biology².

Geomorphology: The study of the physical features of the earth, or the arrangement and form of the earth's crust, and of the relationship between these physical features and the geological structures beneath³.

Physiography: The study of the physical features of the earth, their causes, and their relation to one another. It is sometimes held to be synonymous with the more modern term "geomorphology", and sometimes, rather loosely, with "physical geography"⁴. As used in this Counter-Memorial, "physiography" will be used to convey a dynamic approach to the study of the earth's surface and the changes it undergoes through the agency of the geological processes, in contrast to the more static approach conveyed by the term "geomorphology".

Oceanography: The study of the seas and oceans⁵.

¹ HOLMES, Arthur: *Principles of Physical Geography*. London, Nelson, 1965, pp. 9 and 10. (Copies of these pages are attached as *Annex 73*, Vol. II.)

² MOORE, Wilfred G.: *A Dictionary of Geography*. Harmondsworth, England, Penguin Books, 1954, p. 72. (A copy of this page is attached as *Annex 74*, Vol. II.)

³ *Ibid.*, pp. 72 and 73. (Copies of these pages are attached as *Annex 74*, Vol. II.)

⁴ *Ibid.*, p. 131. (A copy of this page is attached as *Annex 74*, Vol. II.)

⁵ HOLMES, *op. cit.*, p. 9. (See *Annex 73*, Vol. II.)

CHAPTER I

THE IMPORTANCE AND EVOLUTION OF SCIENTIFIC FACTORS IN DELIMITING THE CONTINENTAL SHELF

190. The Court's principal decision concerning the law governing the delimitation of the continental shelf is its Judgment of 20 February 1969 in the *North Sea Continental Shelf Cases*¹. In that case, the Court held that the juridical basis in international law of a State's entitlement to areas of continental shelf off its coast rests on the physical fact of natural prolongation of its land territory into and under the sea:

"The [legal] institution of the continental shelf has arisen out of the recognition of a physical fact...[and is]...by definition, an area physically extending the territory of most coastal States into a species of platform ..."²

"[T]he submarine areas...may be deemed to be actually part of the territory over which the coastal State already has dominion,—in the sense that, although covered with water, they are a prolongation or continuation of that territory, an extension of it under the sea"³.

191. In view of the *North Sea Continental Shelf Cases*, it is apparent that the concept of the continental shelf as the natural prolongation of a State's land territory must necessarily be applied, not in the abstract, but in relation to the geological and other physical factors of the particular area⁴. Once the natural prolongation of a State is determined, delimitation becomes a simple matter of complying with the dictates of nature. Thus, the questions of geology and other significant physical factors have

¹ *I.C.J. Reports 1969*.

² *Ibid.*, p. 51, para. 95.

³ *Ibid.*, p. 31, para. 43. In this respect, the Court affirmed the importance attributed by the Truman Proclamation to geological factors in arriving at an equitable delimitation of areas of continental shelf. Although the *Tunisian Memorial* appears to concede that the Truman Proclamation is the origin of modern principles of law governing delimitation of the continental shelf, it ignores the paramount emphasis placed by that proclamation on mineral, as opposed to living, resources dealt with by President Truman in a quite separate proclamation. The emphasis on mineral resources underscores the relevance of the geological structure of the shelf in effecting a delimitation, a factor downplayed by Tunisia in its so-called scientific case. In this connection see paras. 182 and 183 above.

⁴ The concept of the continental shelf as the natural prolongation of a State's land territory was adopted in its entirety by the Third United Nations Conference on the Law of the Sea. In defining the continental shelf, Art. 76(1) of the *DCIT* states:

"The continental shelf of a coastal State comprises the sea-bed and subsoil of the submarine areas that extend beyond its territorial sea throughout the natural prolongation of its land territory to the outer edge of the continental margin, or to a distance of 200 nautical miles from the baselines from which the breadth of the territorial sea is measured where the outer edge of the continental margin does not extend up to that distance."

Thus, Art. 76(1) explicitly underscores the juridical significance of the concept of "natural prolongation" as well as the geological and other physical factors inherent in application of this doctrine to a delimitation of the continental shelf. (See *Annex 3*, Vol. II.)

decisive importance because, as explicitly noted by the Court, in considering delimitation of the continental shelf, there can never be any question of completely "refashioning nature".

192. The significance of geology in the evolution of the legal institution of the continental shelf is shown by the Court's discussion of the genesis of this juridical concept:

"The continental shelf...has attracted the attention first of geographers and hydrographers and then of jurists. The importance of the geological aspect is emphasized by the care which, at the beginning of its investigation, the International Law Commission took to acquire exact information as to its characteristics, as can be seen in particular from the definitions to be found on page 131 of Volume I of the *Yearbook of the International Law Commission* for 1956. The appurtenance of the shelf to the countries in front of whose coastlines it lies, is therefore a fact, and it can be useful to consider the geology of that shelf in order to find out whether the direction taken by certain configurational features should influence delimitation because, in certain localities, they point-up the whole notion of the appurtenance of the continental shelf to the State whose territory it does in fact prolong²."

193. Indeed, the Court expressly stated that geological factors must be taken into account in the course of negotiating a delimitation. The pertinent paragraph of the 1969 Judgment states that the factors to be taken into account are to include—

"so far as known or readily ascertainable, the physical and geological structure, and natural resources, of the continental shelf areas involved³".

194. As in the *North Sea Continental Shelf Cases*, the Court of Arbitration in the *Anglo-French Arbitration* emphasized the importance of geological criteria in determining the sea boundary between States by stating:

"The Court shares the view repeatedly expressed by both Parties that the continental shelf throughout the arbitration area is characterised by its essential geological continuity⁴."

¹ *I.C.J. Reports 1969*, p. 49, para. 91.

² *Ibid.*, p. 51, para. 95.

³ *Ibid.*, p. 54, para. 101(D)(2) [*dispositif*].

⁴ *Anglo-French Arbitration* (Cmnd. 7438), p. 63, para. 107.

195. An examination of the relevant Articles pertaining to the juridical regime of the continental shelf prepared by the Third United Nations Conference on the Law of the Sea confirms recognition of the decisive importance of geological and physical factors in effecting a delimitation of the continental shelf. Significantly, the *DCIT* acknowledges advances in the field of geology in explicitly rejecting the former definition of the continental shelf in terms of bathymetry adopted by the 1958 Geneva Convention on the Continental Shelf, and substituting a definition predicated on the natural prolongation of a state's landmass "to the outer edge of the continental margin, or to a distance of 200 nautical miles".

196. In light of the Judgment of the *North Sea Continental Shelf Cases*, the new geological evidence that has come to light in recent years and the new accepted trends reflected in the *DCIT*, the Parties must (and can) now take into account the forces that have brought the continents and seas into their present positions and that continue to modify their configuration². It would be ironic indeed if geological evidence were not accorded a paramount role in determining the principles and rules to be applied for the delimitation of the areas of continental shelf appertaining to each State in this case, since the interest of the Parties in these proceedings stems in large part from the presence of valuable natural resources under the subsoil of the shelf. Moreover, the exploration and exploitation of these resources is dependent upon a thorough knowledge and understanding of the geological evolution of the area. Surely, in applying the fundamental legal principle of natural prolongation in this case, geologic factors, including the geological evolution of the area, must be accorded a role of commensurate importance.

¹ See para. 408 below for a more detailed analysis of the *DCIT's* rejection of bathymetry as a primary definitional element of the continental shelf.

² At the time the Truman Proclamation was propounded in 1945, the continental shelf was generally viewed as an extension of the land which had locally been planed down by the waves and elsewhere built up by deposition; a variant of this interpretation was that periods of lowered sea level resulting from land glaciation were responsible for much of the erosion and sedimentation. It is obvious that these views must be reassessed in light of subsequent developments in the field of plate tectonics.

CHAPTER II

THE LIBYAN SCIENTIFIC CASE

THE SCIENTIFIC CONTENTIONS OF TUNISIA

SECTION 1. Summary

197. The scientific factors discussed by Libya and Tunisia in their respective Memorials are as follows:

(i) The Libyan Memorial emphasized the general east/west direction of the North African coastline and pointed out that the North African continental shelf projects northward from this coastline¹. It characterized the turning northward of the Tunisian coastline as an example of an "incidental special feature"². The Tunisian Memorial concentrated on the Tunisian coast between Gabes and Cape Bon almost to the exclusion of the coastline between the frontier at Ras Ajdir and Gabes (which runs in the same general direction as an almost equal length of coastline on the Libyan side of the frontier and faces generally north). And the Tunisian Memorial virtually ignored its shores on the Tyrrhenian Sea, where two of its principal ports and centers of commerce, Tunis and Bizerte, are located. It further emphasized the complexity of its coast³ in contrast to that of Libya⁴ and described Tunisia as disadvantaged by virtue of these features and the close proximity of the Italian islands of Pantelleria, Linosa and Lampedusa⁵. The presence of Malta opposite the Libyan shores was ignored.

(ii) The Libyan Memorial⁶ stressed that the area under consideration is part of the Pelagian Basin⁶, a distinct geologic and physiographic unit at the rim of the stable North African platform to the south and geologically distinct and different from the Atlas Mountain region of Tunisia west of the north/south fault line running from Gabes to Tunis. It analyzed the Sirt Basin rift system extending from the Libyan landmass to the southeast into the Pelagian Basin to the northwest, noting that this is a basic African trend and the predominant trend in the Pelagian Basin and that the geomorphological and bathymetric characteristics of the Gabes - Sabratha Basin are the result of the same forces that formed this rift system⁷. In contrast, Tunisia divided the offshore area into a Tunisian continental shelf and other arbitrary and imaginary divisions. It described an alleged Tripolitanian trough, a "Gulf of Gabes" extending on some of its maps as far east as Tripoli, and various uplifts ("môles"),

¹ See *Libyan Memorial*, para. 114.

² See *Tunisian Memorial*, para. 3.14.

³ *Ibid.*, para. 3.15.

⁴ *Ibid.*, para. 3.16.

⁵ See *Libyan Memorial*, paras. 61, 62, and 113.

⁶ See fn. 1 at p. 90 below.

⁷ See *Libyan Memorial*, paras. 66, 67, 113.

terraces, cliffs ("falaises") and crests ("rides"). These purported features are accorded prime importance in (and indeed in two instances form the basis for) Tunisia's proposals for "practical methods" of delimitation¹.

(iii) Finally, the Libyan Memorial asserted that the area of concern is the natural prolongation northward of the North African landmass, whereas Tunisia attempted to establish a prolongation eastward (and southward) on the basis of morphological correlations between land and sea and, to a lesser extent, a number of geological trends.

198. It has already been noted how suprising it is to see such fundamental differences between the Libyan and Tunisian Memorials regarding the nature of the scientific data and their bearing on this case in light of the Parties' mutual concurrence regarding the importance of scientific factors in the interpretation of the guiding principle of natural prolongation. The remainder of this Chapter will be devoted to a detailed examination of these differences. But first a summary of the main lines of the Libyan scientific case is presented.

199. In the Counter-Memorial of Libya, the scientific case put forward in its Memorial is restated and amplified by the addition of more detailed data. It will be recalled that the conclusions regarding geology, geomorphology, bathymetry and lithology contained in the Libyan Memorial² were supported by a scientific report contained in Annex II, a technical study prepared by Professors Hammuda and Missallati of Libya. This study and these conclusions have subsequently been submitted for review by independent experts in the pertinent fields of science³. This Part II, which deals with the scientific background, and the supporting *Annexes* found in Volume III⁴ have been prepared by or with the assistance of these experts, all of whom have a background in this area of the Mediterranean and, in some cases, extensive knowledge of Libya and Tunisia. A significant result of this technical review of the scientific portion of the Libyan Memorial has been to confirm the main lines of the scientific case set forth in the Libyan Memorial, and indeed, to reinforce this case with additional data.

200. The fundamental scientific case of Libya, as stated in the following sections of this Chapter and supporting *Annexes*, may be summarized as follows:

¹ See *Tunisian Memorial*, paras. 5.26 through 5.34, 5.75; Maps 1 and 2, Vol. III; Figs. 5.07 and 5.09.

² See *Libyan Memorial*, paras. 60 through 68, and 111 through 113.

³ See fn. 1 at p. 79 above.

⁴ See the List of *Annexes*, Vol. III.

(1) There is one basically undifferentiated continental shelf area here at issue, which forms part of the Pelagian Basin¹, itself a geologic and physiographic unit²; (2) thus, this area of continental shelf is not marked or divided by any significant features that would have an effect on a delimitation in this case; (3) the contentions of Tunisia in its Memorial that the shelf is marked by many important features and that it is in fact a continental shelf divided into a "plateau Tunisien", an "avant-pays" and a number of other divisions or features are unsupportable; (4) the area encompassed by the Pelagian Basin is on the north rim of the African plate, has an African affinity and is in fact the continuation to the north of the African plate³ and hence of the African continent and landmass; (5) the bulk of Tunisia, excluding the Sahel and Jeffara regions which are part of the Pelagian Basin, is of non-African affinity being dominated by the Atlas Mountains, a wholly different geologic region⁴.

201. The continuity between the North African landmass to the south and the Pelagian Basin to the north, and in particular the continental shelf area of concern here, is demonstrated by the history of the development of this area geologically and, as a result, geographically. The ancient shorelines, during different geologic times, are discussed in *Annexes 11* and *12B*, Volume III and in paragraph 272 below. Figure 3 of *Annex 11* and Figure 3 of *Annex 12B* show the different shorelines during these times. The latter Figure has been reproduced as *Figure 8* and appears facing page 92. It can be seen that the shoreline during the periods depicted on *Figure 8* extended to the south of the present zone of *chotts* in Tunisia. Most of Tunisia north of that line was part of the submerged African plate. At a later time, the Atlas Mountains were formed on top of the African plate and the present configuration of the Tunisian and Libyan shoreline with its embayments of the Gabes-Sabratha Basin and the Gulf of Sirt came into being.

¹ The term "Pelagian Basin" is employed here as it was in the *Libyan Memorial* to mean an area of shallow depression comprising both sea and land. It is not used in the sense of a sedimentary basin. Thus, the Pelagian Basin includes not only the Pelagian Sea but also the adjoining coastal areas, notably the Jeffara Plain and the Sahel, all part of the same geologic and physiographic unit. The relationship between the Pelagian Basin and the African plate is further shown by *Fig. 6*, which portrays the seismic zone extending across this area into Algeria at the northern rim of the African plate. The shaded area on *Fig. 6* (identified as the Ionian-Valentine block) encompasses the Pelagian Basin. This is an aseismic region and evidences the unity of the region geologically and its affinity to the stable African plate. The northern rim of the African plate is dramatically shown by the shaded area on *Fig. 6* which follows the generally east/west direction that characterizes the present North African coastline. Other evidence of this is discussed elsewhere in this Part II.

² The boundaries of the Pelagian Basin are set forth in the *Libyan Memorial*, para. 62, quoted in fn. 3 at p. 10 above. See also *Fig. 7*.

³ The term *plate* is derived from the *plate tectonics* theory (see para. 185 above). Under this theory the solid part of the earth is divided into a number of "plates" the interaction of which is responsible for such geologic events as mountain building, faulting and earthquakes.

⁴ See *Libyan Memorial*, paras. 63, 64 and 113.

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202. This continuity between the North African landmass and the Pelagian Basin to the north is further confirmed by data of rock types¹ and about the dominant tectonic trends².

203. Moreover, modern geography indicates that the Jeffara Plain, which parallels the coast and extends from east of Tripoli into Tunisia to a point southwest of Djerba, is in fact a unit and has been a unit throughout history. Physically, its geographic unity can be seen from *Map 16* facing page 92, which portrays the mountains of the Jabal Nefusa with the crescent-shaped Jeffara Plain to the north running from Al Khūms in Libya approximately to Medenine in Tunisia. This unity has existed not only in a physical sense but economically, ecologically, and ethnically. Viewed as a whole, the scientific data underscore the fact that this shore, facing generally north from Ras Tajura in Libya to Gabes in Tunisia, is the critical shore to consider in effecting a delimitation, starting from the present land boundary at Ras Ajdir (a point approximately in the centre of this shoreline). It is the natural prolongation of this shoreline which must be determined in arriving at a delimitation of the area of shelf at issue here. Scientific evidence clearly establishes its natural prolongation to be to the north.

SECTION 2. Coastal Geography

204. The Tunisian thesis boils down to the claim that, whereas the (eastern) coast of Tunisia is sinuous, confronted by foreign islands, and restricted by the concavity of the Gulf of Gabes, Libya faces the Mediterranean along a fine, open seaboard ("Une très belle façade maritime, largement déployée...³"). In an attempt to focus attention on the coast of eastern Tunisia and its alleged inferiority to the Libyan shore, the Tunisian Memorial sets the scene by stating that the Ionian flank of Tunisia accounts for 1,150 of the 1,300 kilometres making up that country's coastline. It describes the Ionian coast as "[1]a façade maritime la plus importante⁴", implying more than relative length, and then proceeds to stress its general north/south alignment⁵.

205. However, Tunisia enjoys, in the words of Despois and Raynal, "une double exposition maritime⁶". To omit from consideration a coast once dominated by Carthage and now boasting the port of Bizerte, which occupies "a commanding strategic position in the narrowest part of the Mediterranean⁷", might appear to result from inadvterence or neglect. To disregard Tunis, the country's capital and its major commercial port as

¹ See para. 272 below and *Annex 12A*, Vol. III.

² See paras. 263 through 274 below, and *Annex 12A*, Vol. III.

³ See *Tunisian Memorial*, para. 3.16.

⁴ *Ibid.*, para. 3.12.

⁵ *Ibid.*, para. 3.13.

⁶ DESPOIS, Jean and RAYNAL, René: *Géographie de l'Afrique du Nord-Ouest*. Paris, Payot, 1967, p. 211. (A copy of this page is attached as *Annex 75*, Vol. II.)

⁷ *Tunisia*. (*Geographical Handbook Series*.) London, Naval Intelligence Division, 1945, p. 236 ("Tunisia 1945"). (A copy of this page is attached as *Annex 76*, Vol. II.)

well, suggests a distorted description. By analogy, one could just as well bemoan the lack of natural harbors on Egypt's Red Sea coast while forgetting to mention Alexandria and Port Said¹.

206. To evaluate the Tunisian claims regarding its geographic inferiority a brief description of the coastal orientation east and west of the frontier is set forth below². The delineation and description of coasts might appear a simple matter but, as Shepard³ points out, tidal and other factors can produce extensive shifts in the shoreline, and in any case it is impractical to classify the shoreline and the coast (i.e., "the broad zone directly landward from the shore") separately. Although the tidal range in much of the Mediterranean Sea is a mere 30 centimetres, it exceeds two-and-two tenths metres at spring tides near Gabes⁴ and seiches (oscillating waves) may raise the sea level by 0.6-0.9 metres in undisturbed weather throughout the area. Thus, even excluding storm-induced effects, low lying coasts are prone to marked shifts in their position and shape.

207. East of Ras Ajdir, the coast runs east-southeast/west-northwest for about 47 nautical miles⁵ to Sabratha and then gradually turns a little north of east for a distance of about 38 nautical miles until it reaches Tripoli. From Tripoli the coast runs almost due east for about 11 nautical miles to Ras Tajura. It then runs east-southeast/west-northwest toward the Gulf of Sirt through Ras Hallab (21 nautical miles) to Al Khums (about 23 nautical miles) and Ras Zaroug (another 50 nautical miles).

208. Westward from pillar 31 on the boundary at Ras Ajdir, the coastline continues in a east-southeast/west-northwest direction for about 35 nautical miles to a point just west of the Bahiret El Biban. At that point the coast turns northward for about 15.5 nautical miles to Ras Marmour. At Ras Marmour the general direction of the coast resumes its east-southeast/west-northwest course, which if continued in a straight line would extend as far as the town of Gabes. It is significant that the distances from the frontier east to Ras Tajura in Libya and west to Gabes in Tunisia are roughly equal, and the orientation of the coastlines is in approximately the same direction, that is east-southeast/west-northwest. Similarly, from the frontier at Ras Ajdir to Gabes is approximately the same distance as a straight line from Gabes to Ras Kaboudia. The general direction of the coast, however, is broken by the Island of Djerba, whose effect is to continue the northward diversion of the coastline by a

¹ Of course, it is not intended to imply that this coastline on the Tyrrhenian Sea is pertinent to delimitation of the continental shelf between Libya and Tunisia. But it is pertinent to consideration of the Tunisian argument that it has been disadvantaged, an argument essentially irrelevant to the present case in any event.

² A more complete discussion of the coasts is set forth in *Annex 2*, Vol. III which contains the study of these coasts by Dr. Gerald H. Blake and Dr. Ewan W. Anderson of the University of Durham, England, referred to in para. 209 below.

³ SHEPARD, Francis P.: *Submarine Geology*. 2d edition. New York, Harper & Row, 1963, p. 152. (A copy of this page is attached as *Annex 77*, Vol. II.)

⁴ PERES, Jean Marie: *The Mediterranean benthos*. (In BARNES, Harold: *Oceanography and Marine Biology*. Vol. 5. London, Allen & Unwin, 1965, p. 497.) (A copy of this page is attached as *Annex 78*, Vol. II.)

⁵ One Nautical Mile = 1851 metres.

further 12.5 nautical miles from Ras Marmour to Ras Turguiness, before it turns west and then south to form the southeast coast of the Gulf of Gabes. The coastline of the Gulf itself sweeps round in a gentle curve in a northwesterly direction and then to the north and the northeast, after Ras Yonga running generally northeast for a distance of about 62 nautical miles as far as Ras Kaboudia ($35^{\circ} 14' N$, $11^{\circ} 10' E$). This point is actually six minutes east of the eastern extremity of the Island of Djerba at Ras Turguiness ($33^{\circ} 49' N$, $11^{\circ} 04' E$)¹.

209. Two salient facts emerge from an examination of this coastline. First, no single compass bearing can describe the Tunisian coast; second, in arriving at the general direction of the coastlines, the Island of Djerba invites omission since it is clearly an exceptional feature and its inclusion would introduce irrelevant complications. Similarly, the Kerkennah Islands should be excluded since they occupy little more than 180 square kilometres. In view of the importance of a proper understanding of the geographical aspects of the coastlines and coastal zones of eastern Tunisia and western Libya, a special study has been appended to this Counter-Memorial in *Annex 2*, Volume III, prepared by Dr. Gerald H. Blake, Senior Lecturer in Geography, and Dr. Ewan W. Anderson, Lecturer in Geography, of the University of Durham, England, specialists in this area. This study describes in detail the two coasts and concludes that the Libyan coast is virtually monodirectional—north facing and almost exclusively orientated between north-northwest and north-northeast—while Tunisia exhibits a “very wide spread of orientation with a distinct bias towards north of east”. As stated in the Blake-Anderson Report describing the length of the coast from Cape Bon to Ras Ajdir:

“This length of coast comprising approximately 70 per cent. of the entire Tunisian coastline, consists of five main elements: the Cape Bon peninsula, the Gulf of Hammamet, the Sahelian foreland, the Gulf of Gabes and the lagoonal coast of Bahiret el Biban. The whole area lies to the east of the Saharan plate boundary and has therefore been subjected to Alpine movements superimposed upon the basic African trends. The major trends as indicated by the Cape Bon peninsula are therefore from southwest to northeast and south-southwest to north-northeast, varying locally and being modified towards the south. The shape of the Gulfs of Hammamet and Gabes reinforces this general pattern. Coastlines parallel with the trend such as the north shore of the Gulf of Gabes tend to face southeast while those across the trend such as the southern coastline of the same Gulf are orientated towards the northeast².”

¹ The foregoing coastal description may be seen visually on a number of the maps included in this Counter-Memorial and in particular on *Map 2* facing p. 4 above. For the convenience of the Court, a special Vol. IV (*Map Annexes*) has been prepared which contains many of the maps and figures appearing in this Counter-Memorial and the *Annexes* of Vol. III.

² *Annex 2*, Vol. III, p. 9.

"These directions of course reflect the grain of the country as already mentioned. The main mountain trends throughout Tunisia are to the northeast and east-northeast. Furthermore all the erosion coastlines cutting across the grain are orientated in those directions. The deposition coastlines paralleling the trend tend to face towards the southeast. In the case of Libya the erosional coasts are all north facing, while the areas of deposition are also orientated to the north or north-northeast¹."

210. Reverting to Tunisia's allegations that it has been disadvantaged in comparison to Libya because of its coastline², it is apparent that any comparison between two such coasts appears to have little meaning unless all of the possible advantages or drawbacks at issue are examined and not just a carefully selected few. It could, for example, be suggested that Tunisia's relative closeness to Italy and France is in fact an advantage. Again, a complex shoreline is not necessarily a hostile one, although it must be noted that the Tunisian Memorial exaggerates this complexity as well as the asserted lack of complexity of the Libyan coast³. In this respect, the Libyan coast can be compared with the Adriatic coast of Italy or parts of the Algerian coast, which are certainly not without complexity. The Tunisian coasts are not exceptional if compared with the coasts of Yugoslavia, Greece, Turkey or the Tyrrhenian coast of Italy.

211. The only natural harbour in Tripolitania is Tripoli⁴; and it is largely artificial. The lack of sites sheltered from northerly and easterly winds, brought out by the topography of the sites occupied by the ancient port of Oea (Tripoli), Sabratha, Leptis Magna and *Gaphara limen*⁵, together with the prevalence of dunes and salt marshes along the shore and the barrenness of the Libyan interior, remain an obstacle to harbour development. Compare the coast of eastern Tunisia. In *La Tunisie et ses Richesses*, Ferdinand-Lop remarked: "La Tunisie se trouve favorisée quant au nombre des ports de commerce"⁶. Of these, Sfax (Safaquis), by virtue of its "anchorage completely sheltered"⁷, is now Tunisia's leading port in terms of tonnage; at La Skhirra (As Sukhayrah), which has acquired fresh prominence through the construction of an oil pipeline from Algeria, the water is deep enough for tankers to berth for loading; and if

¹ *Annex 2*, Vol. III, p. 15.

² See fn. 1 at p. 92, in which the dubious relevancy of this argument is noted.

³ See para. 5 above in which it is noted that Tunisia has at times, depending on the context, described its shoreline in quite different terms.

⁴ *A Handbook of Libya*. London, Naval Intelligence Division, 1920, p. 101. ("Handbook of Libya".) (A copy of this page is attached as *Annex 79*, Vol. II.)

⁵ BARTOCCINI, Renato: *Il Porto Romano di Leptis Magna*. (Bull. Centro Studi Storma Arch., Vol. 13, 1958, Supp., pp. 9 and 10.) (Copies of these pages are attached as *Annex 80*, Vol. II.)

⁶ FERDINAND-LOP, Samuel: *La Tunisie et ses Richesses*. Paris, P. Roger & cie., 1921, p. 99. (A copy of this page is attached as *Annex 81*, Vol. II.)

⁷ *Mediterranean Pilot*: 9th edition. Taunton, England, Hydrographer of the Navy, 1974, Vol. 1 ("Mediterranean Pilot 1974"), p. 360. (A copy of this page is attached as *Annex 2*, Vol. II.)

Sousse (Susah) has stagnated ("Un port en sommeil"), it is largely because of competition from Sfax and the decline in phosphate production from the Gafsa area¹.

212. But, as has been remarked, a resource is nothing more than human appraisal. The alleged lack of shoals off Tripoli can appear favourable when the shoals are equated with obstacles to shipping²; the islands and shoals off Tunisia may be a hazard to the novice, but they support fixed fisheries³ and provide shelter for local craft⁴. In the same way, the imposing relief of the Kerkennah Islands⁴ can melt into an almost flat topography⁵ according to the case one is trying to prove.

213. Perhaps more disturbing is the imprecise way in which the term "Gulf of Gabes" is used in the Tunisian Memorial. The precise definition of the Gulf of Gabes set forth in paragraph 78 of the Libyan Memorial is derived from the British and French nautical sources⁶. These sources uniformly describe the Gulf of Gabes as lying between Ras Yonga and Borji Djilidi on the northwest coast of Djerba. The manner in which Tunisia has distorted and expanded the geographic meaning of the Gulf of Gabes has been set forth in considerable detail in paragraphs 81 through 90 above and in *Annex 1*, Volume III. The inaccuracy of other parts of the Tunisian Memorial in attempting to construct a "Gulf of Gabes" extending from Ras Kaboudia to Ras Ajdir or beyond as a geographic unit in light of economic, ecological and ethnological aspects is dealt with in paragraphs 242 through 262 below and in *Annex 1*, Volume III, in the study by Dr. J.A. Allan, Senior Lecturer in Geography of the School of Oriental and African Studies of the University of London.

214. In summary, therefore, we must conclude that the geographical descriptions in the Tunisian Memorial regarding the Libyan and Tunisian coastlines omit relevant factors and that the interpretation of other data is flawed and misleading. The fact of the adjacent coasts facing northward is largely ignored. This coastline is of prime importance since the land boundary at Ras Ajdir is situated here. Moreover, the length of coast west from Ras Ajdir along the Tunisian coast as far as Gabes, where the Tunisian coast starts its turn to the north and the northeast, and east along the Libyan coast for an almost equal length of coast follows the same general direction. A second omission is the concealment of the relative importance of the Tyrrhenian Sea to Tunisia⁷. A third omission is the

¹ DESPOIS and RAYNAL, *op. cit.*, p. 227. (A copy of this page is attached as *Annex 75*, Vol. II.)

² See *Tunisian Memorial*, para. 3.31.

³ *Ibid.*, para. 3.22.

⁴ *Ibid.*, para. 5.39.

⁵ *Mediterranean Pilot*: 10th edition. Taunton, England, Hydrographer of the Navy, 1978, Vol. 1, p. 169. (A copy of this page is attached as *Annex 2*, Vol. II.); *Tunisian Memorial*, para. 3.19.

⁶ See also pp. 11-12 of the Blake-Anderson Report, *Annex 2*, Vol. III.

⁷ But see fn. 1 at p. 92 above.

failure to make any mention of Malta. Finally, the entire comparison of coasts in terms of direction and advantages and disadvantages is distorted and largely incorrect.

215. With respect to physical geography, Tunisia's plea¹ that it has not been favoured in comparison to Libya and that these claimed disparities should not be exacerbated by any decision in this case is an emotional appeal devoid of merit. In fact, the coastal geography of the two States establishes something quite different and, unlike the question of relative advantages and disadvantages, distinctly relevant. It reflects the geological evolution of the Mediterranean Sea. In its configuration, one can chart the developmental stages through which this area went, from the time all of Tunisia north of the area of *chotts* was submerged to the formation of the Atlas Mountains and the resulting anomalous coast of eastern Tunisia, and the formation of the embayments of the Gabes-Sabratha Basin and the Gulf of Sirt between the promontories of Cape Bon and Cyrenaica.

SECTION 3. Coastal Evolution

216. This Section and the one that follows relating to offshore physiography are necessarily focused on the significant errors, misinterpretations and omissions in the contentions made by Tunisia as to coastal evolution and offshore geomorphology. The essentially critical commentary in these two Sections should not obscure the positive points contained in the Libyan Memorial and amplified in this Counter-Memorial. For an understanding of coastal evolution depends on a grasp of the underlying geological forces and trends and how they evolved. The changes in sea level should only be viewed in this light and, in any event, the data advanced by Tunisia with regard to such changes are erroneous.

217. Much is made in the Tunisian Memorial of the intimate links between the Tunisian coast and the sea². The case rests both on the present situation³ and on the effects of the late Quaternary (or Flandrian) marine advance⁴, which occurred approximately 16,000 to 5,000 years ago. The former claim loses much of its force by virtue of the admission that it is also applicable to Libya⁵; indeed, even a glance at the bathymetric map⁶ shows that it is only in the Sirt Basin that the isobaths are parallel to the coast. At all events, the Tunisian Memorial restricts the offshore zone that is intimately linked with Tripolitania to a narrow belt bordering the "Tripolitanian Furrow"⁷. In paragraph 234 below it will be shown how claims contingent on such a fictional feature must be regarded as invalid. Here we will consider the coastal evidence alleged to support the Tunisian argument.

¹ See *Tunisian Memorial*, para. 3.51.

² *Ibid.*, para. 5.36.

³ *Ibid.*, para. 5.48.

⁴ *Ibid.*, para. 5.38.

⁵ *Ibid.*, para. 5.57.

⁶ *Ibid.*, Fig. 5.06.

⁷ *Ibid.*, para. 5.58.

218. The Tunisian Memorial asserts that the interpenetration of land and sea is epitomized by the presence of lagoons, *sebkhas* and "arms of the sea", traces of recent submergence, and the prolongation of the mainland as an offshore platform¹. Lagoons, *sebkhas* and arms of the sea are indeed present on the Tunisian coast; but so are they on the Libyan littoral. To quote the *Handbook of Libya*:

"In western Tripoli between the Tunisian frontier and Bu Ajila ... the ground [behind the coastal dunes] is but little above sea-level, and includes a series of salt swamps or lagoons (*sebkha*) ..."².

Other writers left no doubt about the marine affinities of these *sebkhas*: separated from the sea by narrow tongues of sediment and aligned parallel to the coast, they are linked to lagoons at high tide or to the open sea, and contain abundant marine fauna³.

219. The Tunisian Memorial goes on to equate the depressions (*chotts*) of the Lower Steppe, many of which are of tectonic origin, with the submarine *bahiret* of the so-called "Tunisian Shelf" offshore, and dismisses any analogous features in Libya on the grounds that, unlike the Tunisian depressions, which are internal (or limnic), the Libyan ones are coastal (or paralic)⁴. There are several defects in this thesis. *First* Despois (the main authority cited by the Tunisian Memorial) and Raynal point out, *bahira* is a term applied to the Ichkeul lagoon on the north coast as well as to any depression on the Tunisian Steppes which can be distinguished from the *sebkhas* in being cultivable. In short, it embraces both paralic (i.e., freshwater) and brackish-water lakes and basins⁵. *Second*, granted the importance of subsidence in initially producing the larger Tunisian *chotts*, detailed study suggests that, during the Quaternary, climatic instability was the decisive factor in determining their modern character⁶ and that recent tectonic activity has been of importance only in the Kairouan area. *Third*, the line of depressions that includes *Chotts* Djerid and Rharsa as well as the depressions on the Lower Steppe is viewed by Burollet⁷ as an extension of the south Aurès trough, that is to say as Algerian or westerly in its affinity. Some of the submarine depressions off the Tunisian coast may well be tectonic in origin but, as the

¹ See *Tunisian Memorial*, paras. 5.38 and 5.39.

² *Handbook of Libya*, *op. cit.*, p. 12. (A copy of this page is attached as *Annex 79*, Vol. II.)

³ CREMA, Camillo, PARNA, C. F. and FRANCHI: *Descrizione fisica e geologica della regione*. (In *La Tripolitania Settentrionale*. Vol. I. Rome, 1913, p. 38.) (A copy of this page is attached as *Annex 82*, Vol. II.)

⁴ See *Tunisian Memorial*, paras. 5.40 through 5.42.

⁵ DESPOIS and RAYNAL, *op. cit.*, p. 252. (A copy of this page is attached as *Annex 75*, Vol. II.)

⁶ COQUE, Roger and JAUZEIN, A.: *The Geomorphology and Quaternary Geology of Tunisia*. (In *Guidebook to the Geology and History of Tunisia*. Tripoli, Petroleum Exploration Society of Libya, 1967, p. 246.) (A copy of this page is attached as *Annex 83*, Vol. II.)

⁷ BUROLLET, Pierre Félix: *Contribution à l'étude stratigraphique de la Tunisie Centrale*. Tunis, Ann. Mines et Géol., 1956, p. 283. (A copy of the page is attached as *Annex 84*, Vol. II.)

Tunisian Memorial makes clear, this is because they lie on rift axes running northwest/southeast. As later sections will demonstrate¹, this trend is characteristic of the Sirt Basin of Libya. *Fourth*, the Tunisian Memorial claims that most charts do not show any closed submarine depressions to the south of what it calls the Zira Ridge, that is in the submarine areas adjoining the Libyan coast. However, the SOGREA (1977) chart² shows several such depressions off the Libyan coast.

220. The recent submergence of the offshore zone is advanced as a further argument for its Tunisian identity³. In paragraph 181 above the absurdity of this claim in the abstract has already been considered. Its basis in fact is equally wanting. Underwater archaeology does not at present offer clear evidence that there has been a consistent "one-way" and uniform change in sea levels since antiquity. Flemming⁴, an authority cited in the Tunisian Memorial⁵, concluded, on the basis of the evidence from 179 Greek, Roman and Phoenician cities in the western Mediterranean, that within the margin of error of ± 0.5 metres inherent in the data no definite evidence of eustatic (global sea-level) change could be detected and that any vertical displacement could be attributed to local earth movements. Of the 18 cities he examined in eastern Tunisia and Tripolitania, seven yielded definite conclusions. They are listed below, with "U" designating an undisplaced site and "S" a submerged site. Six of the sites were entirely undisturbed and one showed submergence of a bare 20 to 40 centimetres.

Alipota (Mahdia)	U
Leptis Magna	U
Leptis Minor	U
Ruspina (Monastir)	S
Sabratha	U
Thaene (Thyna)	U
Thapsus (Ras Dimas)	U

221. It is distressing to find that the Tunisian Memorial goes beyond ignoring Flemming's conclusions. In paragraph 5.10, for example, submergence at Thapsus and Leptis Minor is claimed, but the reference to Flemming (complete with page number) would not lead one to suspect that he had found "no relative change of sea-level" at either site.

222. The Cambridge Expedition to Sabratha in 1966 observed some submergence at that site but could not decide whether it was due to "local tectonic change, subsidence or a rise in sea-level". At Sullectum

¹ See para. 240 below.

² This chart is discussed by Prof. Fabricius in his memorandum found in *Annex 11*, Vol. III. A bathymetric chart based on the SOGREA chart was included as Plate 6 to *Annex II* of the Libyan Memorial.

³ See *Tunisian Memorial*, para. 5.06.

⁴ FLEMMING, N.C.: *Archaeological evidence for eustatic change of sea-level and earth movements in the Western Mediterranean during the last 2000 years*. Spécial paper No. 109. Geological Society of America, 1969, Plate 1. (A copy of this plate is attached as *Annex 85*, Vol. II.)

⁵ See *Tunisian Memorial*, para. 5.10, fn.12.

(Salakta), however, the submergence mentioned in the Tunisian Memorial¹ was ascribed to "local land sinkage"². The evidence produced by Foucher for subsidence at Hadrumetum (Sousse)³ is dubious, as the Punic port cannot be identified; and in any case Foucher believed the relative rise in sea-level amounted to no more than one metre⁴.

223. The sole Tunisian site for which the alleged submergence seems well attested is Carthage—albeit for one metre, rather than the one-and-a-quarter to one-and-a-half metres alleged, and here we are dealing with a site outside the area under discussion and within a zone whose instability is shown by its recent earthquake activity⁵ and which is adjacent to the subsiding Medjerda delta⁶. Only the submergence of part of the ruins of Circina is correctly ascribed to local subsidence⁷.

224. In short, the data do not support the conclusion of a general rise in sea-levels of approximately one millimetre per year, which the Tunisian Memorial puts forward on the basis of the underwater ruins at Borg el Hsar off the Kerkennah Islands⁸. Not only is the figure itself a considerable exaggeration of the evidence from other points along the coast, but no consideration has been given to the possibility of purely local effect. Admittedly, the section that introduces the historical evidence for submergence⁹ refers both to rises in sea-level and to subsidence of the shore, but later paragraphs fail to separate the two mechanisms, or indeed to develop the question of coastal erosion briefly raised in a footnote¹⁰. Whatever the authors' intention, the result is to confuse the reader into believing that every case of submergence represents a general rise in the level of the sea. Take, for example, the fact that a columbarium at Circina now lies offshore. Though the site is readily explained by erosion of the local clay—Despois describes it in terms of "la falaise argileuse que la mer attaque mollement"¹¹—the observation is followed in the Tunisian Memorial by the claim: "Thus in only seventy years the sea seems to have advanced a long way at the expense of the land..."¹².

¹ See *Tunisian Memorial*, para. 5.10.

² YORKE, R.: *Cambridge expedition to Sabratha*. Typescript, 1966, p. 14. (A copy of this page is attached as *Annex 86*, Vol. II.)

³ See *Tunisian Memorial*, para. 5.10.

⁴ FOUCHER, Louis: *Hadrumetum*. Paris, Presses Universitaires de France, 1964, p. 82. (A copy of this page is attached as *Annex 87*, Vol. II.)

⁵ Tunisia 1945, *op. cit.*, pp. 17 and 24. (A copy of this page is attached as *Annex 76*, Vol. II.)

⁶ COQUE and JAUZEIN, *op. cit.*, p. 232. (A copy of this page is attached as *Annex 83*, Vol. II.)

⁷ BUROLLET, Pierre Félix: *Mouvements quaternaires et récents aux Iles Kerkennah Tunisie orientale*. Comptes Rendus, Académie des Sciences, Paris, 1978, p. 1135 ("BUROLLET 1978"). (A copy of this page is attached as *Annex 88*, Vol. II.)

⁸ See *Tunisian Memorial*, para. 5.09.

⁹ *Ibid.*, para. 5.06.

¹⁰ *Ibid.*, para. 5.10, fn. 11.

¹¹ DESPOIS, Jean: *Les îles Kerkennah et leur bancs*. (Etude géographique, Revue Tunisienne, 1937, p. 43.) (A copy of this page is attached as *Annex 89*, Vol. II.)

¹² See *Tunisian Memorial*, para. 5.09.

225. Even if we concede that there has nevertheless been some general rise in the sea-level since the Third Century BC, it is far from clear that this has had any great effect on the size or agrarian prosperity of the islands or coastal settlements of the "Gulf of Gabes", as is alleged by the Tunisian Memorial. The Islands of Kerkennah and Djerba are given as examples to support the theory. However, the ancient sources provide no such evidence. Herodotus¹, for instance, says that in the Fifth Century BC the island of Kyraunis (Kerkennah) was 200 Greek stades long and very narrow. Since a Greek stade was 182 metres, the island according to this (very general) description was 36.4 kilometres long, which compares to the present distance of approximately 36 kilometres from Sidi Youssef to Rmadia on each end of the island. For Djerba in Roman times the dimensions given by the learned Pliny in the First Century are 25 times 22 Roman miles², which the Tunisian Memorial incorrectly states to be far greater than the present day dimensions of approximately 35 kilometres times 32 kilometres. If a Roman mile is 1.478 kilometres, then, the dimensions provided by Pliny work out as 36.95 kilometres times 32.51 kilometres, which is almost precisely what it is today. Pliny also states that the Island of Djerba was one and a half miles from the mainland (i.e., 2.217 kilometres, not 300 metres, as stated in paragraph 5.13 of the Tunisian Memorial), which almost exactly corresponds to the width of the Straits of Adjim today. The other figures quoted by the Tunisian Memorial, which are drawn from the Greek mariner's manual attributed (wrongly) to Scylax, have long been considered corrupt and worthless³. No great reliance can be placed on any of these figures from antiquity, since numerals in ancient texts were peculiarly prone to errors in transcription. To the contrary, the available evidence, such as it is, suggests that actual change in the shape of the terrain has been remarkably small.

226. Nor do the ancient texts corroborate the view that the wealth of the islands was once far greater than it is today. Herodotus makes no statement about Kerkennah's prosperity but merely states that it was covered with olive trees and vines—both of which still grow on the island today⁴. In 46 BC Julius Caesar sent his agent to the islands to collect corn, but this does not mean that local crops were necessarily prolific, only that grain was stored on the islands in time of civil war or for transshipment to trading vessels. Although the islands had a port of some importance which served as an entrepot for long-distance trade ships, the town itself is described by the Sicilian historian Diodorus as a modest city with most serviceable harbours⁵. There is therefore no reason to believe that

¹ HERODOTUS, Book IV, para. 195. Cambridge, Massachusetts, Harvard University Press, 1943. (A copy of this page is attached as *Annex 90*, Vol. II.)

² PLINY; *op. cit.*, Book V, para. 41. (A copy of this page is attached as *Annex 33*, Vol. II.)

³ See the comment by the only editor of the text, Müller, in *Geographi Graeci Minores*, Vol. I, no. 110, 1855-1856, p. 87—"Ceterum locum turbatum esse liquet" ("the passage is obviously confused"). (A copy of this page is attached as *Annex 91*, Vol. II.)

⁴ HERODOTUS, *op. cit.*, para. 195 (see *Annex 90*, Vol. II); DESPOIS and RAYNAL, *op. cit.*, p. 228. (A copy of this page is attached as *Annex 75*, Vol. II.)

⁵ DIODORUS OF SICILY, Vol. V, p. 129. Cambridge, Massachusetts, Harvard University Press, 1942. (A copy of this page is attached as *Annex 92*, Vol. II.)

Kerkennah was an agriculturally rich region in antiquity. By contrast, the Island of Djerba and the adjacent mainland, as noted earlier, had a reputation for fertility in the ancient world which continues today.

227. In sum, (i) there is no historical evidence of once prosperous cities crumbling into the sea or disappearing beneath the waves of the "Gulf of Gabes"; (ii) nor is it possible to generalize about changes in the coastline, despite some evidence that there has been a slight rise in the sea-level since the Third Century BC of perhaps one metre; and (iii) it is hardly necessary to point out that there is an inconsistency in the argument which asserts that prosperous agrarian sites have disappeared into the sea, and at the same time that fishing had always been an essential part of the existence of these communities because of the poverty of the land. The ecological potential of the land, says Vita-Finzi, describing the similar coastal region of Tripolitania, is virtually unchanged. What has changed has been the practice of the population¹. In this connection, as observed above, an account of Djerba's current economic status that fails to mention tourism hardly qualifies as accurate.

228. Those sections of the Tunisian Memorial which discuss late Quaternary (i.e., Prehistoric) evidence for shifts in the coastline display a comparable lack of accuracy. For example, it is claimed that, in the early Quaternary, the whole of the "Gulf of Gabes" lay above water and witnessed the accumulation of deposits of a continental type including a hard limestone layer. This calcareous "carapace" occurs on the Kerkennah Islands and on Djerba; on the latter it is succeeded by sandstones of marine origin which indicate that the island had become separated from the mainland in Stone Age times². No evidence is cited for the presence of the calcareous carapace below the sea, apart from an unspecified location off the Kerkennah Islands where an access channel for the ferry to Sfax was being excavated², and no source is given for the geological narrative. This is understandable, as the carapace could have formed during any one of the many periods of low sea-level that characterized the Mediterranean during the last 2 million years, and could in any case represent a marine or wind deposit which was affected by percolating rainwater long after its initial formation; consequently the clay need not be of continental origin, and there is evidence to suggest it is a shallow-water marine deposit³.

229. The Quaternary geology of the islands is in fact much more complex than suggested by the Tunisian Memorial. On the Kerkennah Islands, for example, the Lower Pleistocene crust is overlain by traces of a marine advance dating from 60,000 years ago, with some indications of one 60,000 years earlier, and the resulting deposits are overlain by a yellow silty sand capped by a second crust⁴. On Djerba, there are again traces of

¹ VITA-FINZI, Claudio: *The Mediterranean Valleys: Geological Changes in Historical Times*. London, Cambridge University Press, 1969, p. 114. (A copy of this page is attached as *Annex 93*, Vol. II.)

² See *Tunisian Memorial*, para. 5.17.

³ Carte Géologique Provisoire, Sheet 23, Gabès, c. 1933.

⁴ BUROLLET 1978, *op. cit.*, p. 1134. (A copy of this page is attached as *Annex 88*, Vol. II.)

two beaches covered by red silts¹ and fossil dunes². In both locations there is evidence of at least two major phases of crustal deformation, so that the height of sea-level indicators is a poor guide to their former position: on Djerba, the younger (Tyrrhenian) beach, which elsewhere in Tunisia lies at about 10 metres, has been uplifted by up to 35 metres³. In other words, the initial "individualisation" of the islands was followed by at least one period of "reunification".

230. The (Flandrian) marine advance that followed the last glaciation and that raised the sea from a level some 100 metres below the present level to its current position between 16,000 and 5,000 years ago⁴ undoubtedly flooded the inshore regions of the Mediterranean and in so doing created islands and banks. Some writers believe that the rise brought sea level above modern datum and that there has since been a fall. Fabricius *et al.*⁵ have obtained radiocarbon dates of approximately 5,000 years for beach deposits 5 to 7 metres high formerly ascribed to the Tyrrhenian episode of 60,000 years ago, the implication being that in this region, at least, the latest change in sea-level has led to *emergence*⁶, with the further implication that instead of losing territory to the sea Tunisia at present has in fact gained territory from the sea. It is not known whether confirmation of the radiocarbon dates will be accepted by the authors of the Tunisian Memorial as grounds for renouncing the areas thereby exposed. Extending the argument to the late Miocene (26 to 7 million years ago) would thereupon lead to the abandonment of two-thirds of the country⁷.

SECTION 4. Offshore Physiography

231. As with all topographic maps, the delineation of contours on bathymetric charts is a matter of interpolation between the available data points, a limitation that can be minimized but not evaded by the use of computers rather than skilled draftsmen. Moreover, the quality of the depth observations is likely to vary from place to place. Inshore areas will

¹ PERTHUISOT, J.-P.: *Le "Lambeau de Tlet" et la Structure Néotectonique de l'île de Jerba (Tunisie)*. Paris, Comptes Rendus de l'Académie des Sciences, 1977, p. 1091. (A copy of this page is attached as *Annex 94*, Vol. II.)

² CASTANY, G.: *Le Tyrrhénien de la Tunisie*. Paris, Dunod, 1962, p. 264. (A copy of this page is attached as *Annex 95*, Vol. II.)

³ PERTHUISOT, *op. cit.*, p. 1091. (See *Annex 94*, Vol. II.)

⁴ FLINT, Richard Foster: *Glacial and Quaternary Geology*. New York, Wiley, 1971, p. 326. (A copy of this page is attached as *Annex 96*, Vol. II.) *Fig. 9* facing this page compares the present sea level with that 16,000 years ago. It reveals that the sea bottom along the line A-B was not dry land during this period.

⁵ FABRICIUS, Frank H., BERDAU, Dietrich and MUNNICH, Karl Otto: *Early Holocene Ooids in Modern Littoral Sands. Reworked from a Coastal Terrace, Southern Tunisia*. (*Science*, Vol. 69, 1970, p. 757.) (A copy of this page attached as *Annex 97*, Vol. II.)

⁶ BELLAICHE, G. and BLANPIED, C.: *Evolution sédimentaire quaternaire de la plate-forme pélagienne*. (In BUROLLET, Pierre Félix, *et al.*: *La Mer Pélagienne. Géologie Méditerranéenne*, Vol. VI, no. 1. Paris, Editions de l'Université de Provence, 1979, p. 307 ("BUROLLET 1979").) (A copy of this page is attached as *Annex 98*, Vol. II.)

⁷ The absurdity of this general line of argument in any event has been previously noted. See para. 181 above.

tend to boast the highest density of soundings, and the needs of shipping coupled with easy access will ensure that they are accurate; but it is here that erosion and deposition are most likely to render the charts obsolete in the space of a few years. Offshore areas are less prone to rapid, significant change but they are expensive to survey and the results may be marred by poor position-fixing.

232. All these issues are illustrated by the coverage available for the Pelagian Sea. As the Memorandum of Professor Fabricius makes clear¹ there are discrepancies between the contours shown by different charts of the same area. As a result, it would be unwise to glean more than an approximate picture of the sub-bottom morphology from the published material. The need for caution is heightened where a stepped effect has been produced by the shading of successive contour intervals, and especially where colour is employed to emphasize a particular depth zone, as morphological units may be created on an arbitrary basis. *Figure 10* shows how two charts of the same area differ not only with respect to particular isobaths but also as regards the identification of depth assemblages, and it will be observed that the more recent and larger-scale of the charts does not invariably present the more complex pattern. Thus the Medina Bank is present on both charts whereas the Melita Bank—which, as it happens, is not recognized by the *Mediterranean Pilot 1974*—appears as a single entity only on the upper chart.

233. The sea-bed of the continental shelf area is inaccurately described by Tunisia in its attempt to make a case for the eastward extension of Tunisian sovereignty over the continental shelf. As revealed by the relief model and block diagrams prepared by Libya², described in *Annexes 5A* and *5B*, Volume III, the continental shelf area is much like a gently rolling plain with no marked features of importance. There are no cliffs marking ancient shorelines or lines of ridges. This fact underscores the point that we are dealing here with a single shelf, a physiographic unit, part of the Pelagian Basin. A photograph of the relief model appears facing page 104. A reproduction of a block diagram viewing the area from the east/southeast and with a vertical exaggeration of ten times appears as *Figure 11* facing page 104. The coastlines and certain other data have been indicated thereon. Additional reproductions of this block diagram appear in Volume IV with no vertical exaggeration, a vertical exaggeration of 10 times, and a vertical exaggeration of 25 times. *As the block diagrams show, even with a vertical exaggeration of 25 times, no marked features of any significance can be found.*

¹ *Annex 11*, Vol. III, prepared by Dr. Frank H. Fabricius, Professor of Geology, Director of the Marine Geological and Sedimentological Division at the Institute of Geology and Mineralogy, Technical University of Munich, Federal Republic of Germany; Member of the Editorial Board, International Bathymetric Chart of the Mediterranean Sea.

² These were prepared from the best available data (including the principal bathymetric data cited by Tunisia). The preparation of this relief model and the block diagrams was under the guidance of Professor Fabricius. See *Annexes 5A* and *5B*, Vol. III.

234. The bathymetric units identified in the Tunisian Memorial as within the Pelagian Basin are all open to challenge whichever chart one uses¹. These alleged units are discussed separately below in the following paragraphs:

(i) *Tunisian Plateau (Plateau Tunisien)*. This name as a separate unit has gained currency largely through publication of the recent monograph of Blanpied *et al.*². The name, and indeed the entire effort to divide up a relatively featureless area of continental shelf, are entirely arbitrary and without scientific basis. The term "Plateau Tunisien" itself is obviously politically biased. On Tunisian Maps 1 and 2, this unit (as well as a number of other arbitrarily selected and named "units" which in fact do not exist) has been added to the original map. The fact that this region of continental shelf lacks features of sufficient prominence to warrant its subdivision is seen from objective sources such as Ryan *et al.*³ To demonstrate the point, *Figures 12 and 13* facing page 106 have been prepared by superimposing the Norwegian Trough and the Hurd Deep on the Pelagian Basin (showing also the coastlines to which these features are related). It will be recalled that the Trough, a significant feature, was ignored by the United Kingdom and Norway in their North Sea delimitation. Similarly, the Hurd Deep was not considered as a factor affecting delimitation by the Court of Arbitration in the *Anglo-French Arbitration*. Such illustrations make a mockery of the effort in the Tunisian Memorial to find features of significance that would favor the Tunisian theories of delimitation.

(ii) "*Gulf of Gabes*". The Libyan Memorial properly delineated this oceanographic unit⁴. The extent to which it has been extended and distorted in the Tunisian Memorial has been mentioned in several parts of this Counter-Memorial⁵. It might be added here that "gulf" is a term conventionally applied to a feature bounded along much of its periphery by land, as, for example, the Gulf of Mexico⁶.

(iii) *The Tripolitanian Furrow (Sillon Tripolitain)*. Figure 5.09 of the Tunisian Memorial shows this so-called unit bordering the Libyan coast between the "Golfe de Gabès" in the west and the "Golfe de Syrte" in the east. Here, again, this unit is arbitrarily conceived. It is even refuted by Tunisian Figure 5.24 which shows this area of the Pelagian Basin as the Sirt Basin continental rise. Moreover, as can be seen clearly

¹ In this connection, see *Tunisian Memorial*, paras. 5.26 through 5.34, Fig. 5.09 and Maps 1 and 2.

² BLANPIED, C. *et al.*: *Cadre Géographique et Géologique. A. Morphologie*. (In *Burillet* 1979, p. 19.) (A copy of this page is attached as *Annex 99*, Vol. II.)

³ RYAN, W.B.F. and OLAUSSON, E.: *Mediterranean Sea*. (In Fairbridge, Rhodes Whitmore (ed.): *Encyclopedia of Geomorphology*. New York, Reinhold, 1968, p. 491.) (A copy of this page is attached as *Annex 100*, Vol. II.)

⁴ See *Libyan Memorial*, para. 78.

⁵ See paras. 81 through 90 above.

⁶ BATES, Robert L. and JACKSON, Julia A.: *Glossary of Geology*. 2d edition. Falls Church, Virginia, American Geological Institute, 1980, p. 280. (A copy of this page is attached as *Annex 101*, Vol. II.)

on Map 2 in Volume III of the Tunisian Memorial, the west-facing concavity in the isobaths by which the Sillon is identified extends into the purported "Gulf of Gabes". Hence if a "furrow" is to be recognized, it would embrace both of the units named by the Tunisian Memorial; or, to put it another way, the "Sillon Tripolitain" (which is at least morphologically and physiographically an extension of the Gulf of Sirt) could be said to extend as far as Gabes. The use of "Gabes-Sabratha Basin" by the Libyan Memorial to describe this area is thus more appropriate. One could justifiably dismiss the interruption in a northeastward declivity represented by this feature as too trivial to warrant naming. Marchant *et al.* include the zone within a "rise"¹ and comparison with another "sillon"—the "Sillon Sicilo-Tunisien" of the Tunisian Memorial², which corresponds to the Pantelleria Trough of the Libyan Memorial, a physiographic feature of real importance—endorses their verdict. These differences can be seen dramatically on the relief model and block diagrams prepared by Libya³. And just as no basis exists for separating this trough or zone of depressions from the "Gulf of Gabes", so also is there no justification for alleging that this so-called "Tripolitanian Furrow" constitutes a natural limit to the area of continental shelf which Tunisia has misleadingly called the "Plateau Tunisien".

(iv) *The Gulf of Sirt Basin (Cuvette du Golfe de Syrte)*. This feature is defined by Tunisia as a "gouttière" running south-west/northeast. The structure of the area is too complex for a physiographic term to encompass it even at a single stage in geological history. In any case the landward and inshore parts of it are defined on the west by the Hun Graben (i.e., a fault-bounded depression) and it is itself characterized by numerous faults that trend northwest/southeast (as discussed in considerable detail in Annex II of the Libyan Memorial) that can be traced continuously almost as far as Sousse. This is a further illustration of how a map such as Figure 5.09 can completely distort the physiographic and geologic realities. It is noteworthy that the Tunisian Memorial cites no sources for this figure.

(v) *The Melita-Medina Plateau (Plateau de Melita et de Medina)*. We have already seen in Figure 10 facing page 102 that the Melita Banks are not a self-evident feature. At least Carter *et al.*⁴ failed to recognize such a feature and it does not appear on Figure 5.24 of the Tunisian Memorial derived from that study. Aside from the question of whether such a unit in fact exists on this featureless rolling submerged plain, the

¹ MARCHANT, Francis, L.: *Ionian Sea*. (In CARTER, Terence G. *et al.*: *A New Bathymetric Chart and Physiography of the Mediterranean Sea*. In STANLEY, D. J. (ed.): *The Mediterranean Sea: A Natural Sedimentation Laboratory*. Stroudsburg, Pennsylvania, Dowden, Hutchinson & Ross, Inc., 1972, pp. 14 through 16.) (Copies of these pages are attached as Annex 102, Vol. II.)

² See *Tunisian Memorial*, Fig. 5.09.

³ See para. 233 above and the photograph and Fig. 11 facing p. 104. See also *Annexes 5A and 5B*, Vol. III.

⁴ CARTER, T.G. *et al.*, *op. cit.*, pp. 1-23. (Copies of these pages are attached as Annex 102, Vol. II.)

Tunisian Memorial overlooks a relatively apparent depression between the so-called "Plateau de Mélite et de Médina" and that portion of the Pelagian Basin which the Tunisian Memorial arbitrarily carved out and named the "Plateau Tunisien". This depression, running roughly north/south, in fact exceeds a depth of 370 metres making it considerably more significant than the depression along the Gabes-Sabratha Basin.

(vi) "*Ionian Abyssal Plain*". This is an erroneous description. There is no such abyssal plain but rather two abyssal plains, the Messina Abyssal Plain and the Sirt Abyssal Plain with the Medina Bank in between¹. This error of fact should be borne in mind in considering the morphological case put forward by Tunisia in paragraph 9.09 in which an alleged "Ionian Abyssal Plain" plays such a commanding role².

(vii) "*Zira and Zuara Ridges*" (*Rides de Zira et de Zuara*). From the available data, Libya is at a loss to know the basis for the claim that these ridges exist. In examining Figures 5.25 and 5.26 the so-called "Zira Ridge" appears to coincide with slight kinks on the 50 metre isobath and on both the 50 and 100 metre contours in Tunisian Map 2. Figure 5.22 makes them appear more prominent but no source is given for its bathymetry; if valid, the isobaths show that the "ridges" slope a mere one to two degrees in any event. Even more serious is Tunisia's failure to specify the source of these data. The bathymetry on Figure 5.22 is at odds with the data available to Libya based on the SOGREA bathymetric studies and other sources³. Accordingly, Tunisia should be required to furnish the data on which Figure 5.22 was based. The absence of a corresponding shape on the map of sponge distribution⁴ lends support to the view that the ridges are fictional entities; the "Zuara Ridge" does not show up at all on Tunisian Map 2. In view of the crucial role these so-called "ridges" play in the Tunisian case⁵, any factual support for their existence should be disclosed.

235. Tunisia also claims that the "morphostructural alignment" of eastern and southern Tunisia parallels alignments offshore: an alleged east/west zone of depressions and *chotts* extending seaward through the "Gulf of Gabes"; further north, the seaward prolongation of the Tebessa - High Steppe - Low Steppe elevated belt extending eastward to the "Plateau Tunisien" and the "Melita-Medina Banks"⁶. The argument clearly owes a good deal to the much-reproduced tectonic sketch-map of Burolet⁷,

P. 316 ¹ See the reproduction of a map showing these features facing p. 183 below. See also para. 21 above.

² See para. 341 below.

³ The relief model prepared for Libya (see para. 233 above), which was based entirely on bathymetric data relied on by Tunisia in its Memorial, similarly does not reveal these "ridges". The salt walls depicted on Figs. 12 and 13 of *Annex II* of the *Libyan Memorial* are unrelated to any such "ridges". Indeed, these salt walls are sub-surface features.

⁴ See *Tunisian Memorial*, Fig. 5.26.

⁵ See, e.g., *Tunisian Memorial*, para. 5.75.

⁶ *Ibid.*, paras. 5.51 through 5.58.

⁷ BUROLLET, Pierre Félix: *General Geology of Tunisia*. (In *Guidebook to the Geology and History of Tunisia*. Tripoli, Petroleum Exploration Society of Libya, 1967, p. 58.) (A copy of this page is attached as *Annex 103*, Vol. II.)

not least through his use of hollow crosses to denote the Kerkennah "Uplift", and the "Pelagian Bloc". The resemblance ends there. The structural axes identified by Buroillet for the Pelagian Block do not extend west beyond the "north/south axis" (which extends roughly from Tunis to Gabes) or, to be more precise, beyond the eastern limits of the "peri-Atlasic basins" east of the north/south axis. By what can only be described as cunning use of shading, Figure 5.15 of the Tunisian Memorial extends the line of Buroillet's Kerkennah Axis via the Kasserine Island right across Tunisia into Algeria. The axis of subsidence indicated by Buroillet¹ in the southern Pelagian Sea is likewise extended by means of shading in Figure 5.14 into the belt of *chotts* in southern Tunisia and Algeria, whereas Buroillet confines it to the offshore zone and relates the *chott* depressions (as mentioned earlier) to the peri-Atlasic depressions. This distortion of Buroillet's work, which has the effect of eliminating the importance of the north/south axis, is most interesting since it parallels the almost total absence of any reference to this axis in the Tunisian Memorial, a point referred to in paragraph 271 below. One can readily see why this inconvenient geologic fact should be overlooked: it totally negates the Tunisian case for a west/east "transversal".

236. It is worth adding that the eastern limit of the "Kerkennah Axis" as depicted on Buroillet's 1967 structural sketch-map has no basis in fact, and that the very concept of a Kerkennah "Uplift" can be disputed, as Professor Fabricius has noted in his memorandum set forth in *Annex 11*, Volume III. Buroillet himself makes no mention of such a regional feature in his latest account of the archipelago², and clearly shows that, apart from two very minor anticlines, its Quaternary history is dominated by north-west/southeast and northeast/southwest faults. Further east the seafloor is characterized by structures trending northwest/southeast³. As shown in the Libyan Memorial, these lineaments are of Libyan affinity running as they do from the Sirt Basin into the Gabes - Sabratha Basin and up to the edge of the Pelagian Basin in Tunisia.

237. The use of submerged shorelines to define the extent of the Tunisian territory "lost" to the marine advances is equally invalid. The two key claims are: (i) that a line of submarine "cliffs" ("falaises") produced by wave erosion at a time of lowered sea level in Quaternary time borders the "Plateau Tunisien"; and (ii) that shoreline deposits, some of which have been dated by the radiocarbon method, indicate a submerged shoreline dating from 25,000 years ago at a depth of 50 to 70 metres and another one less than 100,000 years old at a depth of 100 to 200 metres⁴. With regard to the so-called "cliffs" so dramatically depicted in Figure 5.07, by teeth-like marks emphasizing their supposed sharp decline, it can

¹ BUIROLLET, *op. cit.*, p. 58. (See *Annex 103*, Vol. II.)

² BUIROLLET 1978, *op. cit.*, pp. 1133 through 1135. (Copies of these pages are attached as *Annex 88*, Vol. II.)

³ BELLAÏCHE, G. and BLANPIED, C.: Aperçu néotectonique, in BUIROLLET 1979, p. 53. (A copy of this page is attached as *Annex 104*, Vol. II.)

⁴ See *Tunisian Memorial*, para. 5.18, Fig. 5.07.

⁵ *Ibid.*, para. 5.18, Figs. 5.06 and 5.08.

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only be stated that this is an utter distortion of fact¹. There are no such "cliffs" or "falaises" as drawn on Figure 5.07 and described in paragraph 5.18. In the first place, as already discussed above², there is no basis for the allegation of retreat of the sea beyond the 140 metre isobath. The lowest level attained by the last marine regression was -130 or at most -140 metres³. Only subsidence could explain features at greater depths. Secondly, any features in this area would be predominantly tectonic lineaments, not erosional steps or "cliffs". Even in non-tectonic areas any physiographic features would have an inclination of less than 2 degrees, which would not in any way justify the kind of claims made by Tunisia in paragraph 5.18 and on Figure 5.07⁴.

238. It can only be concluded that these "cliffs" are fanciful creations. No data are cited in support and none are known to Libya. If data support these claims, then it is evident that they must be presented by Tunisia to the Court. In view of the importance of scientific data in this case, and the imperative need that accurate and complete data be submitted to the Court by the Parties, Libya has had prepared the relief model and block diagrams referred to earlier⁵ showing the physiography of the sea bottom and bordering land areas throughout the Pelagian Basin based on the best available data known to Libya. An explanation of the data on which they are based and the manner of their preparation appear in *Annexes 5A and 5B*, Volume III. The relief model and block diagrams depict the Pelagian Basin as a gently rolling plain without any prominent features. It should be noted that the relief model was based largely on the bathymetric data relied on by Tunisia in its Memorial⁶. These same characteristics appear from the block diagrams, some of which are given a vertical exaggeration of 10 times and 25 times but which were prepared on the basis of bathymetric data different from those used to prepare the relief model⁷. The use of vertical exaggeration on some of the block diagrams illustrates the difference between features at the borders of the Pelagian Basin and the physiographic unity of the Basin itself. Both the relief model and the block diagrams have been deposited with the Court.

239. The Tunisian Memorial⁸ claims that Burolet *et al.* (1979) have demonstrated (i) the presence of a littoral belt (*un cordon de faciès côtiers*) at a depth of 50 to 70 metres, which "proves" that a mere 25,000 years ago the coastline lay close to the 50 to 70 metre isobaths, and (ii) sands and gravels confined to (*localisés à*) the eastern margin of the "Plateau Tunisien" around the 100 to 200 metre isobaths, which indicate

¹ One is reminded of the film "Jaws", the French title of which is "Les Dents de la Mer".

² See paras. 219 through 230 above.

³ FLINT, *op. cit.*, p. 321. (A copy of this page is attached as *Annex 96*, Vol. II.)

⁴ See in this connection the slope map included as Fig. 11 in the memorandum of Professor

⁵ Fabricius, *Annex 11*, Vol. III which has been reproduced facing this page as *Fig. 14*.

⁶ See para. 233 above.

⁷ See Map 1, Vol. III of the *Tunisian Memorial*.

⁸ See the technical explanation regarding the preparation of the block diagrams in *Annex 5B*, Vol. III.

⁹ See *Tunisian Memorial*, para. 5.18.

that an ancient shoreline corresponding to the last major regression of the Würm period (the fourth glacial stage of the Pleistocene epoch) lay nearby less than 100,000 years ago. The claims are untenable, and the citations from Burollet (1978) are quoted either out of context or without due regard to the cautious and tentative manner in which they were advanced.

240. The one well-attested submarine feature is a series of fault-bounded depressions (grabens) which are aligned predominantly northwest/southeast¹. The failure of the Tunisian Memorial to draw attention to this dominant tectonic lineament despite the prominence it receives in many studies of the area² is astonishing, especially as it would have helped to explain the pattern of Plio-Pleistocene sediment thickness illustrated by Winnock and Bea³, and shown by Tunisia in its Figure 5.20. It will be recalled that this feature was emphasized in the Libyan Memorial and its Annex II, which shows that the Sirt Basin tectonic trends extend from the Basin northward across the Pelagian Basin into Tunisia as far as the area of the north/south axis. The interrelationship between this dominant African tectonic trend and the physiography of the Pelagian Basin was graphically portrayed by Figure 13, Annex II of the Libyan Memorial where an overlay of the bathymetry was placed on a geologic map showing the tectonic trends in the area. The faults, some of which continued moving during and after deposition of the overlying sediments, can be traced back at least as far as the late Miocene⁴. Though locally interrupted by compressive phases, tectonic extension has remained the rule until the present day⁵.

241. The same northwest/southeast fault lineaments that are found extending across the Pelagian Basin into coastal Tunisia are found unambiguously in the Sirt zone, the Hun Graben and the southern slopes of the Jabal Nefusa in Libya⁶. These various trends are shown on Figure 15 facing page 110, and the study set forth in Annex 12A, Volume III will consider the circumstances that led to the establishment of this pattern. For the present it is sufficient to observe that, viewed in conjunction with

¹ BELLAICHE and BLANPIED, *op. cit.*, p. 53. (A copy of this page is attached as Annex 104, Vol. II.)

² ZARUDZKI, E.F.K.: *The Strait of Sicily - a Geophysical Study*. (*Revue de Géographie Physique et de Géologie Dynamique*, Vol. XIV, 1972, p. 20.) (A copy of this page is attached as Annex 105, Vol. II.); LORT, J.: *Geophysics of the Mediterranean Sea Basins*. (In *The Ocean Basins and Margins: The Eastern Mediterranean*. Vol. 4A. New York, Plenum, 1977, p. 175.) (A copy of this page is attached as Annex 106, Vol. II.)

³ WINNOCK, E. and BEA, F.: *Structure de la Mer Pélagienne*. (In BUROLLET 1979, *op. cit.*, p. 36.) (A copy of this page is attached as Annex 107, Vol. II.)

⁴ See para. 188 above.

⁵ BELLAICHE and BLANPIED, *op. cit.*, p. 57. (A copy of this page is attached as Annex 104, Vol. II.)

⁶ GOUDARZI, G.H.: *Geology and Mineral Resources of Libya - a Reconnaissance*. United States Geological Survey Paper 660, 1970, p. 51. (A copy of this page is attached as Annex 108, Vol. II.)

other structural evidence, it helps to identify the Pelagian Basin as unambiguously "African" and thus distinct from the Alpine belt of Tunisia and the rest of the Maghreb¹.

SECTION 5. Continuity between the Libyan and Tunisian Jeffara Plain and the Area of Continental Shelf to the North (Geographic and Socio-Economic Factors)

242. It has been mentioned above² that the area of continental shelf to be delimited is part of the Pelagian Basin, which includes not only the entire continental shelf area in question but also the land areas known as the Jeffara Plain in Libya and Tunisia and the Sahel in Tunisia. A closer look will be taken here at the Jeffara Plain in the light of allegations made in the Tunisian Memorial that the "Gulf of Gabes", as greatly exaggerated in extent in the Tunisian Memorial³, is a unit in a geographic sense, having in mind various socio-economic and ecological factors in addition to purely physical geography.

86) 243. *Figure 16* reveals the topography of Tunisia and the relevant part of Libya. It is observed that except for the relatively narrow area of the Sahel and the southern and southeastern portion of Tunisia, most of the country is of a quite different topographical character. It consists of the area of the Atlas Mountains and the foothills leading to them, the Atlas running in a southwest/northeast direction. As has been discussed above in considering the geological characteristics of this region⁴, the western edge of the Pelagian Basin runs along the north/south axis from Gabes to Tunis. The Atlas Mountains are folded on top of the underlying African plate and this area of Tunisia is an entirely distinct geologic region from the Pelagian Basin. However, the Sahel and the Jeffara Plain are part of the Basin, and hence are on the rim of the African plate. The Jeffara Plain is bounded on the south by the Jabal Nefusa, a line of hills running across Libya and into Tunisia in a crescent open to the north. Thus, the African continent extends north into the Pelagian Sea, from the Jabal Nefusa range across the Jeffara Plain which extends from just east of Tripoli at Al Khums to the vicinity of Medenine to the southeast of Djerba. The zone of depressions running west from Gabes to Algeria across the Tunisian and Algerian *chotts* marks an ancient shoreline of the African continent⁵.

244. As discussed earlier⁶, the Pelagian Basin is a geologic and physiographic unit which has existed in essentially its present form over a long period of years except for fluctuations in the sea level resulting at times in much of it being dry land and at other times inundated across the Jeffara

¹ BUROLLET, Pierre Félix and BYRAMJEE, R.S.: *Réflexions sur la Tectonique Globale. (Exemples Africains et Méditerranéens.)* (Notes Men. Comp., Vol. 1974, p. 96.) (A copy of the page is attached as Annex 109, Vol. II.)

² See para. 200 above.

³ See para. 81ff. above.

⁴ See para. 197 above.

⁵ See Annex 12B, Vol. III. The above features are portrayed in an artist's rendition of the major onshore physiographic provinces described above appearing as Fig. 17 facing p. 112.

⁶ See para. 201 above.

Plain to the foothills of the Jabal Nefusa. The whole of the Pelagian Basin between the Cape Bon promontory, where Tunisia appears to thrust northeastward towards Sicily—and indeed the Atlas Mountain trend continues in that direction across Sicily into Italy to join the Apennines, establishing the continuity of this part of Tunisia with Europe to the north—and the promontory of Cyrenaica is a zone of vertical subsidence of the North African block or plate. This has resulted in the large embayments of the Pelagian Sea and the Sirt Basin. In effect, this entire area of continental shelf constitutes a regional embayment from the margin of North Africa in former times, which was further to the north than at present, extending even into southern Sicily. Much of the shelf is tilted toward the east and, depending upon where one is along the Libyan shore, to the north and the northeast. This tilting is the result of the rapid sinking of the Ionian Basin that began some five million years ago when the Sirt Basin broke off along the present Misratah - Malta Escarpment. Of course, the effect of this tilting can be seen in the bathymetry, causing the shelf to appear to slope from west to east, but this is only an incidental feature that is unrelated to the real continuity between the African continent to the south and its outer edge at the north rim of the Pelagian Basin.

245. As noted above, it is argued by Tunisia that the "Gulf of Gabes" (allegedly from Ras Kaboudia to El Biban), has always been regarded in antiquity, as today, as a physical unity¹. But historically speaking, it is not correct that the coastal strip from Ras Kaboudia to El Biban formed a single economic or political region. This has been shown above in some detail in paragraphs 61 to 64 above and is documented by the historical memorandum set forth in *Annex 6*, Volume III.

246. The historical record of antiquity makes it quite clear that the natural territorial unit in ancient history was not the whole area of the "Gulf of Gabes" as alleged in the Tunisian Memorial, "depuis le fond des âges". On the contrary, as noted in paragraph 64 above, the southern half of the "Gulf of Gabes" as far as the region of the *chotts* was often regarded as a nomadic no-man's-land and the coastal strip was often associated with the *regio Tripolitania* to the east rather than the old province to the north.

247. A second argument in the Tunisian Memorial relates to what is alleged to have been the historical importance of fishing in the economy of the region of the "Gulf of Gabes". It is claimed that Tunisia was forced to compensate for its poor terrain by maintaining a close, profitable and symbiotic relationship with the sea². The historical importance of fishing for the region, it is alleged, can be authenticated in various sources³ and stands in striking contrast to the adjacent sector of the Libyan coast⁴. The inaccuracy of this claim is fully discussed in the historical memorandum set forth in *Annex 6*, Volume III. It is pointed out there that in ancient

¹ See *Tunisian Memorial*, paras. 4.16 through 4.31.

² *Ibid.*, para. 4.01.

³ *Ibid.*, para. 4.33.

⁴ *Ibid.*, para. 3.47.

times the region of the "Gulf of Gabes" (called *Emporia*¹) depended primarily upon its extremely fertile land. Parts of the region of the "Gulf of Gabes" were extremely prosperous agriculturally. In contrast, references by ancient authors to fishing in the "Gulf of Gabes" are hardly enough to support the Tunisian claim that fishing represented an essential part of the livelihood of the inhabitants from "time immemorial". Certainly there is no justification for the assertion that all the settlements along the "Gulf of Gabes"—erroneously described as Phoenician "comptoirs"—either practiced fishing or depended upon it for their main source of wealth².

248. Turning to the ethnographic background of the region of north-west Tripolitania and southern Tunisia, it is noted that no reference to this subject is made in the Tunisian Memorial. Detailed documentation of this background is provided by the historical study set forth in *Annex 6*, Volume III. The salient points of this ethnographic story are set forth below.

249. Interweaving of tribes across northwest Tripolitania and southern Tunisia was considerable and of great antiquity. This situation went back to pre-Arab times, before the Seventh Century, when the Berbers³ inhabited the area⁴.

250. The coming of the Arabs to North Africa had the effect of introducing further elements of complexity to the ethnographic situation. The Jeffara Plain became a region dominated by the periodic migrations of the transhumant and nomadic Arabs. Over the coastal areas of Zuara, Djerba, Zarzis, and Gabes the nomadic overlords exercised an effective and burdensome control, ensuring that the major benefits from the produce of the areas went to them. The tribes of the Jabal, needing access to the fertile land on the edge of the Jeffara Plain, found themselves in a similar position of servitude. It was only in the 15th Century that the mountain tribes were able to redress the balance, when, as a result of the exhaustion of the plains nomads in their incessant wars, the mountain tribes were able to re-enter the plains. In the resultant battles the coastal tribes were forced northwest towards Gabes and the Sahel, and east into the Tripolitanian Jeffara by the mountain tribes coming from the southern Jabal.

251. From the 17th Century onward the situation in the Tunisian Jeffara followed the fortunes of the two adjacent regencies. Both the Beys

¹ The very term "*Emporia*"; meaning "trading posts" in Greek, evidences the fact that the sites depended partly upon their trading activity, much of it generated from the desert hinterland in the form of precious stones (e.g., carbuncles), animals, and animal skins, etc., though, doubtless, fish was included.

² See *Tunisian Memorial*, para. 4.33, "la prospérité de ces 'Emporia' venait de la mer". The reference to Stéphane Gsell's *Histoire ancienne de l'Afrique du nord 1913-1928* (Paris, Hachette et cie., 1928-1929), which is cited to support this statement is manifestly faulty; nowhere does Gsell give justification for such a view. See *Annex 6*, Vol. III, pp. 36 and 37.

³ It is believed that the Berbers were originally an Arab tribe coming from the region of the Arabian Gulf.

⁴ See *Annex 6*, Vol. III, p. 29.

of Tunis and the Pashas of Tripoli sought the support of the tribes in the region to extend their respective areas of power. From 1598 to 1638, the Tunisian Beys were engaged in a continuous series of wars to impose their authority southward as far as Djerba. Added to these complexities came a further one. The traditional rivalries between mountain and plains tribes (by this time intermarriage had made the population largely homogeneous) had allied to the formal rivalries of Tripoli and Tunis to create a form of alliance pattern known as the *soff*. The *soff* alliance divided the Jeffara and Jabal tribes into two groups, known as the Bashia and Masinia. The division referred ostensibly to the struggle between Ali and Hussain Pasha for the control of the Regency of Tunis in the 1750s. In reality, of course, this justification was soon forgotten and this *soff* became simply a traditional alliance pattern which bore no relationship to wider political events, but codified traditional patterns of warfare. The *soff* extended right across the Jeffara into Tripolitania, providing a sense of cohesion¹.

252. The circumstances relating to the border between the regencies of Tripolitania and Tunis in more recent times are discussed in paragraphs 67 through 76 above, where the facts are brought out that the border between these two jurisdictions lay at various times at Gabes, at Djerba and at El Biban. Indeed, the tribes of western Tripolitania and southeastern Tunisia were very similar—in organization, life style, social and political interaction and aspirations to escape the exigencies of central control. In this respect, they differed considerably from tribes to the north of Gabes, further pointing up the fact that there has never existed an inherent unity between the northern and southern parts of this area which the Tunisian Memorial has exaggeratedly termed the “Gulf of Gabes”.

253. Other factors bear out the conclusions arrived at in considering the physical geography of the region as well as its history and ethnology. For example, *hydrogeology*², which is pertinent to an understanding of the total scientific setting, is of interest here. Hydrogeology provides an essential link between the prevailing physical parameters and the ecological response. It is largely concerned with the occurrence, flow and quality of ground waters and the management and conservation of this fundamental natural resource³.

254. In paragraph 4.18 of the Tunisian Memorial it is asserted that “the unity [of the area] ... between Ras Kaboudia and the Libyan frontier...constitutes an indivisible whole from the ecological point of view...”. With respect to the coast and hinterland there is no hydrogeological basis for this statement or for the view that the whole region from Ras Kaboudia to Ras Ajdir is a single entity having a fundamental unity of character. One can identify two, and possibly three, hydrogeological provinces within

¹ See *Annex 6*, Vol. III, p. 32.

² This field of science involves primarily a study of the relationship between the fixed geological conditions and the variables governing the movement and quality of underground water within any system.

³ This portion of Sec. 5 is based on the study prepared by Dr. Allan, *Annex 1*, Vol. III.

this region: (i) eastern Tunisia; (ii) the Jeffara Plain; (iii) the intervening area situated west and southwest of Gabes. (These provinces are indicated on Figure 9 to *Annex 1*, Volume III.)

255. Eastern Tunisia extending from Cape Bon to the southwest of Sfax is part of the Tunisian Atlas region, represented by the predominantly compressional deformation of folding and related faulting having northeast/southwest and north/south structural trends. The resultant complex system has a number of separate basins with strong structural control and limited contributory area to springs and wells, so that sustained yields of any magnitude are lacking. The Jeffara Plain, extending inland from the coast from about Medenine in Tunisia to beyond Tripoli in Libya¹ constitutes an unbroken entity, the essential hydrogeological features of which are similar, if not identical. The Plain is characterized by simple flexuring and faulting of the sedimentary cover on the Sahara platform. The Jeffara hydrogeological province is abruptly terminated in the west by the marked structural control of the generally north/south oriented Dahar ridge which functions as both a water divide and intake area for the major inland basin of Algeria. In the area west and southwest of Gabes, a prevalence of faults allows the issue of springs and hydraulic continuity from great depths towards the surface. This condition is explained principally by groups of wells, which along the coast and inland from Gabes have provided significant water supplies for irrigation use. The water quality is good by western Jeffara standards, though saline intrusion from the sea is always a risk at the more coastal locations.

256. From the foregoing it can be concluded that the presence of hydrogeological provinces of essentially different character refutes the contention that the Tunisian coast from Gabes to Ras Kaboudia and the Tunisian coast from Gabes to Ras Ajdir along the Pelagian Sea constitute a single natural entity. However, the Jeffara Plain which lies behind the northward-facing coasts of both Libya and Tunisia can be viewed as a natural entity from the standpoint of hydrogeology. Thus, here too, there is seen the unity of the Jeffara Plain in both Libya and Tunisia and the disunity of the region of Tunisia to the north of Gabes.

257. A detailed examination of the Jeffara Plain and the "Gulf of Gabes" from the standpoint of ecology and economics is contained in the study of Dr. Allan contained in *Annex 1*, Volume III. Again, the assertion to be tested is whether, from an ecological and economics standpoint, this region is properly to be viewed as a unity, as alleged by Tunisia. In his study Dr. Allan analyses a number of factors relating to onshore natural resources in order to test the validity of the Tunisian claim of unity for the entire region between Ras Kaboudia and Ras Ajdir. These factors include: climate, soil, vegetation, livestock rearing, and agriculture. He also examines offshore natural resources. The Allan study then takes a look at industry in the area, tourism and government investment and planning.

(78) ¹ See *Map 16* facing p. 92 above.

258. With respect to climate, it is apparent that just south of Sfax below the 200 millimetre mean annual *isohyet* a very different zone of climate begins. To the north of Sfax reliable dryland farming of grain and olives is possible; to the south, all agriculture (except that based on groundwater) becomes increasingly more hazardous. Even within the coastal strip south of Sfax separate natural climatic zones are evident. Similarly, this area is not a uniform environment in terms of soil quality or with respect to its potential for agriculture or rangeland utilization¹. Vegetation varies according to climate and soils and hence varies within the area as a function of these factors further negating any inference of a unified area.

259. With regard to livestock, although the region north of Sfax due to greater rainfall is better endowed to sustain higher stocking levels, the area to the south depends more heavily economically on livestock². Agriculture also points up the lack of uniformity in the area. Around Sfax a wide range of crops is grown and it is the main area in Tunisia for the olive. To the south, particularly away from the coast, dates are grown. In the Medenine area the major agricultural activity is vine raising³. Figures included in the Allan study illustrate the foregoing and point up the lack of uniformity of the entire region between Ras Kaboudia and Ras Ajdir and the relative uniformity along the Jeffara Plain.

260. With regard to offshore natural resources, the fish resource, though important to the national economy of Tunisia, is by no means a major element in it⁴. Even in the south its place is declining compared with other economic sectors such as industry and tourism. It is also not the case that fishing provides a livelihood for a significant portion of the people living on the southern margins of the "region of the Gulf of Gabes", resulting in that region being, as stated in the Tunisian Memorial, "one of the most densely populated regions of the Mediterranean"⁵. The region is not heavily populated, and the population which does live in the southern governorate is only supported to a limited extent by fishing. Just as was noted above with regard to agriculture that Sfax is the most productive governorate in this region of Tunisia, so also a much higher proportion of the fish caught throughout this region is fished from Sfax than from the southern ports. Comparative figures measuring fishing against other sectors of the economy and in terms of the percentage of the population engaged in fishing are shown at pages 7 through 10 of the Allan Study⁵, which shows conclusively the relatively low importance of fishing in the Tunisian economy, in marked contrast to the claims made of the importance of fishing in the Tunisian Memorial.

261. In the discussion of socio-economic factors in the Tunisian Memorial there is a serious omission— tourism. As we have seen, Tunisia

¹ See *Annex 1*, Vol. III, pp. 2 through 5.

² *Ibid.*, p. 5.

³ This subject is treated in detail in the Allan Study, *Annex 1*, Vol. III, p. 7 from which this paragraph is extracted.

⁴ See *Tunisian Memorial*, para. 4.24.

⁵ See *Annex 1*, Vol. III.

rests its case firmly on the notion that the fish resource of the "Gulf of Gabes" is the most significant contribution to the livelihood of the population residing on the shores of the Gulf and especially along its southern shores. It has been shown how this is just not so. The fishing market has never been a very large proportional employer, and its share in the employment market has declined substantially in the past two decades. In contrast, the tourist industry centred around the region of the "Gulf of Gabes", especially on Djerba, has grown more rapidly than in any other center in Tunisia during the 1970s. Figures and charts showing the growth and significance of tourism in the Tunisian economy are found in the Allan Study¹. Tourism has for over 20 years been dynamic, expanding and has become a major feature of Tunisia's economic well-being. Meanwhile the fishing industry has expanded relatively little and makes no equivalent contribution to the Tunisian economy whether measured in terms of value added or of employment creation. The prospects for fishing are that it will grow slowly, will employ progressively fewer people and will never contribute significantly to exports. Tourism, on the other hand, can consolidate its position by concentrating on the better value added performance derived from medium and high cost tourism, and thereby continue to make a major contribution.

262. In conclusion, therefore, it is evident that the claim in the Tunisian Memorial that the entire region from Ras Kaboudia to Ras Ajdir is somehow a unity, ecologically, economically and otherwise, is not so. On the contrary, one can establish a continuity between the Jeffara Plain in both Libya and Tunisia that has its roots in the distant past.

SECTION 6. Continuity between the Continental Shelf and the North African Landmass to the South (Geologic Factors)

263. As has been noted elsewhere², the Tunisian Memorial contains relatively little stratigraphic or physiographic discussion and puts forward rather superficial, and as will also be seen, inadequate geological data and interpretations in support of its claim that the "eastward-facing" coast of Tunisia fronting on the Pelagian Sea is naturally prolonged eastward far onto the continental shelf. Such geological material as Tunisia does put forward is discussed in considerably greater detail in the study of Dr. J.M. Anketell, Lecturer in Geology, University of Manchester, England, set forth as *Annex 12A*, Volume III.

264. The Libyan case has deeper and more extensive geological roots. They establish the continuity between the North African landmass to the south and the continental shelf to the north. The geological background that constitutes the underpinning for these conclusions is set forth in the

¹ See *Annex 1*, Vol. III, pp. 10 through 12.

² See para. 182 above.

memorandum of Professor Fabricius referred to in earlier paragraphs and set forth as *Annex 11*, Volume III and in the two studies of Dr. Anketell¹. The key points will be summarized briefly below.

77 265. The essential elements of the Libyan case were set forth in the Libyan Memorial² and in its Annex II. The continental shelf area to be delimited forms part of the Pelagian Basin³. The Pelagian Sea and the Sirt Basin region of the Southern Ionian Sea are relatively shallow seas, the shape of which has remained more or less unchanged apart from coastal advances and retreats during the 200 million years that have elapsed since Triassic time⁴. The Pelagian Basin, the extent of which is shown in *Figure 7* facing page 90, is located on the African Plate. The various movements of the African Plate in former geologic times, and the development of fold systems such as that of the Atlas Mountains, and of fault zones such as those of the Jeffara, the Sirt Basin and the north/south axis in Tunisia, are summarized by Professor Fabricius and by Dr. Anketell⁵.

266. Although the African plate can be described as stable in contradistinction to the mobile Atlas-Alpine belt, there have developed in northern Africa a number of zones which are either higher or lower than their neighbours. It depends on the regional situation whether from the coastal area seaward one type of zone comes first or the other. In the case of the coastal portion of the Jeffara Plain in Libya and Tunisia, that coast is immediately followed by a zone of depressions (the Gabes-Sabratha Basin)—which is more accentuated in the east. Beyond this zone of depressions seaward there is a higher zone which includes the Sahel, the Kerkennah Islands, and the Medina Bank. Of course, these features are very much more complicated by tectonic forces, but the general scheme remains. These zones may run parallel to the northward-facing Libyan-Tunisian coast and the Jeffara Plain and the fault system behind the coast, but quite to the contrary of showing any prolongation of the Tunisian coast to the east, these zones clearly establish the continuity between the Pelagian Basin (including the continental shelf below the Pelagian Sea to the north) and the African Plate and landmass to the south. This is, of course, the essence of the meaning of "natural prolongation"⁶.

267. This physiographic pattern has fundamental geologic origins. It stems from the various fold and fault trends that have arisen from the Tethyan origin of the Mediterranean and the various movements and interactions of the African and European plates during geological times.

¹ *Annexes 12A and 12B*, Vol. III.

² See *Libyan Memorial*, paras. 60 through 68.

³ *Ibid.*, para. 62. For an explanation of the use of the term "Pelagian Basin", see fn. 1 at p. 90 above and fn. 2 at p. 10 above.

⁴ See para. 188 above.

⁵ *Annex 11 and Annexes 12A and 12B*, Vol. III.

⁶ The foregoing is summarized from the memorandum prepared by Dr. Fabricius found in *Annex 11*, Vol. III. The investigation by Anketell and Ghallali (1977) established the existence of a series of block movements with fault planes running mainly east/west, i.e., more or less parallel to the Libyan coast. See *Fig. 18* facing p. 116.

Thus, for example, the northeast/southwest Atlas Mountains trend, the north/south axis, and the northeast/southwest Sirt Basin trend emphasized in the Libyan Memorial and its Annex II, are all features superimposed on the African plate that have contributed to the resulting physiographic patterns. In addition, there are less important trends further complicating the picture. Such trends have been detected by careful analysis of *facies* and isopach data, and the interpretation of lineaments on satellite imagery, on aerial photographs and in the field. They represent the interaction between the African continent and the seas and lands that impinged upon it from the north during geological times. They may complicate but they do not obscure the essential continuity between the Pelagian Basin and the landmass to the south. Together, these features support the proposition that the continental shelf area in question is the natural prolongation northward of the generally northward-facing North African coast from Gabes to Ras Ajdir on the Tunisian coast and from Ras Ajdir eastward on the Libyan coast to the edge of the Pelagian Basin.

268. The "scientific" claims of Tunisia are summarized in paragraphs 5.80 through 5.85 of its Memorial. These claims are primarily morphological in content, but Tunisia tries to support them with geological evidence. The Tunisian Memorial attempts to establish a "morphological continuity" between Tunisia's land territory and the adjacent sea bottom to the east out to the 250 to 300 metre isobaths, and beyond. A "veritable land-sea interpenetration" is alleged with an essentially west-to-east orientation. It is said that a real continuity between eastern and southern Tunisia and the underwater areas adjacent can be established. Two west/east morphological zones are emphasized: in the centre, a series of elevated areas or "môles" forming a high zone said to run west/east from Algeria out to the "Plateau de Melita et de Medina"; to the south a zone of depressions, again said to run west/east from the *chotts* in Algeria by way of the Gulf of Gabes to the "Tripolitanian Furrow". Finally, sedimentological and structural data are said to establish that the "Tunisian Shelf" and the "Gulf of Gabes" are homogeneous units and that the eastward prolongation of Tunisia under the sea, far from being an accident of nature, has a fundamental basis evidenced by the west/east geological alignment in Tunisia and the homogeneity of stratigraphic *facies* in a west/east direction. The whole approach of the Tunisian Memorial is, therefore, one which advances the existence and the importance of west/east trends and the "ease" with which they can be traced offshore far into the Pelagian Basin, thus, it is said, affirming the claim of a natural prolongation of the Tunisian coast toward the east. In addition, it is stated that this trend is not only recognizable at the present time but has also played an important role in the geological development of the region ever since "remote times".

269. These "scientific" claims for a west/east trend are invalid. This is so in part because of the inadequacy of the data adduced in support and in part because of faulty interpretations of the data. An examination of the

¹ See para. 234 above.

data alleged to support the Tunisian claims is set forth in the study of Dr. Anketell¹ and summarized in the next paragraph. It should be noted that the Tunisian contentions are not based essentially on geology at all but are geomorphological and paleogeographical². *The alleged highs and lows running west/east since ancient geologic times simply do not exist.* The only paleogeographic high at the end of the Cretaceous³ is situated near the Kerkennah Islands and it trends northwest/southeast to join the Lampedusa high. It is not a west/east trend. Moreover, there is a linear depression trending north-northeast/south-southwest between the Kerkennah high and the Tunisian coast which completely refutes any allegation of a west/east prolongation from the Tunisian landmass out to the Kerkennah Islands and beyond to the east. Finally, at the end of the Cretaceous there is no zone of paleogeographic lows trending west to east from the *chotts* in Algeria, across Tunisia and into the "Gulf of Gabes" as claimed in the Tunisian Memorial⁴. The only major low at that geologic time trends west-northwest/east-southeast parallel to the Libyan-Tunisian northward-facing coast and is situated in the Gabes-Sabratha Basin.

270. The data put forward in the Tunisian Memorial, and in particular the *facies* maps and stratigraphic sections, are examined by Dr. Anketell in his study set forth as *Annex 12A*, Volume III. A brief explanation of the different types of geologic maps mentioned below is set forth in footnote 5 on this page⁵. Certain very basic criticisms are made of these Tunisian maps in the Anketell study. Briefly summarized, the contouring of the isopach maps is often inconsistent or not noted. This makes them difficult even for an expert to read and often misleading. In addition, the data on these maps are largely dependent on boreholes, the location of which is not indicated with anything like a sufficient degree of accuracy for verification of the data. Certain other difficulties with the data, and in particular Figure 5.21 in the Tunisian Memorial, are noted by Dr. Anketell. With regard to the *facies* maps in the Tunisian Memorial⁶, it is demonstrated in the Anketell study that the *facies* patterns are more sophisticated than proposed by Tunisia and that selective data have been used. In particular, the use of these data to show a west/east trend is faulty and ignores the influence of the north/south axis which, as noted above, though a major trend in Tunisia, is all but obscured in the Tunisian Memorial, an omission that is impossible to justify. The real meaning of

¹ See *Annex 12A*, Vol. III, pp. 1-8.

² "Paleogeography" is the study and description of the physical geography of the geologic past, such as the historical reconstruction of an area of the Earth's surface at a particular time in the geologic past. BATES and JACKSON, *op. cit.*, p. 450. (See *Annex 101*, Vol. II.)

³ See para. 188 above.

⁴ See *Tunisian Memorial*, Figs. 5.14, 5.15 and 5.18.

⁵ A "*facies* map" shows the variation or distribution of different rock types within a designated stratigraphic section. It does not indicate thickness. A "stratigraphic section" is a sequence of rock units found in a given region either at the surface or below it. An "isopach map" shows the thickness of a bed or formation throughout a geographic area—a "thickness map". BATES and JACKSON, *op. cit.*, pp. 221, 258, 330 and 615. (Copies of these pages are attached as *Annex 101*, Vol. II.)

⁶ See *Tunisian Memorial*, Vol. III, Maps 8 and 9.

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(22)

the *facies* data will be discussed in paragraph 272 below. With regard to the isopach maps, the Anketell study severely criticizes the pertinent scientific discussion in the Tunisian Memorial both as to the conclusions drawn from it and as to the failure to include data necessary for valid interpretation.

271. The surprising thing is that the Tunisian Memorial fails to give any importance to the real trends with geologic significance. The north/south axis is mentioned but it would never be suspected that it was this geologic feature to which Burolet attributed so much importance, the very Burolet whose work is drawn on so heavily by Tunisia in its Memorial¹. Of course, this north/south axis completely destroys the interpretation of the *facies* and isopach data on which the alleged west/east trend relies. Equally astonishing is the absence of any mention of the west-northwest/east-southeast Sirt Basin trend. Yet this trend is fundamental. Extending parallel to the coast from the Sirt Basin to Gabes, it establishes a continuity with this African coastline since Triassic times (over 200 million years). This is the dominant trend in the areas, running right up to the north/south axis where it swings to the north following the original edge of the African Plate.

272. *Facies* maps have been prepared by Dr. Anketell to show the real significance of this data². Similarly, maps showing the ancient shorelines on the North African coast have been prepared³. Instead of establishing some type of west/east trend, the *facies* data portrayed show something quite different. These maps cover successive periods of geologic time starting about 100 million years ago until about 15 million years ago. It is interesting to show the correlation between these *facies* maps and the ancient African coastline during the same general periods. This coastline, it will be noted, ran more or less east/west and cut across present-day Tunisia south of the east/west depression marked by the *chotts*. Everything north of that line was submerged. Of course, the Atlas Mountains had not yet been formed. The *facies* maps clearly show that the rock types, represented on Figures 5 and 6 of *Annex 12A*, Volume III as east/west bands of different colors, change from shallow water types to deeper water types northward from the ancient coastline. This evidence exists on the subsurface of the earth today and shows the northward continuation of the African continent from the ancient coast when everything to the north of this line in Tunisia was submerged and there was no coast running from Gabes to Cape Bon at all, just a northward-facing coast parallel to that of Libya, some part of which was also then submerged. Far from showing some sort of west/east trend, as alleged in the Tunisian Memorial, these *facies* data are clear geologic evidence of the natural prolongation northward of both Libya and Tunisia. More recent tectonic events such as the formation of the Atlas Mountains and the

¹ See Fig. 19 facing this page.

² See Figs. 5 and 6 to *Annex 12A*, Vol. III.

³ See Figs. 1, 3 and 4 of *Annex 12B*, Vol. III.

sinking of the Ionian Basin, with the resulting tilting of the Pelagian Basin and related physiographic responses reflected in the bathymetry, cannot alter this fundamental condition.

273. The latter part of Dr. Anketell's study set forth in *Annex 12A*, Volume III, is particularly enlightening. Regarding the asserted west/east geological trend advanced in the Tunisian Memorial, Dr. Anketell reports only a very minor east/west geological trend in Tunisia and this "only with respect to those areas in the immediate vicinity of the north-south axis of uplift in Tunisia". He adds:

"The trend is, in fact, the local expression of a regional North African trend which east of the axis has an east/southeast alignment and west of the axis has a west/southwest alignment. These alignments can be related to the trends of the margin of the North African plate¹."

274. The final conclusions of Dr. Anketell are of particular importance:

"As far as the Libyan-Tunisian coastline from the Gulf of Sirt to Gabes is concerned, there is a consistent conformity between the present east/southeast to west/northwest coastal trend and geological features developed since early Triassic times. The projection of an east/west trend from 'Tunisia' far out onto the Pelagian Basin has no firm basis in geological fact. To project a west/northwest to east/southeast trend parallel to the existing coastline of the Jeffara Plain most certainly has²."

¹ See *Annex 12A*, Vol. III, pp. 19 and 20.

² *Ibid.*, p. 20.

CHAPTER III CONCLUSIONS

275. Inevitably, a substantial portion of this Part II of the Libyan Counter-Memorial is directed at identifying errors and omissions in the "scientific" claims asserted by Tunisia in its Memorial. However, this critique is essential in view of the importance of scientific factors in this case—a point on which the Parties appear to be in full agreement¹—and of Tunisia's misapplication and misleading use of those factors.

276. As demonstrated in the foregoing Chapters of this Part II on "The Scientific Background", the Tunisian Memorial contains serious, misleading errors of scientific fact. But equally important are the omissions and the faulty inferences drawn from otherwise correct scientific data.

277. Turning first to the Tunisian Memorial's treatment of physical geography², it has been shown that Tunisia fails to mention its shorter but more important coastline on the Tyrrhenian Sea, as well as the fact that, while Tunisia may be an opposite State to Italy, so is Libya to Malta (as well as to Italy). Moreover, Tunisia fails to discuss adequately that Tunisia and Libya have adjacent coastlines, a critical omission, as the Libyan case for the natural prolongation northward from the African landmass reveals. In the foregoing paragraphs and in the supporting studies contained in Volume III, Libya has endeavored to correct the geographical description of the coastlines and to analyze other factors that show that the Tunisian claim that it has been geographically disadvantaged is exaggerated in the extreme.

278. Tunisia's treatment of "economic and human geography"³ has been examined generally in this Counter-Memorial and in more detail in a study prepared by Dr. J.A. Allan that is found in *Annex 1* of Volume III. Of course, the essential point to make with regard to all this material (which attempts to show how, as colourfully translated into English, "Tunisia does not hold the same trump cards as Libya") is that it is totally irrelevant.

279. This Counter-Memorial has also devoted a good deal of space to the incorrect claims of Tunisia regarding the region of the "Gulf of Gabes" both as to the exaggerated definition of this otherwise well-defined body of water and as to incorrect statements and conclusions regarding the region of the "Gulf of Gabes" as an economic and ecological unity. The real point to be made has been obscured in the Tunisian Memorial: this is the unity and continuity geographically (using this term in its broadest sense to include also socio-economic factors) throughout history of the Jeffara Plain region, which extends from Medenine in Tunisia (south of Djerba) to Al Khums (110 kilometres east of Tripoli) in Libya. To the south and running generally from west to east in the same direction as the Jeffara Plain are the uplands of the Jabal Nefusa. On the north of the Jeffara

¹ See para. 198 above.

² See *Tunisian Memorial*, paras. 3.02 through 3.31.

³ *Ibid.*, paras. 3.32 through 3.51.

Plain and running in the same general direction of west to east (the exact directions are set forth in paragraphs 207 and 208 above) is the northward-facing coastline of Libya and Tunisia from Ras Tajura on the east to Gabes on the west. From the Jabal Nefusa north across the Jeffara Plain and onto the continental shelf of the Pelagian Basin, we see the natural prolongation northward of the African continent on the edge of the African plate. This fact is dramatized by the fact that the ancient African shoreline ran along the Jeffara Plain and just south of the present Tunisian and Algerian *chotts* as revealed on Figure 3 to *Annex 12B*, Volume III (reproduced as *Figure 8*, facing page 92). Tunisia north of this line was submerged. Subsequent tectonic events resulted in creation of the Atlas Mountains and caused the Pelagian Basin to sink and tilt to the east in reaction to the rapid dropping of the Ionian Basin, leaving the outjutting promontories of Cape Bon in Tunisia and Cyrenaica in Libya which envelope the recessed embayments of the Pelagian Basin that are the Gulf of Sirt and the areas of the Gulf of Gabes and the Gabes-Sabratha Basin. But these events cannot obscure the underlying continuity between the Jabal Nefusa and Jeffara Plain and the sunken continental shelf region of the Pelagian Basin to the north. The Tunisian coast from Gabes up along the Sahel to Ras Kaboudia and on north to Cape Bon is an incidental result of these tectonic events, prior to which this region was a submerged part of the African plate along its northern rim.

280. The foregoing Chapters in this scientific portion of the Counter-Memorial also criticize the geomorphological and geological claims of Tunisia¹ that seek to make a case for the natural prolongation eastward of this north-jutting coast of Tunisia. The Tunisian case advanced is superficial and fanciful. It is not based on scientific fact. Some of the geological data have been distorted. The details backing up these conclusions are set forth in the technical studies referred to earlier and contained in Volume III.

281. It has been noted how Tunisia attempts to divide up artificially the continental shelf area in question. It suggests there is a "Plateau Tunisien" as if almost to prejudice the question at issue. It has had drawn on to maps various other features such as the "Sillon Tripolitain" (another attempt at prejudging), the "Plateau de Melita et de Medina", the "rides de Zira et de Zuara", the "falaises" (complete with teeth) and the "Ionian Abyssal Plain", and attempts to give these alleged features significance in arriving at a delimitation of the continental shelf. The previous Sections have shown that these features either do not exist at all or are greatly exaggerated. In fact, the continental shelf area in question is a featureless gently rolling plain. The relief model and block diagrams prepared by Libya on the basis of the best available data including the bathymetric data cited by Tunisia in its Memorial clearly show this. No invalid effort to carve up the area can alter these basic physiographic realities which are bolstered by the fact that, geologically, the Pelagian Basin is a unit that has remained in its present form since ancient geologic times.

¹ See *Tunisian Memorial*, Chap. V.

282. In previous Sections and in the Anketell study¹ the various data adduced in the Tunisian Memorial to show a land-sea interpenetration and a west/east "morphostructural alignment" have been severely criticized. In particular, the data shown in the *facies* and isopach maps have been considered in some detail in order to show inaccuracies, gaps, distortions and misinterpretations. The scientific invalidity of so much of this material is disturbing. However, without dwelling on this aspect of the claims put forward by Tunisia, the example of the *facies* data will suffice. Maps 8 and 9 in Volume III of the Tunisian Memorial set forth accurate *facies* data. However, they support a conclusion quite different from that advanced in the Tunisian Memorial. These *facies* data, correlated with the ancient African shoreline, clearly establish the continuity between the African landmass to the south and the Pelagian Basin to the north as well as to the subsurface African plate underlying the present Atlas - Maghreb region of Tunisia. The case is clearly made for the natural prolongation of Africa northward from the generally east/west coastline of Libya and Tunisia. They in no way support an alleged eastward prolongation of Tunisia.

283. Among the more glaring omissions noted in earlier sections is the failure of the Tunisian Memorial to place the actual trends that exist in the Pelagian Basin in proper focus and instead to emphasize trends that either are not trends at all (such as zones of depression or of elevation) or are minor at best. Thus, the Tunisian Memorial tries to make a case for a west/east trend, almost entirely ignoring the critical north/south axis in Tunisia and the very well-known Sirt Basin tectonic trend running west-northwest/east-southeast across the Pelagian Basin parallel to the coastline, both as it is today and as it trended throughout ancient geologic times.

284. Finally, it must be emphasized that the Tunisian "scientific" case, based as it is essentially on geomorphology with a scattering of geological data alleged to be in support, is superficial, quite apart from the omissions, inaccuracies and distortions referred to above. The Libyan case is based on fundamentals and on data and interpretations reflecting the latest scientific geological thinking and findings. The continuity between the continental shelf area in question and the African landmass to the south is irrefutable. The natural prolongation necessarily must be northward from the adjacent coasts of Libya and Tunisia that face to the north just as the ancient coastline did.

¹ *Annex 12A*, Vol. III, pp. 1-8.

PART III

THE PRINCIPLES AND RULES OF INTERNATIONAL LAW

INTRODUCTION

285. In interpreting the provisions of the Special Agreement, the question arises as to what content should be given to the expression "principles and rules of international law" in Article 1. These terms have different content. "Principles" are more general and basic; "rules" more detailed and specific. The principles to be applied in this case are enunciated in the *North Sea Continental Shelf Cases* and in the *Anglo-French Arbitration*. In the former, the Court stated:

"More fundamental than the notion of proximity appears to be the principle ... of the natural prolongation or continuation of the land territory or domain, or land sovereignty of the coastal State, into and under the high seas, via the bed of its territorial sea which is under the full sovereignty of that State. There are various ways of formulating this principle, but the underlying idea, namely of an extension of something already possessed, is the same, and it is this idea of extension which is, in the Court's opinion, determinant¹."

In the latter the Court of Arbitration said:

"... the principle that a coastal State has inherent rights in the continental shelf which constitutes the natural prolongation of its land territory [is] 'the most fundamental of all the rules of law relating to the continental shelf' ...²".

Thus, the rules to be applied, necessarily subordinate to the basic principles, must be perceived as having a single aim—a common direction: to give effect to the overriding principles enunciated by this Court and by the Court of Arbitration.

¹*I.C.J. Reports 1969*, p. 31, para. 43.

²*Anglo-French Arbitration* (Cmd. 7438), p. 51, para. 77, citing *I.C.J. Reports 1969*, p. 22, para 19.

CHAPTER I

NATURAL PROLONGATION

SECTION 1. The Meaning of the Concept of Natural Prolongation

286. The Memorials of the two Parties disclose complete agreement in one respect: the controlling principle to be applied in this case is that of "natural prolongation". The proposition that each Party is entitled to the area of shelf which constitutes the natural prolongation of its land territory, into and under the sea, is to be found in the very first submission of both Parties.

287. Despite this apparent agreement on this most fundamental principle, it is nevertheless apparent from the two Memorials that the Parties do not agree over the true effect of that principle, or its application to the particular situation before the Court. To resolve the disagreements, it is necessary to refer back to the Court's Judgment of 20 February 1969 in the *North Sea Continental Shelf Cases*, and the subsequent endorsement of that Judgment in the 1977 Award of the Court of Arbitration in the *Anglo-French Arbitration* and in the Third United Nations Conference on the Law of the Sea. In this way it may be possible to discern the true relevance of natural prolongation to problems of delimitation, and thereby test the validity of the positions adopted by the Parties in their pleadings.

288. The essence of the principle of natural prolongation is already described in Part II, Chapter I of the Libyan Memorial, and it is not proposed to repeat what is adequately stated there. Indeed, the Libyan description of the principle does not differ markedly from that in the Tunisian Memorial¹, save for the concluding paragraphs of that part of the Tunisian Memorial². It is in the mode of application of the principle that the Parties differ.

289. In the context of shelf delimitation, it is also necessary to distinguish two different aspects of this problem: the first is that of the outer limits of the shelf, and the second is that of boundaries between States adjoining the same shelf.

A. The Outer Limits of the Shelf

290. If these are conceived as the limits to the area of national jurisdiction, beyond which lies the international area, then, clearly, State practice and the text of Article 76 of the *DCIT* have already adopted the Court's concept of the shelf as the natural prolongation of the State's land territory. The contemporary, and accepted, view of the shelf is based upon its geological unity throughout the continental margin. The point is important because, as we shall see³, in the Tunisian Memorial there is an attempt

¹ See *Tunisian Memorial*, paras. 6.30 through 6.46.

² *Ibid.*, paras. 6.47 through 6.49 where, erroneously, this concept is given a primarily geomorphological sense.

³ See paras. 313 through 317 below.

to distinguish between the shelf and the so-called "borderland¹," with resulting differences in methods of delimitation. There is also an attempt to make alleged "historic rights", and the geomorphological features of the shelf, predominate², an attempt quite contrary to the essentially *geological* nature of the continental margin.

291. Reverting to the Truman Proclamation of 28 September 1945³, as the "starting point of the positive law on the subject" (to use the Court's own phrase)⁴, it is evident that, from the outset, the shelf was a predominantly geological concept. The Truman Proclamation (as quoted in the Tunisian Memorial, paragraph 6.04) said "the continental shelf may be regarded as an extension of the land-mass of the coastal nation and thus naturally appurtenant to it...". This statement has to be read with the further assertion (also quoted in paragraph 6.04), namely that,

"[T]he Government of the United States regards the natural resources of the subsoil and sea bed of the continental shelf beneath the high seas but contiguous to the coasts of the United States as appertaining to the United States, subject to its jurisdiction and control".

Although both statements, as quoted in the Tunisian Memorial, use the word "contiguous", this word is used in a descriptive sense rather than as the basis of the rights of the coastal State over the continental shelf. The "reason" or basis of claim is given in the first quotation: to paraphrase the relevant passage, since the continental shelf may be regarded "as an extension of the landmass of the coastal nation", it is reasonable and just for the contiguous nation to exercise jurisdiction over the natural resources of the continental shelf.

292. The Court's Judgment in the *North Sea Continental Shelf Cases* reinforced this view of the shelf, stressing the physical, and essentially geological, unity of the shelf and the adjoining landmass.

"What confers the *ipso jure* title which international law attributes to the coastal State in respect of its continental shelf, is the fact that the submarine areas concerned may be deemed to be actually part of the territory over which the coastal State already has dominion,—in the sense that, although covered with water, they are a prolongation or continuation of that territory, an extension of it under the sea⁵."

293. It is of course true that the concept of natural prolongation must also have a *geographical* connotation, for the shelf is a prolongation of a particular landmass which has its own configuration. However, the relevance of the geographical configuration of the adjacent landmass is seen

¹ See *Tunisian Memorial*, paras. 5.75 through 5.79.

² *Ibid.*, Chaps. IV and V and paras. 8.17 through 8.19.

³ Presidential Proclamation No. 2667, *op. cit.* (See *Annex 54*, Vol. II.)

⁴ *I.C.J. Reports 1969*, pp. 32 and 33, para. 47.

⁵ *Ibid.*, p. 31, para. 43.

more in the context of boundaries between neighbouring States, as we shall see in the next section, than in determining the outer limits of the shelf.

294. Confining our attention to the outer limits, it is also clear that under Article 76 of the *DCIT* a coastal State's entitlement to areas of continental shelf exists without regard to bathymetry. Bathymetry under these new trends becomes relevant in setting outer limits under circumstances not even remotely applicable to this case. Indeed, the principal change between the 1958 Convention and the *DCIT* is the abandonment of bathymetry as a determinant criterion in delimiting the continental shelf.

B. Boundaries between States Adjoining the Same Shelf

295. As noted in paragraph 85 of the Libyan Memorial, the guiding principle in determining a State's entitlement to areas of continental shelf off its coast rests on the physical fact of a natural prolongation of its land territory into and under the sea. The Court's Judgment in the *North Sea Continental Shelf Cases*, together with the Court of Arbitration's Award in the *Anglo-French Arbitration* and a substantial body of State practice, permit the formulation of a series of propositions concerning natural prolongation and boundaries, which might serve as *consideranda* underlying the Submissions, in whole or in part.

(i) *Natural prolongation serves to identify which areas are part of the same shelf.*

296. The proposition is self-evident in the sense that, viewing natural prolongation as synonymous with the continental margin, the geological evidence which shows that an area is part of the same continental margin equally demonstrates that it is the same shelf. As will be seen¹, the point has relevance to the Tunisian attempt to create a picture of two separate areas: the shelf and the "borderland".

(ii) *The natural prolongation of one State will be separated from the natural prolongation of another, on geological grounds, only where there exists a fundamental discontinuity in the area so as to create, in effect, two shelves.*

297. It will be recalled that in its 1969 Judgment in the *North Sea Continental Shelf Cases*, the Court adverted to the feature in the North Sea called the Norwegian Trough, suggesting that the shelf areas to the west of that feature could not be said to be the natural prolongation of the Norwegian coast "in any physical sense"². The possibility of a geological or geomorphological feature separating the natural prolongation of one State from the natural prolongation of another was also raised in the pleadings filed by the United Kingdom in the *Anglo-French Arbitration*.

¹ See paras. 313 through 317 below.

² *I.C.J. Reports 1969*, p. 32, para. 45.

The feature in question there was the Hurd Deep¹ and its related fault zone. The Court of Arbitration rejected the United Kingdom's argument, saying:

"The geological faults which constitute the Hurd Deep and the so-called Hurd Deep Fault Zone, even if they be considered as distinct features in the geomorphology of the shelf, are still discontinuities in the seabed and subsoil which do not disrupt the essential unity of the continental shelf...²".

The Court of Arbitration's insistence on allowing only fundamental "discontinuities" to mark the division between two natural prolongations is fully in accord with State practice. To take perhaps the best known example, the Indonesian/Australian Agreement of 12 February 1973 established a boundary in the Timor Sea³ which took into account the Aru and Timor Trenches⁴ as the natural limits to the Australian Shelf. That example discloses how significant the "discontinuity" must be. It is in contrast to that example, and in the context of this second proposition, that we shall in due course examine the Tunisian method of delimitation following the "ligne des crêtes".

(iii) "[I]t can be useful to consider the geology of [the] shelf in order to find out whether the direction taken by certain configurational features should influence delimitation because, in certain localities, they point-up the whole notion of the appurtenance of the continental shelf to the State whose territory it does in fact prolong."

298. This third proposition is taken *verbatim* from paragraph 95 of the Court's Judgment in the *North Sea Continental Shelf Cases*. What is important is the Court's stress on the *geology of the shelf*, for the relevant configurational features derive from that. Thus, features of a purely topographical significance—such as bathymetry or the "ligne des crêtes" on which Tunisia relies—will be seen to be irrelevant by this criterion. So, too, will features which lie far outside the shelf—such as an abyssal plain.

(iv) *The natural prolongations of adjacent States cannot be determined in isolation from the question of the natural prolongations of third States, be they opposite or adjacent.*

299. As the Court said in the *North Sea Continental Shelf Cases*:

¹ These two features have been superimposed on the Pelagian Basin in *Figs. 12 and 13* facing p. 106 to point up the artificiality of Tunisia's effort to create features that would affect delimitation.

² *Anglo-French Arbitration* (Cmnd. 7438), p. 63, para. 107.

³ *Limits in the Seas*, No. 87, 20 Aug. 1979, p. 9. (See *Annex 65*, Vol. II.)

⁴ The Timor Trench is a deep and very pronounced division between the two shelves. Its greatest depth is 3,301 m. At the 2,500 m. isobath, a more average depth, it is 220 mi. long and 14 mi. wide. At 2,000 m. it is 350 mi. long and 23 mi. wide.

"If there is a third State on one of the coasts concerned, the area of mutual natural prolongation with that of the same or another opposite State will be a separate and distinct one, to be treated in the same way¹".

The point made by the Court was further reflected in the *dispositif* where the Court required the parties to take account of other delimitations, actual or prospective, with third States in the same region. In similar terms, the Court of Arbitration was concerned in its Award in the *Anglo-French Arbitration* to consider the possible impact of the claims of the Irish Republic². As will be seen, the Tunisian "methods" suggested in its Memorial ignore this important element, for they involve claim-lines which can only be regarded as a transgression into areas of shelf to be delimited between Libya and Malta or Libya and Italy.

(v) *The delimitation of the shelf should leave as much as possible to each Party all those parts of the continental shelf that constitute a natural prolongation of its land territory without encroachment on the natural prolongation of the other.*

300. This proposition is taken almost *verbatim* from the Court's *dispositif* in the *North Sea Continental Shelf Cases*. The important part of the proposition is the injunction against "encroachment". This is highly relevant to the Tunisian methods, for all of them involve encroachment into areas of shelf that are the natural prolongation of Libya.

301. The fact that the equidistance method will frequently produce this "encroachment" led the Court to distinguish it from the true principle of natural prolongation. As the Court said:

"As regards equidistance, it clearly cannot be identified with the notion of natural prolongation or extension, since, as has already been stated (paragraph 8), the use of the equidistance method would frequently cause areas which are the natural prolongation or extension of the territory of one State to be attributed to another, when the configuration of the latter's coast makes the equidistance line swing out laterally across the former's coastal front, cutting it off from areas situated directly before that front³."

The Court developed further the notion that the shelf areas which attach to a State are those which lie in front of its coast, saying "[t]he appurtenance of the shelf to the countries in front of whose coastlines it lies, is therefore a fact...⁴". This results not simply from proximity, for the Court rejected any test of absolute proximity, but from the observable, physical facts. Hence, absent fundamental "discontinuities", a boundary that swings across a State's front, which is so angled as to cut across the area lying in front of that State's coast, is an impermissible encroachment.

¹ *I.C.J. Reports 1969*, p. 36, para. 57.

² *Anglo-French Arbitration* (Cmnd. 7438), p. 111, para. 236.

³ *I.C.J. Reports 1969*, pp. 31 and 32, para. 44.

⁴ *Ibid.*, p. 51, para. 95.

302. It is at this juncture that the importance of the geographical circumstances becomes evident. For, particularly insofar as the equidistance method is used to determine boundaries between States, it is the geographical form of a coastline which will influence the direction of such a boundary.

(vi) *The natural prolongation of a State is the prolongation of its landmass and not just of its coast.*

303. The shelf is the prolongation of the continental landmass and not merely a reflection of a coastline. The whole purpose of the Court's use of the concept of a "coastal front" was to eliminate the distortions caused by coastal peculiarities or irregularities—be these concave or convex coasts, promontories or offshore islands,—and thereby gain a true measure of the *landmass* which is prolonged under the sea. The Court of Arbitration took exactly the same view², regarding the English and French coasts in the English Channel as broadly equal. It thus ignored the substantial concavity of the Golfe de Gascogne, in the Channel sector, and in the Atlantic sector sought to remedy the distortion which the Scilly Islands would have produced by the equidistance method. In the present case, the Court faces a similar situation, in which Tunisia seeks to use natural prolongation by reference to its coasts rather than by reference to its landmass.

(vii) *The landmass of a State which has its natural prolongation under the sea is limited in extent by the existing political boundaries, and the prolongation must therefore reflect those boundaries.*

304. It is not merely the facts of nature which have to be accepted, but also the facts of political history. Neither this Court nor the Court of Arbitration was disposed to postulate land boundaries other than those which actually existed: for example, in the *North Sea Continental Shelf Cases*, the assumption that the shelf boundary should proceed from the land boundary (or, more accurately, the outer limit of the territorial sea) was never questioned. In the *Anglo-French Arbitration*, the Court of Arbitration emphasized that "the principle of natural prolongation is not of a prolongation under the sea of a continent or geographical land mass but of the land territory of a particular State"³. Similarly in the present case, the exercise of delimitation must start from the premise that the land boundary lies at Ras Ajdir. The natural prolongation proceeds from that point, on that coast.

(viii) *In delimiting the respective natural prolongations of adjacent States, the Court is not concerned to ensure an equitable allocation of resources, or with wider arguments of "economic equity".*

¹ *I.C.J. Reports 1969*, p. 52, para. 98.

² *Anglo-French Arbitration* (Cmd. 7438), pp. 88, 89 and 110, paras. 181, 182 and 234.

³ *Ibid.*, p. 86, para. 174; see also p. 92, para. 191.

305. The Court in its Judgment in the *North Sea Continental Shelf Cases* emphasized that the coastal State's rights to its own natural prolongation existed "*ipso facto and ab initio*". It continued by emphasizing that "the process of delimitation is essentially one of drawing a boundary line between areas which already appertain to one or other of the States affected". The Court was concerned to apply a legal institution—the shelf doctrine—which "has arisen out of the recognition of a physical fact". Consequently, the Court felt bound to reject the arguments of the Federal Republic of Germany based upon a claim to an "equitable share". Such a claim, whether based upon the argument that the State has a particular coastal frontage, or needs the resources, or is economically disadvantaged as compared with another State, is entirely inadmissible in matters of shelf delimitation⁵. Indeed, all "economic" arguments must be inadmissible, for they are quite incompatible with the fundamental notion of a State's inherent right to the physical, natural prolongation of its own landmass. This proposition is therefore dispositive of the "economic" or "social" arguments made in Chapters III and IV of the Tunisian Memorial.

(ix) *Reference is also made as appropriate to the relevant circumstances of geography, so as to indicate which methods of delimitation will produce an equitable result.*

306. This Court has made reference to the "general configuration of the coasts of the Parties"—a geographical phenomenon—as a relevant factor⁶. Similarly, the Court of Arbitration made repeated reference to the "geographical and other features" which, in that Court's view, established the legal framework for its decision⁷.

307. This Court's concern with geographical configuration seems, however, to be directly related to its implications for the *methods* of delimitation to be used. As the Court said in the *North Sea Continental Shelf Cases*:

"[I]n view of the particular geographical situation of the Parties' coastlines ... the methods chosen by them for the purpose of fixing

¹ *I.C.J. Reports 1969*, p. 22, para. 19; p. 29, para. 39.

² *Ibid.*, p. 22, para. 20.

³ *Ibid.*, p. 51, para. 95.

⁴ *Ibid.*, p. 22, para. 20; p. 31, para. 44. And see the Award in the *Anglo-French Arbitration* (Cmnd. 7438), pp. 114 and 115, para. 245, endorsing the view that the notion of "the just and equitable share" is wholly at variance with the fundamental principle that the shelf appertains to the coastal State as the natural prolongation of its land territory.

⁵ In this Counter-Memorial Libya has been forced to discuss these issues because of the emphasis placed on such matters in the *Tunisian Memorial* and because of the erroneous and misleading statements relating to such issues.

⁶ *I.C.J. Reports 1969*, p. 54, para. 101 (D)(1) [*dispositif*].

⁷ *Anglo-French Arbitration* (Cmnd. 7438), p. 109, para. 232.

the delimitation of their respective areas may happen in certain localities to lead to an overlapping of the areas appertaining to them”.

308. Similarly, in the *Anglo-French Arbitration*, it was as a consequence of its findings that the shelf area was a continuous, uniform shelf², without determinative geological characteristics—that the Court of Arbitration turned to geography. And the Court of Arbitration’s concern with geography was, again, in the context of its influence on the propriety of a particular *method* of delimitation. The Court was essentially concerned with the impact of the particular geographical features upon the propriety of the use of the equidistance method. The Court referred expressly to the “effects of particular geographical features or configurations upon the course of an equidistance-line boundary”³. That the Court of Arbitration saw geography as being relevant to the choice of *methods* is abundantly clear from its statement that—

“the appropriateness of the equidistance or any other method for the purpose of effecting an equitable delimitation in any given case is always a function or reflection of the geographical and other relevant circumstances of the particular case”⁴.

It is perfectly explicable that, in both the *North Sea Continental Shelf Cases* and the *Anglo-French Arbitration*, when either one or both parties were arguing by reference to the equidistance method, the Court should give very careful consideration to geographical configuration. For, when using the equidistance method, it is the configuration of the coast which will control the line, unless corrective action is taken to remedy distortions produced by some exceptional configuration.

309. In the present case, however, neither Party seeks to rely on the equidistance method. Although geographical circumstances remain relevant, their significance is therefore perhaps somewhat reduced. This is particularly so in view of the preponderance of geological evidence in this case clearly establishing a northward general line of direction of the prolongation of the African continental landmass, and in view of the congruence with these geological factors of the geographical features and legally relevant circumstances, as more fully discussed in Part IV, Chapter III of this Counter-Memorial, below. Nor could geographical circumstances alone, in any event, displace the principle of natural prolongation clearly established by physical geological evidence, for that would be to allow coastal configuration to prevail over the inherent rights of coastal States deriving from the physical facts of the natural prolongation of their landmass.

¹ *I.C.J. Reports 1969*, p. 52, para. 99.

² *Anglo-French Arbitration* (Cmd. 7438), p. 92, para. 191; pp. 109 and 110, para. 232.

³ *Ibid.*, p. 60, para. 100. See also, p. 114, para. 243, referring to the geography of the Scilly Isles, deflecting the equidistance line on a more southwesterly course.

⁴ *Ibid.*, p. 112, para. 239; see also p. 116, para. 248.

310. It would be contrary to principle to allow mere coastal configuration to determine the line of delimitation. The true role of geography would be to indicate the broad relationship of the two landmasses of the Parties and to suggest which method of delimitation would produce the least encroachment. For, notwithstanding a continuity of the shelf, the fact of encroachment would still be apparent in a situation where a proposed boundary crossed directly in front of the coast of a State. As shall be seen, therefore, in a particular area the relevant circumstance of geography may influence the direction of the main trend of prolongation. In paragraphs 493 through 505 below this point is dealt with more specifically in the context of the present case.

SECTION 2. Tunisia's Application of the Concept of Natural Prolongation

311. Although Tunisia's submissions are ostensibly founded on the concept of natural prolongation, an analysis of the use and application of this fundamental principle by Tunisia in its Memorial reveals a repeated distortion of that principle. The distortion is not without its purpose, for it serves to lend some color of legality to a series of propositions, ultimately reflected in the "practical methods" suggested by Tunisia and in the Tunisian submissions, which in fact run counter to the very concept of natural prolongation. It is necessary to demonstrate this distortion, and for this purpose it will be convenient to deal with the Tunisian arguments under four heads: the definition of the shelf, the limits of the shelf, the coasts abutting on the shelf, and the direction of the shelf.

A. The Definition of the Shelf

312. As indicated in the previous Section¹, the concept of natural prolongation enables the shelf to be identified and defined. It extends throughout the continental margin. In contemporary practice, States treat the shelf as a single entity, a unified area extending to the limits of the continental margin. Delimitation agreements between States commonly cover areas of shelf up to depths of 4,000 metres².

¹ See para. 296 above.

² For example, *Anglo-French Arbitration* (Cmd. 7438), 1,000 m.; India/Indonesia Agreement of 8 Aug. 1974, 1,646 m. (*Limits in the Seas*, No. 62, 25 Aug. 1975); France/Spain Agreement of 29 Jan. 1974, 3,229 m. (*Limits in the Seas*, No. 83, 12 Feb. 1979); Japan/Korea Agreement of 30 Jan. 1974, 1,829 m. (*Limits in the Seas*, No. 75, 2 Sep. 1977); Canada/Greenland Agreement of 17 Dec. 1973, 1,560 m. (*Limits in the Seas*, No. 72, 4 Aug. 1976); Guinea-Bissau/Senegal Agreement of 25 May 1960, 4,415 m. (*Limits in the Seas*, No. 68, 15 Mar. 1976); Colombia/Costa Rica Agreement of 17 Mar. 1977, 3,493 m. (*Limits in the Seas*, No. 84, 15 Feb. 1979); Colombia/Ecuador Agreement of 23 Aug. 1975, 3,621 m. (*Limits in the Seas*, No. 69, 1 Apr. 1976); Brazil/Uruguay Agreement of 21 July 1972, 6,652 m. (*Limits in the Seas*, No. 73, 30 Sep. 1976); India/Maldives Agreement of 28 Dec. 1976, 5,000 m. (*Limits in the Seas*, No. 78, 24 July 1978); India/Sri Lanka Agreement of 23 Mar. 1976, 3,000 m. (*Limits in the Seas*, No. 77, 16 Feb. 1978). In accordance with Art. 50, para. 2 of the Rules of Court, copies of these issues of *Limits in the Seas* have been deposited with the Registrar.

313. It is against this background that one must assess the extraordinary division which Tunisia makes between the "shelf" and the "borderland" ("avant-pays"). There is, in fact, no scientific basis for such a distinction; and in any event it is abundantly clear that the jurisprudence (in particular the Award of the Court of Arbitration in the *Anglo-French Arbitration*), the practice of States, and the new accepted trends in the Third United Nations Conference on the Law of the Sea combine to reject such a distinction. The concept of "natural prolongation" treats an identifiable shelf as a unity, and does not permit so arbitrary a division as Tunisia proposes between the "shelf"—up to 300 metres—and the "borderland"—from 300 to 1,000 metres.

314. The distinction made by Tunisia is not without its purpose, for on the basis of this arbitrary distinction Tunisia seeks to vary the legal rules governing delimitation. In fact, three zones were distinguished in the Tunisian Memorial. The first is the zone up to the 50 metre isobath, a zone within which the alleged "historic rights" prevail to the exclusion of all other legal rules or relevant factors; indeed, this zone is suggested by Tunisia as a zone *excluded* from the exercise of delimitation altogether¹. The absence of any foundation for this submission has already been demonstrated in Chapter II of Part I of this Counter-Memorial.

315. The second area of "shelf", up to the 300 metre isobath, is one in which Tunisia would exclude all relevant circumstances save those geomorphological facts which, in Tunisian Submission I.3, suggest that the Tunisian "natural prolongation" extends as far south as the ridges of Zira and Zuara². This follows from the Tunisian Memorial's elaboration of the application of the law in its Chapter VIII. The Court will note that the section on "relevant circumstances" (Section III—"Les Circonstances Pertinentes") is deemed to apply *only* to the "borderland"³. Thus, Tunisia would have the Court consider the three relevant circumstances listed—coastal configurations, the position of the frontier on the coast, and the effects of other delimitations—*only* in relation to delimitation beyond the 300 metre isobath.

316. The division is unacceptable in principle, and quite contrary to the concept of natural prolongation. Its purpose is to exclude the relevant circumstances from the area out to the 300 metre isobath precisely because those circumstances do not support the Tunisian claims. The Tunisian Submission is not in accord with Article 1 of the Special Agreement, which plainly indicates that the Court must take account of "the relevant circumstances which characterise the area" (the area here clearly embracing the entire area of concern).

317. The division is equally incompatible with the recent trends demonstrated in the Third United Nations Conference on the Law of the

¹ See *Tunisian Memorial*, para. 4.103 and Submission I.2.

² It appears that Tunisia is not content with its thrust to the east noted in paras. 39 and 90 above. Through the device of these "ridges" it attempts to thrust southward as well.

³ See *Tunisian Memorial*, para. 8.28.

Sea. The criterion of depth or bathymetry has ceased to have any relevance to the definition of the shelf within 200 miles from the baseline, and all the area of concern in this case is within that distance¹. Thus, to make this extraordinary division into a 50 metre zone, a further zone between 50 and 300 metres, and a third zone of 300 to 1,000 metres (the "borderland"), as Tunisia does, is to repudiate one of the most fundamental of all the recent trends.

B. The Limits of the Shelf

318. Tunisia seeks to demonstrate that, by the application of the concept of natural prolongation, the limits to the Tunisian shelf—to the Tunisian "natural prolongation"—can be determined.

16 319. To the east those limits are said to lie along the line of "falaises sous-marines", a line of underwater cliffs which are said to represent the original coast of Tunisia². This line is graphically, and dramatically, illustrated by Figure 5.07 in the Tunisian Memorial. To the south, the Tunisian shelf—the limit of its natural prolongation—is said to lie along the "rides" of Zira and Zuara³. As has been demonstrated in paragraphs 234 and 237 above, the existence of these "rides" and "falaises" cannot be established on the basis of any data put forward in the Tunisian Memorial or known to Libya. Yet quite apart from the factual misrepresentation inherent in this argument, the argument is also bad in law.

320. The Court will appreciate that the argument contains an inconsistency. The "rides" are represented as a possible shelf boundary, but the "falaises" are not. No reason is given for this inconsistency, but one may presume that the alleged "falaises" were found by Tunisia not far enough to the east to provide the boundary Tunisia seeks. Tunisia had no hesitation in asserting claims beyond these "falaises", beyond its shelf, in the area of the so-called "borderland".

321. However, in law neither feature can provide a boundary, or a natural limit to the prolongation of either Tunisia or Libya, for as demonstrated in the previous Section⁴, the features would have to represent a fundamental discontinuity in the shelf before providing such a limit. In short, the Tunisian argument is not only bad on the facts; it contains a serious misunderstanding of the type of feature required *in law* to mark the division between the natural prolongations of two States.

322. The aspect of limits with which natural prolongation might well assist is in determining where the shelf area, appropriate for delimitation between Tunisia and Libya, stops; and where shelf areas appropriate for delimitation between Malta and Libya (or Italy and Libya) begin. As indicated in the previous Section⁵, the concept of natural prolongation

¹ See also para. 294 above.

² See *Tunisian Memorial*, para. 5.18.

³ *Ibid.*, para. 5.75.

⁴ See para. 297 above.

⁵ See para. 299 above.

cannot be invoked by one State—or even by both Parties to a litigation—without taking account of the actual or prospective delimitations with third States, delimitations which will necessarily take account of the natural prolongations of those third States.

323. It is therefore somewhat surprising that, in the Tunisian Memorial, the existing delimitation between Italy and Tunisia receives scant mention, and Libya's future delimitation with Malta is virtually ignored¹. What is said², in a rather general way, is that Tunisia is opposite to States whose coasts are not far distant from its own. This, or rather the effects resulting from actual or potential delimitations, is regarded as a "relevant circumstance". The implication is that, by reason of the proximity of these other States (presumably the Italian islands of Pantelleria, Limpione, Linosa and Lampedusa and the State of Malta), Tunisia is "disadvantaged" and therefore requires a generous share of the shelf in its delimitation with Libya³.

324. Any such implication is based on fallacious reasoning, for the physical facts are what they are and it is no part of the Court's task to re-fashion geography⁴. And certainly, it is not possible to create a natural prolongation for Tunisia where none exists. If one examines the boundary between the Tunisian and Italian shelves deriving from the 1971 Italo/Tunisian Delimitation Agreement⁵, it is apparent that the extension of this boundary towards the southeast *excludes the possibility of any relationship between Tunisia and Malta as opposite States*⁶. In other words, it blocks off, or "amputates", any direct line between any part of the Tunisian coast which might be nearer to Malta than is the Libyan coast to the south. It also means that, given the Italo/Tunisian Agreement, Libya and Malta are opposite States and Tunisia and Malta are not: this statement is true whether one looks at the "natural prolongation" as being geographically the shelf area in front of the coast, or as defined on geological grounds. (The same effect is achieved by the Tunisian "sheaf of lines" illustrated in the Diagram appearing on page 192 below, which would if accepted totally isolate the Libyan coast from any potential delimitation with clearly opposite States such as Malta and Italy; Tunisia has therefore not only failed to take into account "the relevant circumstances which characterise the area": it has made proposals which fly in the face of those circumstances.)

325. Thus, all the kinds of lines which result from the various Tunisian "methods", and which swing across the Libyan coast, between Malta and

¹ Save for the rather extraordinary suggestion that the "abyssal plain" method would work equally well for other States, like Malta; see *Tunisian Memorial*, para. 9.09.

² See *Tunisian Memorial*, Submission I.4.(e).

³ See paras. 204 through 212 above.

⁴ See *I.C.J. Reports 1969*, pp. 49 and 50, para. 91.

⁵ See para. 48 above.

⁶ This is borne out by the fact that the only negotiations concerning delimitations with Malta have been between Libya and Malta. A Special Agreement has been entered into between these two States to refer the matter to this Court. Moreover, the *Tunisian Memorial* overlooks the obvious fact that Libya is an opposite State to Italy (the Pelagian Islands).

Libya, are a transgression into, and a true amputation of, areas of shelf which are not only part of Libya's natural prolongation, but are also outside the areas subject to the present Tunisian/Libyan delimitation. They are areas which may ultimately fall for consideration in the context of delimitations between or among Libya and another State or States, but they are quite outside the areas which may be legitimately regarded as appropriate for delimitation between Tunisia and Libya.

326. The issue is really one of "encroachment". As indicated in the previous Section, it is fundamental to the application of the principle of natural prolongation that delimitation should avoid allowing the one Party's shelf to encroach upon the natural prolongation of another¹. The defect with all the Tunisian methods is that they involve precisely such an encroachment.

327. It must also be added, for the sake of completeness, that the particular geometrical exercises contained in Chapter IX of the Tunisian Memorial, and identified as methods (a) and (b) in the Tunisian Submission II.2, all contain the same basic fallacy of transgressing into shelf areas which cannot conceivably be relevant to a delimitation between Tunisia and Libya. The matter is dealt with in detail in *Annex 8*, Volume III, to this Counter-Memorial. It need only be said, here, that the fallacy again stems from Tunisia's disregard of the limits imposed by the particular natural prolongations of Tunisia and Libya with which the Court is concerned in this case. These natural prolongations are not the prolongations of the entire Tunisian or Libyan coasts, but only of those parts of their coasts that abut on the shelf area in question. This is a point amplified in the section which follows.

C. The Coasts Abutting on the Shelf

328. For the sake of clarity, it will be convenient to distinguish the various issues to which these coasts, or rather their treatment in the Tunisian Memorial, give rise.

The identification of the relevant coasts

329. It is perhaps a trite observation to say that, in any delimitation between adjacent or opposite States, it is rarely the case that the whole of the coasts of the States concerned is in issue. To take a very obvious illustration, the Court in its Judgment in the *North Sea Continental Shelf Cases* was at no time concerned with the east- or north-facing coasts of Denmark. The first (the east) did not face into the North Sea at all, and the second (the north) was relevant only to the existing delimitation between Denmark and Norway. In some situations, the identification of the relevant coasts presents more difficulty. In the *Anglo-French Arbitration* the Court of Arbitration had to deal with a French argument that, in relation to the Atlantic area, the United Kingdom had no coast at all. Whilst the Court had little difficulty in rejecting so extreme an argument²,

¹ See paras. 300 and 301 above.

² *Anglo-French Arbitration* (Cmd. 7438), p. 110, para. 234.

it did raise the important question of which, in fact, were the relevant coasts, i.e., the coasts from which the natural prolongations of the two States projected. The Court found that, in fact, the two States had comparable "frontages" and stated the following:

"The Court considers that the method of delimitation which it adopts for the Atlantic region must be one that has relation to the coasts of the Parties actually abutting on the continental shelf of that region. Essentially, these are the coasts of Finistère and Ushant on the French side and the coasts of Cornwall and the Scilly Isles on the United Kingdom side¹."

Thus, the Court of Arbitration was not concerned with the long French coast of Brittany, Loire, Vendée and Gironde facing westward into the Atlantic, or the English coasts of North Devon or Wales: it identified the relevant coasts as a comparatively short "frontage".

330. A similar situation prevails in the present case. However, the Tunisian contentions are demonstrably unsound. For the relevant Tunisian coast is identified as extending to Cape Bon², and the relevant Libyan coast as far east as the Gulf of Sirt³. In relation to the Tunisian coast this has the effect of bringing in the length of coast north of Ras Kaboudia which has already been allocated its share of shelf under its 1971 Agreement with Italy. *What Tunisia seeks to do, in effect, is to count its coast north of Ras Kaboudia twice over.* Tunisia now seeks to use the same length of coast to acquire a greater share of shelf against Libya than its more limited, and relevant, coast would in equity secure for it.

331. By a parity of reasoning, the Libyan coast as far as the Gulf of Sirt must be irrelevant to the present delimitation, for east of Tripoli the Libyan coast is squarely opposite to Malta⁴. From this it follows that the areas of natural prolongation off the Libyan coast east of Tripoli have nothing to do with the present delimitation between Tunisia and Libya⁵. Put in other terms, the Tunisian selection of the relevant coasts is designed to support the encroachment of the Tunisian claims into the Libyan shelf and, moreover, a Libyan shelf which in due course will have to be recognized as such under a Libyan/Maltese delimitation⁶.

¹ See *Anglo-French Arbitration* (Cmnd. 7438), p. 116, para. 248. It was because these were the relevant coasts, and not the coasts along the entire length of the Channel, that the Court felt bound to reject the French method of a median line between "lignes de Lissage", for these were based on the Channel coasts.

² See *Tunisian Memorial*, para. 8.29 and Figs. 9.10 and 9.13.

³ *Ibid.*, para. 8.29 and Figs. 9.10 and 9.13.

⁴ Save for the line of delimitation to the east and south of Lampedusa which may well turn out to be drawn in an area of shelf which properly falls for delimitation between Malta and Libya.

⁵ It is apparent from the map that the Tunisian coast from Gabes to Ras Ajdir cannot, on any basis, be considered as opposite to Malta. With regard to the Tunisian coast between Gabes and Ras Kaboudia, see para. 336 below.

⁶ See paras. 358 and 482 through 484 below.

The configuration of the coasts

332. As indicated above¹, the Tunisian Memorial regards "relevant circumstances" (which include the general configuration of the coasts) as relevant only to the "borderland", not to what they term the Tunisian shelf proper.

333. The features of the Tunisian coast stressed in the Tunisian Memorial² are the following:

- the concavities of the Gulfs of Gabes and Hammamet;
- the convexity of the Sahel between the Gulfs;
- the north/south orientation of the Tunisian coast; and
- the consequential west/east direction of the Tunisian natural prolongation.

The features of the Libyan coast that are stressed are the following:

- its simplicity;
- that it has a broad front stretching to the Gulf of Sirt and facing the central basin of the Ionian Sea;
- the northwest/southeast orientation of the Libyan coast; and
- the consequential northeast/southwest direction of the Libyan natural prolongation.

334. As indicated in the previous Section, the natural prolongation is of the landmass, not the coast³, so that the accidents of convexities or concavities are really of no significance⁴. The question is therefore one of the *extent* of the respective landmasses and the relation of the adjoining shelf to those landmasses. For reasons already explained, the Court is not concerned with the Tunisian coast up into the Gulf of Hammamet, nor with the Libyan coast out to the Gulf of Sirt.

335. Confining ourselves to the coasts that are relevant, certain observations must be made regarding the Tunisian description of the Tunisian coast. For a more detailed geographical description of the Libyan and Tunisian coasts see *Annex 2*, Volume III. To depict the Tunisian coast as having a north/south orientation is inexact. In a delimitation between adjacent States one must start from the land boundary. That boundary is at Ras Ajdir and there the Tunisian coast, like the Libyan coast, runs west-northwest/east-southeast. It follows, therefore, that at this point the Tunisian shelf lies *to the north*, and not to the east.

336. In fact, Tunisia has quite an extensive coast running westward from Ras Ajdir. Thus, any delimitation must take account of this coast⁵.

¹ See para. 315 above.

² See *Tunisian Memorial*, paras. 3.12 through 3.14.

³ See para. 303 above.

⁴ They might assume significance if the equidistance method were to be used (see para. 387 below), but since neither Party advocates equidistance this aspect of coastal configuration can be dismissed.

⁵ Tunisia, too, makes this point by complaining of the effects of "amputation" (see *Tunisian Memorial*, Fig. 9.06). But this "amputation" arises directly from Tunisia's insistence that its coast runs north/south. With two lengths of coast abutting on the same shelf area, Tunisia cannot seriously complain that the one causes an "amputation" of the other.

The result would then be that the Tunisian coast, from Ras Ajdir to Gabes, has its natural prolongation *to the north*, which any delimitation must respect. Obviously, insofar as there is a further length of Tunisian coast running between Gabes and Ras Kaboudia this coast must abut on the same area. It is visually like a square (the shelf area) with two sides (the two lengths of Tunisian coast) at right angles. The two sides abut on the *same area*, and whether this area is regarded as a prolongation of the one side or the other, it is clear that there is no justification for claiming a *larger area* on the basis that one side is being "amputated". The overlap of prolongations on a right-angled coast is inevitable, and, as we shall see¹, Tunisia seeks some sort of "compensation" by, as it were, trying to count its Ras Ajdir-to-Gabes coastline twice over and by attaching to it areas of shelf that in fact lie in front of the Libyan coast. The problem is quite artificial, and entirely of Tunisia's own making. It disappears once the shelf area is regarded as lying *to the north* of that particular length of coast and it is conceded that the coast at right angles (between Gabes and Ras Kaboudia) is simply a coast abutting on the same area².

337. In the present case the shelf area is more properly regarded as a prolongation *to the north* of the Tunisian coast between Ras Ajdir and Gabes for at least two persuasive reasons. The first is that, geologically, the shelf is a northerly projection of the North African landmass. And the second is that the delimitation must start from Ras Ajdir, which lies on the coast facing north. The idea of a delimitation based upon the coast between Gabes and Ras Kaboudia might have some justification if the land boundary were at Gabes or Ras Yonga: but it is, in fact, at Ras Ajdir.

338. As to the Tunisian description of the Libyan coast, it treats as a coastal front the entire coast as far as the Gulf of Sirt. That coastal frontage cannot possibly be relevant to a delimitation between Tunisia and Libya. As indicated below³, beyond a point west of Tripoli the coast can be relevant only to a future delimitation with Malta. (This length of Libyan coast follows approximately the same direction as the length of the Tunisian coast between Ras Ajdir and Gabes: west-northwest/east-southeast, and not northwest/southeast as alleged by Tunisia.)

D. The Direction of the Shelf as the Natural Prolongation of the Landmass

339. The Tunisian argument necessarily hinges on the submission that there are, in fact, *two* shelves, physically distinguishable from each other. The Tunisian is said to be an easterly prolongation extending in the east to the line of "falaises", roughly along the 300 metre isobath, and in the

¹ See paras. 460 and 461 below.

² It may be helpful to consider the analogy of a bay. Whether the sea area is regarded as being attached to (a prolongation of) one side of the bay or the other, the area remains the same.

³ See paras. 483 and 484 below.

south to the "rides" of Zira and Zuara. The Libyan shelf is therefore somewhat ungenerously confined to the area south of these "rides", with a northeasterly direction to the prolongation.

340. The factual inaccuracies of the Tunisian contentions, simply as a question of the scientific evidence, have been exposed in Part II of this Counter-Memorial. This Chapter demonstrates how the Tunisian contentions distort the concept of natural prolongation as a matter of law.

341. Taking first the argument that the direction of the shelf can be determined by a line from the land boundary to the centre of the abyssal plain¹—not only is this scientifically incorrect but as a matter of law it is unacceptable². It purports to resolve the question of the relationship between a landmass and the adjoining shelf—the "natural prolongation" of the shelf—by reference to a feature which lies completely outside the shelf, some 600 kilometres³ east of Ras Kaboudia and lying between Sicily and Greece.

342. Then there is the quite separate argument based on bathymetry⁴. In essence, it is the argument that what was originally Tunisian land (the Pelagian Block or Plateau) has been gradually submerged, and that as the sea advanced at different times, so the Tunisian shoreline altered and at each stage formed a "terrace": these "terraces" are now shown by the bathymetry. In contrast, it is alleged that the Libyan shoreline has changed little; that Libya has lost little territory to the sea; and that this is shown by the proximity of the 200 metre isobath to the Libyan coast.

343. As has been demonstrated in paragraphs 217 through 219 above, the argument is inconsistent with the scientific evidence, and the changes in the Libyan coastline have been as dramatic as in the Tunisian. The other obvious flaw in the argument is that it all depends on the premise that the Pelagian Basin was originally part of the land territory to the west. In fact the Pelagian Basin is more accurately identified with the land to the south⁵, so it is scientifically more accurate to regard it as submerged Libya rather than submerged Tunisia.

344. However, all this speculation on the geological evolution of the Pelagian Basin, and its effect on bathymetry, is rather beside the point, because in law, the bathymetry is of minimal relevance. As a fundamentally geological concept, the superficial or topographical characteristics of the shelf—of which bathymetry is the most obvious—are not true indicators of prolongation⁶. They are not capable of indicating appurtenance. This can perhaps best be demonstrated by reversing the illustration. Can it be supposed that in applying the concept of natural prolongation, a Court would ever look to the surface topography of the land—to the location and shapes of hills, valleys, etc.? It is believed not. By the same

¹ See *Tunisian Memorial*, Chapter IX and Submission II.1.

² See paras. 444 through 453 below.

³ 324 nautical miles.

⁴ See *Tunisian Memorial*, paras. 5.16 through 5.25.

⁵ See paras. 265 and 266 above.

⁶ See para. 298 above.

token, the purely surface topography of the sea-bed is equally incapable of revealing the identity, or lack of identity, between the shelf and the adjoining landmass.

345. It must therefore be stated, by way of conclusion to this Section, that even aside from the scientific inaccuracies on which the Tunisian arguments rest, the Tunisian arguments cannot be reconciled with the legal concept of natural prolongation, the concept which both Parties regard as basic to this case.

SECTION 3. Libya's Application of the Concept of Natural Prolongation

346. The fundamental importance of geology in determining whether the area of continental shelf in question is the natural prolongation of the landmass of Libya or of Tunisia or of both, and the effect of the application of the principle of natural prolongation upon delimitation of this shelf between each State, were recognized by Libya in its Memorial. In fact, Libya had a special geological study undertaken which it appended as Annex II to its Memorial. In the available time since preparation of its Memorial, Libya has had additional studies made of the geological and other related scientific factors, calling on highly qualified independent experts¹. As a result, Libya's treatment of geology has been expanded in this Counter-Memorial. These additional scientific investigations were occasioned by a need not only to evaluate the scientific contentions contained in the Tunisian Memorial but also to reassess the Libyan case in light of the Tunisian contentions and to confirm and fortify the initial conclusions set forth in the Libyan Memorial.

347. In the sections which follow, the Libyan view of the concept of natural prolongation, and of its application to the facts of the present case, are set out. For the purpose of assisting the Court to note the comparisons between the Libyan and Tunisian views, these sections follow the same headings and sequence as those in the previous Section.

A. The Definition of the Shelf

348. In contrast to the Tunisian attempt to divide the shelf into different zones, and to depict various features said to affect delimitation, Libya demonstrates that the shelf is a single, physiographic unit without any significant features that would remotely affect delimitation. Indeed, this shelf is identifiable as the natural prolongation of the North African landmass to the south.

349. The Libyan Memorial at paragraphs 61 and 113 points out that the continental shelf area to be delimited is part of the Pelagian Basin, the limits of which are defined in paragraph 62². This Basin, including necessarily the continental shelf area in question, is physiographically and

¹ See fn. 1 at p. 79 above, for a listing of these experts. The memoranda resulting from these studies are set forth in the *Annexes* of Vol. III.

² See fn. 3 at p. 10 which repeats this definition. See also *Fig. 7* facing p. 90.

geologically a basically undifferentiated unit, and has been for millions of years¹. There is no legal or scientific basis whatsoever, on geographical, geological, physiographic or geomorphological grounds for dividing it up.

350. This conclusion has been confirmed by the additional scientific data set forth in and annexed to this Counter-Memorial. The geologic origins and development of the Pelagian Basin are dealt with in paragraphs 266ff. above and *Annex 11*, Volume III. In brief, it is now known that this area is part of the northern rim of the African plate which has over several hundreds of millions of years remained essentially unchanged. Of course, during this period, aside from the rising and falling sea, there have been major geologic events that have affected the geologic unit of the Pelagian Basin as a whole. The Atlas Mountains were formed as a result of interaction between the European and African plates. This and other tectonic events have led to the anomalous configuration of the Sahel promontory and the north-jutting of eastern Tunisia. With the formation of the Atlas Mountains, a totally different geologic region of European plate origin was superimposed on the African plate which today lies below the Atlas formation. Most of Tunisia north of the area of the *chotts* and west of the Sahel falls within this region. Another event of significance that occurred at roughly the same geologic time was the sinking of the Ionian Basin, which caused a tilting of the Pelagian Basin and its breaking off along the present Malta - Misratah Escarpment. As a result, the portion of the Pelagian Basin between Cape Bon and the Cyrenaica promontories became submerged, recessed embayments, tilting slightly toward the Ionian Sea.

351. Physiographically, the entire area of continental shelf here is like a gently rolling plain. As discussed in paragraph 238 above, a relief model and block diagrams were prepared for Libya from the best available bathymetric data in order to reveal the physiography of the sea bottom. They completely refute the Tunisian attempt to divide up the continental shelf into different zones characterized by alleged significant features².

352. The effort of Tunisia to exclude from consideration a portion of this area of continental shelf on alleged historical grounds has already been dealt with in Part I, Chapter II above. There is neither a legal nor a factual basis for considering the area as starting from the 50 metre isobath.

353. As reflected in Submission 12 of the Libyan Memorial (corresponding to Submission 11 of this Counter-Memorial), Libya considers the entire sea-bed area as part of the shelf, extending from the low-water mark seaward. For the entire area is part of the same "natural prolongation" and, as shown in paragraph 153 of the Libyan Memorial, whilst there is a difference between the coastal State's rights to its territorial sea

¹ See para. 244 above.

(80) ² See the photograph of the relief model facing p.104. See also *Fig. 10* facing p. 102.

and its continental shelf for jurisdictional purposes, it is imperative that, for purposes of determining whether a particular method of delimitation achieves an equitable result, the whole area must be taken into account.

B. The Limits of the Shelf

354. Libya has defined the limits of the continental shelf in accordance with the principles of law laid down in the *dispositif* of the Court's 1969 Judgment.

355. The Court there indicated that parties must take account of actual or potential delimitations with third States so as to avoid any attempt to delimit areas of shelf which might be appropriate for delimitation between one of the parties and a third State rather than between the two parties exclusively. It may be recalled that the Court of Arbitration in the *Anglo-French Arbitration* expressed the same concern in relation to a delimitation between the United Kingdom and France which might trespass into areas of shelf more appropriate for delimitation between the United Kingdom and the Republic of Ireland¹.

356. The point at issue is to prevent the Parties in their delimitation from encroaching upon areas of shelf which are of legal concern to a third State.

357. In the view of Libya, there are clear limits to the shelf area involved in the delimitation now before the Court. In the north, the 1971 Italo/Tunisian Agreement has already delimited between those two States, the shelf area lying between the Tunisian coast north of Ras Kaboudia and the Italian islands of Pantellaria, Limpione, Linosa and Lampedusa. (This point has been fully dealt with in paragraph 324 above, and it should be noted that Italy has entered into no delimitation agreement with either Malta or Libya.)

358. By the same token, Libya regards the position of Malta, and the potential Libyan/Maltese delimitation (as to which a special agreement has already been entered into) as imposing a limit to the shelf area to be delimited (in this case in the east). An equally significant fact is that the Italian islands of Limpione, Lampedusa and Linosa lie due north of the Libyan shoreline east of Ras Ajdir.

359. The rationale for these limits to the area now before the Court and a more precise definition of those limits are given later in this Counter-Memorial, in paragraphs 474 through 490 below. As will be pointed out there, these limits constitute an essential step in arriving at a method of delimitation consistent with legal principles. The difference between the Libyan and Tunisian positions on this particular issue is fundamental, and the difference stems entirely from their different views on the limits *in law* to their natural prolongations.

C. The Coasts Abutting on the Shelf

360. There is a necessary relationship between the question of the limits of the area of shelf subject to delimitation and the question of

¹*Anglo-French Arbitration* (Cmd. 7438), p. 111, para. 236.

identifying the particular coasts which abut on that area. As indicated in the previous Section, it was this relationship which Tunisia ignored in its Memorial.

361. The fundamental error in Tunisia's selection of the entire coast-line from Cape Bon to the Gulf of Sirt as the relevant coasts¹ (among other things) has invalidated from the outset the whole of the geometrical "methods" used by Tunisia to support its proposed line of delimitation².

362. Part IV, Chapter III below, therefore, will explore with some care a method of delimitation consistent with the legal principles, applying the correct application of the principle of natural prolongation discussed above.

¹ See paras. 333 and 334 above.

² See paras. 454 through 467 below for a detailed analysis of the two Tunisian geometrical exercises and *Annex 8*, Vol. III.

CHAPTER II

THE ROLE OF EQUITABLE PRINCIPLES, RELEVANT CIRCUMSTANCES AND THE NEW ACCEPTED TRENDS IN THE THIRD CONFERENCE ON THE LAW OF THE SEA

SECTION 1. The Role of Equitable Principles

363. Article 1 of the Special Agreement asks the Court to render judgment in this proceeding in accordance with equitable principles, the relevant circumstances which characterize the area and the new accepted trends in the Third United Nations Conference on the Law of the Sea. In this section, Libya will set forth the equitable principles embodied within the legal regime of the continental shelf which, in its view, are applicable to this case.

364. The modern positive law concerning delimitation of the continental shelf has its origin in the Truman Proclamation¹. Indeed, in the context of the evolution of continental shelf jurisdiction as a legal doctrine, the Truman Proclamation has "in the opinion of [this] Court a special status"², and is "regarded as the starting point of the positive law on the subject [of delimitation]"³.

365. In this respect, the primary concept contained in the Truman Proclamation and the continuing vitality of that principle have been described, by this Court, as follows:

"[T]he chief doctrine it enunciated, namely that of the coastal State as having an original, natural, and exclusive (in short a vested) right to the continental shelf off its shores, came to prevail over all others, being now reflected in Article 2 of the 1958 Geneva Convention on the Continental Shelf⁴."

366. Significantly, the Truman Proclamation declared that in cases in which the continental shelf in question extended to the shores of another State or was shared with an adjacent State, the boundary should be determined by the States concerned "in accordance with equitable principles".

367. This Court's principal decision with respect to the law governing delimitation of the continental shelf, its *Judgment in the North Sea Continental Shelf Cases*, reconfirmed the role of equitable principles as an essential element in determining the propriety under international law of a State's entitlement to the continental shelf appertaining to its territory. In this context, the Court indicated the general nature and content of the equitable principles applicable to continental shelf delimitation as follows:

"[D]elimitation must be the object of agreement between the States concerned, and ... such agreement must be arrived at in accordance with equitable principles. On a foundation of very

¹ See fn. 3 at p. 65 above.

² *I.C.J. Reports 1969*, p. 32, para. 47.

³ *Ibid.*, pp. 32 and 33, para. 47.

⁴ *Ibid.*, p. 33, para. 47.

general precepts of justice and good faith, actual rules of law are here involved which govern the delimitation of adjacent continental shelves—that is to say, rules binding upon States for all delimitations;—in short, it is not a question of applying equity simply as a matter of abstract justice, but of applying a rule of law which itself requires the application of equitable principles, in accordance with the ideas which have always underlain the development of the legal régime of the continental shelf in this field...¹”.

368. Thus, in endorsing the primacy of equitable principles the Court stressed the distinction between legal doctrines that incorporate or reflect considerations of “equity”, i.e., justice or fairness, and determinations *ex aequo et bono*, implying decisions based on practical considerations and expediency, disregarding, if necessary, existing law and recognized rights. The Court specifically held that there was no question of any decision *ex aequo et bono*, since Article 38, paragraph 2 of the Court’s Statute provides that a case may be decided on the basis of *ex aequo et bono* only if the parties so agree. Similarly, in the *Anglo-French Arbitration*, the Court of Arbitration, which was empowered by the parties to delimit certain continental shelf boundaries between France and the United Kingdom “in accordance with the rules of international law applicable in the matter as between [the Parties]”², held that its function was not to decide *ex aequo et bono*.

369. The Court in the *North Sea Continental Shelf Cases* also adopted the same basic perspective as the Truman Proclamation with respect to the relevance of geological factors in arriving at a delimitation in compliance with equitable principles, placing paramount emphasis on the physical relationship between the land and the adjacent continental shelf³.

“[T]he Court entertains no doubt [that] ... the most fundamental of all the rules of law relating to the continental shelf, enshrined in Article 2 of the 1958 Geneva Convention, though quite independent of it,—[is] ... that the rights of the coastal State in respect of the area of continental shelf that constitutes a natural prolongation of its land territory into and under the sea exist *ipso facto* and *ab initio*, by virtue of its sovereignty over the land, and as an extension of it in an exercise of sovereign rights for the purpose of exploring the seabed and exploiting its natural resources. In short, there is here an inherent right⁴.”

¹ *I.C.J. Reports 1969*, pp. 46 and 47, para. 85.

² *Anglo-French Arbitration* (Cmd. 7438), p. 22, para. 1.

³ The focus of the Truman Proclamation on the mineral resources (as opposed to living resources) of the continental shelf underscores the relevance of the geological aspects of the shelf in arriving at a delimitation or determination of the vested right of a coastal state in offshore areas in accordance with equitable principles. See in this connection para. 196 above.

⁴ *I.C.J. Reports 1969*, p. 22, para. 19.

370. Thus, because the land is the legal source of the power which a State may exercise over territorial extensions seaward, the most fundamental of all the rules of law governing the continental shelf, which must be applied in accordance with equitable principles, rests on the physical fact of the natural prolongation of a State's land territory into and under the sea.

“What confers the *ipso jure* title which international law attributes to the coastal State in respect of its continental shelf, is the fact that the submarine areas concerned may be deemed to be actually part of the territory over which the coastal State already has dominion,—in the sense that, although covered with water, they are a prolongation or continuation of that territory, an extension of it under the sea. From this it would follow that whenever a given submarine area does not constitute a natural—or the most natural—extension of the land territory of a coastal State, even though that area may be closer to it than it is to the territory of any other State, it cannot be regarded as appertaining to that State;—or at least it cannot be so regarded in the face of a competing claim by a State of whose land territory the submarine area concerned is to be regarded as a natural extension, even if it is less close to it!”

371. In view of the above-quoted language, it follows that a delimitation which is consistent with the physical facts of natural prolongation cannot possibly be inequitable, because there can be no contradiction between the fundamental rule of natural prolongation and principles of equity.

372. In sum, in the *North Sea Continental Shelf Cases* the Court enunciated the following basic rules and principles to be applied in a delimitation of a continental shelf between adjacent States:

“[D]elimitation is to be effected by agreement in accordance with equitable principles, and taking account of all the relevant circumstances, in such a way as to leave as much as possible to each Party all those parts of the continental shelf that constitute a natural prolongation of its land territory into and under the sea, without encroachment on the natural prolongation of the land territory of the other...²”

373. In view of the foregoing, the Libyan Memorial and the present Counter-Memorial have both been drafted on the premises set forth by the Court in the *North Sea Continental Shelf Cases* that in the delimitation of a continental shelf between adjoining States “it is precisely a rule of law that calls for the application of equitable principles³” and that “delimitation is to be effected by agreement in accordance with equitable principles, and taking account of all the relevant circumstances⁴”. They have also

¹ *I.C.J. Reports 1969*, p. 31, para. 43.

² *Ibid.*, p. 53, para. 101(C)(1) [*dispositif*].

³ *Ibid.*, p. 48, para. 88.

⁴ *Ibid.*, p. 53, para 101(C)(1) [*dispositif*].

been drafted in heed of the observation of the Court of Arbitration in the *Anglo-French Arbitration* that there exists "a general norm that, failing agreement, the boundary between States abutting on the same continental shelf is to be determined on equitable principles"¹.

374. This view found expression in the Libyan Memorial in Submission 3 (positively) that:

"3. A delimitation which gives effect to the principle of natural prolongation is one which respects the inherent *ipso jure* rights of each State, and the assertion of such rights is therefore in accordance with equitable principles²."

and in Submission 9 (negatively) that:

"9. A principle or method of delimitation which disregards the *ipso jure* title of a coastal State to the continental shelf constituting the natural prolongation of its land territory is, *ipso facto*, illegal and necessarily inequitable²."

It was also concluded in Submission 7 that:

"7. Whether the application of a particular method of delimitation is in accordance with equitable principles is to be tested by its results²."

375. It is on the basis of these established equitable principles, which have been consistently kept in mind, that the Libyan Counter-Memorial sets forth in Part IV, Chapter III below the practical method for achieving an equitable delimitation in the relevant circumstances of this case.

376. In marked contrast is the failure of the Tunisian Memorial to apply equitable principles to the determination of the delimitation lines actually claimed by Tunisia in Submission II, and Chapters VIII and IX — proposals which not only fail to apply the terms of the Special Agreement, but also are inconsistent with numerous other passages in the Tunisian Memorial³.

377. While one may agree with the passage quoted with approval by Tunisia⁴ from Judge Charles De Visscher, that the true function of equity as a part of the applicable law is to adapt the law to particular situations in the interests of a justice more or less individualized, the Tunisian Memorial confuses the issue in attempting to answer its own question, "What then is an equitable result, and what are equitable principles⁵?"

378. The Tunisian Memorial correctly concludes that two fundamental equitable principles in the context of a continental shelf delimitation are: (i) that each State is entitled to its own natural prolongation without encroachment on the natural prolongation of a neighbouring State; and (ii) that respect for the geographical realities of natural prolongation does

¹ *Anglo-French Arbitration* (Cmd. 7438), p. 48, para. 70.

² Submissions 3 and 9 have been consolidated into Submission 9 in this Counter-Memorial and Submission 7 has become Submission 10.

³ See *Tunisian Memorial*, paras. 2.15 and 2.19 and, in particular, Chap. VII, Sec. I.

⁴ *Ibid.*, para. 7.13.

⁵ *Ibid.*, paras. 7.07ff.

not require that compensation for the advantages or disadvantages inherent in the physical geographical situation be made in an attempt to achieve equity¹.

379. However, the Tunisian Memorial goes astray in posing what it pretends to regard as a dilemma: how can the proposition that equity requires a "just result", which the Tunisians interpret as "equal treatment", be reconciled with the factual and natural inequalities of natural prolongation on which legal title is based²?

380. The dilemma posed by the Tunisian Memorial is false because it is not "treatment" by any Court which causes the inequalities of nature which prolong under the sea the land territories of some States more than others; nor, the Courts agree, is it the function of equity to redress these natural inequalities. "Treatment" in accordance with equitable principles refers to the application of a particular method of delimitation and consideration of the consequences—equitable or inequitable—arising from application of that particular method in the factual circumstances. A "just result", therefore, is not intended to redress natural inequalities, but to ensure that, given the fact of natural inequalities (which remain), the application of a particular method of delimitation does not exaggerate the consequences of a natural geographical feature. Moreover, the "just result" comes not necessarily from exactly "equal treatment", but from "equitable treatment".

381. The conclusions which the Tunisian Memorial seeks to derive from this false dilemma are far from clear³, but appear to consist of an attempt to vary the application of the two principles which it has called "principes directeurs" because of the clearly erroneous claim of Tunisia that in the current case the Court is confronted with "two" continental shelves rather than one as in the *North Sea Continental Shelf Cases* and the *Anglo-French Arbitration*.

382. However, when the actual relevant circumstances which characterize the area are considered in light of equitable principles, the method of delimitation appropriate to this proceeding is clear. Therefore the applicable relevant circumstances must now be considered.

SECTION 2. The Relevant Circumstances

383. Pursuant to Article 1 of the Special Agreement the Court is asked to take its decision, *inter alia*, upon the basis of the relevant circumstances which characterise the area. This request is entirely consistent with the request that the Court consider equitable principles, since, as demonstrated above, the applicable equitable principles require a consideration of the relevant circumstances which characterise the area. Indeed, the equitable principles to which the Special Agreement refers, taken together

¹ See *Tunisian Memorial*, paras. 7.07 through 7.09.

² *Ibid.*, para 7.10.

³ *Ibid.*, paras. 7.11ff.

with the factual elements relating to the area in question, are determinative of the relevant circumstances. Here those circumstances are primarily two-fold:

- (i) the geological structure of the shelf and its relation to the adjoining landmass; and
- (ii) the geographic configuration of the coasts.

384. The importance of these primary physical factors as relevant circumstances with respect to the delimitation of the continental shelf has been forcefully emphasized by the Court. In connection with the geological aspect of natural prolongation the Court has stated:

“The importance of the geological aspect is emphasized by the care which, at the beginning of its investigation, the International Law Commission took to acquire exact information as to its characteristics.... The appurtenance of the shelf to the countries in front of whose coastlines it lies, is therefore a fact, and it can be useful to consider the geology of that shelf in order to find out whether the direction taken by certain configurational features should influence delimitation because, in certain localities, they point-up the whole notion of the appurtenance of the continental shelf to the State whose territory it does in fact prolong¹.”

385. Similarly, the Court has stressed the importance of geographical factors. With respect to the doctrine of the continental shelf:

“[T]he principle is applied that the land dominates the sea; it is consequently necessary to examine closely the geographical configuration of the coastlines of the countries whose continental shelves are to be delimited. This is one of the reasons why the Court does not consider that markedly pronounced configurations can be ignored; for, since the land is the legal source of the power which a State may exercise over territorial extensions to seaward, it must first be clearly established what features do in fact constitute such extensions².”

386. Although Tunisia has attempted to raise a variety of factors other than geology and geography which it appears to suggest would fall within the category of relevant circumstances, such factors are in reality irrelevant. Those factors, which include comparative economics, flora and fauna, climate, archaeology and the abyssal plain as a geological consideration, have all been disposed of in other chapters of this Counter-Memorial³. The ensuing paragraphs of this section will demonstrate the importance of the geologic and geographic circumstances in reaching an equitable delimitation.

387. Guidance as to the precise nature of the factors which are pertinent to a determination of the geological and geographical “relevant circumstances” in a particular case may be found in both the *North Sea Continental Shelf Cases* and the *Anglo-French Arbitration*. In the *North*

¹ *I.C.J. Reports 1969*, p. 51, para. 95.

² *Ibid.*, p. 51, para. 96.

³ See paras. 15 through 21 above.

Sea Continental Shelf Cases the Court held that account should be taken of the general configuration of the parties' coasts, "as well as the presence of any special or unusual features"¹. Earlier portions of that judgment make clear that the Court had in mind the relevance of concave and convex or otherwise irregularly shaped coastlines (which may have marked effects on a delimitation by means of the "equidistance" method).

388. The nature of scientific relevant circumstances is also illustrated by the *Anglo-French Arbitration*. In that case the Court noted that the Channel Islands archipelago and the sea-bed and subsoil of the Golfe Breton Normand formed a portion of the same landmass as Normandy and Brittany and that there was essential geological continuity as to the rest of the Channel. This was so despite the fact that, a few nautical miles to the north and northwest of the Guernsey and Alderney groups of islands, the geomorphology of the Channel was marked by a distinct fault, known as the Hurd Deep, which the Court of Arbitration described as "...that fault or series of faults [which] extends in a south-westerly direction for a distance of some 80 nautical miles ... and a depth of over 100 metres"². Significantly, the Arbitration Court found that the presence of the Hurd Deep should not affect the delimitation. The specific geomorphological feature which it was considering, i.e., the Hurd Deep—Hurd Deep Fault Zone, was not—

"a geographical feature capable of exercising a material influence on the determination of the boundary either in the Atlantic region or in the English Channel. The Court shares the view repeatedly expressed by both Parties that the continental shelf throughout the arbitration area is characterised by its essential geological continuity. The geological faults which constitute the Hurd Deep and the so-called Hurd Deep Fault Zone, even if they be considered as distinct features in the geomorphology of the shelf, are still discontinuities in the seabed and subsoil which do not disrupt the essential unity of the continental shelf either in the Channel or the Atlantic region. Indeed, in comparison with the deep Norwegian Trough in the North Sea, they can only be regarded as minor faults in the geological structure of the shelf; and yet the United Kingdom agreed that the trough should not constitute an obstacle to the extension of Norway's continental shelf boundary beyond that major fault zone³."

389. Thus, notwithstanding the extent of the Hurd Deep, it was found to be immaterial. It is significant for present purposes that even in comparison with the Hurd Deep Fault Zone analysed by the Court of Arbitration, the purported series of crests and ridges upon which Tunisia so heavily relies to establish the existence of two continental shelves as well as its claim to the area of continental shelf between the 50 and 300 metre

¹ *I.C.J. Reports 1969*, p. 54, para. 101(D)(1) [*dispositif*].

² *Anglo-French Arbitration* (Cmd. 7438), p.24, para.9.

³ *Ibid.*, pp. 62 and 63, para. 107.

isobaths can only be regarded (even if they were to exist) as minor faults in the geological structure of the shelf which should not exert any meaningful influence on the determination of the delimitation¹.

390. It is not the purpose of this section of Libya's Counter-Memorial to continue cataloguing the numerous additional scientific fallacies of the Tunisian Memorial. These have already been considered at length in Chapter II of Part II, above. Rather, the relevant geological and geographical circumstances which actually characterize the continental shelf in question will now be considered.

A. The Physical and Geological Structure of the Shelf

391. As demonstrated at paragraphs 263ff. above, the geological evidence demonstrates the existence of a single continental shelf abutting on both Libya and Tunisia devoid of any significant features that could conceivably affect delimitation. That shelf forms a portion of the Pelagian Basin which is itself a geologic and physiographic unit forming a component of the stable North African plate. Indeed, the Pelagian Basin is a northward continuation of the North African plate and therefore of the North African landmass itself.

392. The continuity between the North African landmass and the Pelagian Basin is supported by the history of the geologic development of the area², by *facies data*³, and by the principal tectonic trend of the Sirt Basin rift system.

393. Thus, a review of the predominant geological factors leads to the conclusion that from a geological perspective the continental shelf in question is a northward prolongation of the North African landmass. Since equitable principles require that a delimitation leave to each State that area of continental shelf which is its natural prolongation⁴, geological factors alone require that the delimitation between Libya and Tunisia proceed in a northerly direction seaward from Ras Ajdir. Any other method of delimitation would necessarily infringe upon Libya's natural prolongation, since all of the continental shelf abutting upon Libya's coasts is a northward prolongation of the North African landmass. Obviously, any delimitation proceeding in an easterly direction from the land boundary would cut across the natural northward prolongation of Libya into and under the sea.

394. The practical method for effecting a delimitation which would accord with Libya's geological natural prolongation is considered in detail in Chapter III of Part IV below.

(83)

¹ See Fig. 13 facing p. 106 above.

² See paras. 263 through 274 above.

³ See para. 272 above.

⁴ *I.C.J. Reports 1969*, p. 22, para. 19.

B. The Geographic Configuration of the Coasts

395. As demonstrated in paragraphs 207 through 209 above, and in the accompanying *Annex 2* to Volume III prepared by Drs. Blake and Anderson concerning the coasts of Tunisia and Libya, the Libyan coast is virtually mono-directional facing northward. On the other hand the Tunisian coast exhibits a wide range of orientations.

396. However, viewing North Africa as a whole, the most prominent geographic configuration of the land area from which the North African continental shelf projects is the general east/west direction of the North African coastline. The northward turn of the Tunisian coastline is an anomalous variance to this general east/west trend which, as noted in paragraph 114 of the Libyan Memorial, is a classic example of "an incidental special feature from which an *unjustifiable* difference of treatment could result¹".

397. Thus, geographically, the continental shelf is necessarily a northward prolongation of the northward-facing coasts of Libya and of Tunisia, since it lies, unquestionably, due north of those coasts. This is a result of the configuration and nature of the coast from Gabes to Ras Ajdir and further east which essentially follows the east/west direction of the overall North African coast. In fact, it is not until approximately Ras Yonga, on the Tunisian coast, that the continental shelf appertaining to Tunisia could possibly be regarded as projecting from the Tunisian coast in a non-northerly direction, since a projection from a coast running generally in an east/west direction must necessarily be northerly and any continental shelf inuring to Tunisia south of the latitude of Ras Yonga is clearly a prolongation of the Tunisian coast from Ras Ajdir to Gabes. Thus, at least until Ras Yonga, geography as well as geology requires a northerly delimitation. This is especially so since this Court has held that the actual geography in question may not be overlooked nor reshaped, but must be taken as it exists².

398. Significantly, the practical method of delimitation considered at paragraphs 491 through 505 below is not only compatible with the geology of the area, but is also consistent with the geography. Thus, when the primary relevant circumstances are taken into account, they lead to but one conclusion: that the method of delimitation suggested at those paragraphs conforms entirely with equitable principles.

SECTION 3. New Accepted Trends in the Third Conference on the Law of the Sea

399. The Special Agreement between the Parties specifically requests the Court, in rendering its judgment, to consider the new accepted trends in the Third United Nations Conference on the Law of the Sea. That

¹ *I.C.J. Reports 1969*, p. 50, para. 91 (italics added). *Map 17* facing p. 158 illustrates the anomalous nature of this portion of the Tunisian coast.

² *Ibid.*, p. 50, para. 91.

conference has as its goal the development of a legal framework which will be relevant to the economic, scientific and social conditions of the late 20th Century.

400. The genesis of these new trends was the United Nations General Assembly vote in January, 1971 to hold the Third Law of the Sea Conference. The First Session of that Conference was held in New York in 1973 and concerned only organizational matters. Thereafter, a Second Session was held in Caracas, Venezuela in 1974 and a Third Session in Geneva, Switzerland in 1975. The 1975 Geneva Session resulted in an Informal Single Negotiating Text. A Fourth Session in New York in the spring of 1976 resulted in a Revised Single Negotiating Text. Subsequently, in 1977, an Informal Composite Negotiating Text was produced. That text has undergone three revisions, the latest of which is the present *DCIT* which is a result of the Ninth Session of the Conference, which was held in Geneva between 28 July and 29 August 1980¹.

401. Part VI of the *DCIT* considers the question of the continental shelf. The definition of the continental shelf adopted by the *DCIT* is of sufficient significance to require repetition in full. Thus, Article 76 provides:

"1. The continental shelf of a coastal State comprises the seabed and subsoil of the submarine areas that extend beyond its territorial sea throughout the natural prolongation of its land territory to the outer edge of the continental margin, or to a distance of 200 nautical miles from the baselines from which the breadth of the territorial sea is measured where the outer edge of the continental margin does not extend up to that distance.

2. The continental shelf of a coastal State shall not extend beyond the limits provided for in paragraphs 4 to 6.

3. The continental margin comprises the submerged prolongation of the land mass of the coastal State, and consists of the seabed and subsoil of the shelf, the slope and the rise. It does not include the deep ocean floor with its oceanic ridges or the subsoil thereof.

4. (a) For the purposes of this Convention, the coastal State shall establish the outer edge of the continental margin wherever the margin extends beyond 200 nautical miles from the baselines from which the breadth of the territorial sea is measured, by either:

- (i) A line delineated in accordance with paragraph 7 by reference to the outermost fixed points at each of which the thickness of sedimentary rocks is at least 1 per cent of the shortest distance from such point to the foot of the continental slope; or
- (ii) A line delineated in accordance with paragraph 7 by reference to fixed points not more than 60 nautical miles from the foot of the continental slope.

¹ See fn. 3 at p. 5 above.

(b) In the absence of evidence to the contrary, the foot of the continental slope shall be determined as the point of maximum change in the gradient at its base.

5. The fixed points comprising the line of the outer limits of the continental shelf on the sea-bed, drawn in accordance with paragraph 4(a)(i) and (ii), either shall not exceed 350 nautical miles from the baselines from which the breadth of the territorial sea is measured or shall not exceed 100 nautical miles from the 2,500 metre isobath, which is a line connecting the depth of 2,500 metres.

6. Notwithstanding the provisions of paragraph 5, on submarine ridges, the outer limit of the continental shelf shall not exceed 350 nautical miles from the baselines from which the breadth of the territorial sea is measured. This paragraph does not apply to submarine elevations that are natural components of the continental margin, such as its plateaux, rises, caps, banks and spurs.

7. The coastal State shall delineate the seaward boundary of its continental shelf where that shelf extends beyond 200 nautical miles from the baselines from which the breadth of the territorial sea is measured by straight lines not exceeding 60 nautical miles in length, connecting fixed points, such points to be defined by coordinates of latitude and longitude.

8. Information on the limits of the continental shelf beyond the 200 nautical mile exclusive economic zone shall be submitted by the coastal State to the Commission on the Limits of the Continental Shelf set up under annex II on the basis of equitable geographical representation. The Commission shall make recommendations to coastal States on matters related to the establishment of the outer limits of their continental shelf. The limits of the shelf established by a coastal State on the basis of these recommendations shall be final and binding.

9. The coastal State shall deposit with the Secretary-General of the United Nations charts and relevant information, including geodetic data, permanently describing the outer limits of its continental shelf. The Secretary-General shall give due publicity thereto.

10. The provisions of this article are without prejudice to the question of delimitation of the continental shelf between adjacent or opposite States."

402. By contrast, the 1958 Geneva Continental Shelf Convention defined, in relevant part, the term "continental shelf" as referring "to the seabed and subsoil of the submarine areas adjacent to the coast but outside the area of the territorial sea, to a depth of 200 metres or, beyond that limit, to where the depth of the superjacent waters admits of the exploitation of the natural resources of the said areas". Thus, although the *DCIT* largely follows Article 1 of the 1958 Continental Shelf Convention in

providing that "the continental shelf of a coastal State comprises the seabed and subsoil of the submarine areas that extend beyond its territorial sea", the text of Article 76 rejects bathymetry as a primary definitional element.

403. In short, the *DCIT* adopts the concept of natural prolongation enunciated by this Court in the *North Sea Continental Shelf Cases*. In paragraph 19 of that Judgment the Court referred to:

"[T]he most fundamental of all the rules of law relating to the continental shelf, enshrined in Article 2 of the 1958 Geneva Convention, though quite independent of it,—namely that the rights of the coastal State in respect of the area of continental shelf that constitutes a natural prolongation of its land territory into and under the sea exists *ipso facto* and *ab initio*, by virtue of its sovereignty over the land, and as an extension of it in an exercise of sovereign rights for the purpose of exploring the seabed and exploiting its natural resources. In short, there is here an inherent right¹."

404. It may therefore be said that Article 76 of the *DCIT*, by defining the continental shelf in terms of the natural prolongation of land territory, is not enunciating a new trend in the law of the sea but is rather codifying the principle of natural prolongation described in the *North Sea Continental Shelf Cases*.

405. Notwithstanding this essential continuity of the definition of the continental shelf from the 1958 Convention through the *North Sea Continental Shelf Cases* and into the *DCIT*, the *DCIT* does inject a significantly new definitional element. The *DCIT* text provides that the continental shelf shall extend to the outer edge of the continental margin or to a distance of 200 nautical miles from the baselines from which the breadth of the territorial sea is measured, whichever distance is greater².

406. This concept of the extension of the continental shelf from the baselines of the territorial sea to a distance of 200 nautical miles represents a radical departure from the definition of the continental shelf as contained in Article 1 of the 1958 Convention, which reflected the state of the law existing at the time of the decision in the 1969 *North Sea Continental Shelf Cases*.

407. Article 1 of the 1958 Convention defined the continental shelf as follows:

"For the purpose of these articles, the term 'continental shelf' is used as referring (a) to the seabed and subsoil of the submarine areas adjacent to the coast but outside the area of the territorial sea, to a depth of 200 metres or, beyond that limit, to where the

¹ *I.C.J. Reports 1969*, p. 22, para. 19.

² *DCIT*, Art. 76(1). It may be noted, however, that this provision only applies to internationally recognized baselines in contrast to the controversial baselines promulgated by Tunisia in 1973, the validity of which Libya would deny.

depth of the superjacent waters admits of the exploitation of the natural resources of the said areas; (b) to the seabed and subsoil of similar submarine areas adjacent to the coasts of islands.''

408. Significantly, the *DCIT* rejects the 1958 Convention's definition of the continental shelf in terms of bathymetry¹. Therefore, since the new trends of the Law of the Sea Conference are specifically required to be considered by the Court under the Special Agreement, the *DCIT* also does away with a primary portion of Tunisia's argument. Tunisia specifically contends at paragraph 8.18 of its Memorial that the offshore depths of the continental shelf may be used to demonstrate the existence of what Tunisia refers to as the "Tunisian shelf". In making this argument, Tunisia relies upon what it describes as a gentle descent towards the east of the continental shelf with contours which reflect the contours present in Tunisia's landmass. However, in view of the *DCIT*'s rejection of bathymetry as the determinant element of the continental shelf, and its relegation of bathymetry to a subordinate role in the definition, to be applied only in circumstances not present in this case, this bathymetrical argument seems clearly out of step with the new trends reflected in the *DCIT*. Bathymetry simply cannot be regarded as a factor of any importance in determining whether the continental shelf in question is the natural prolongation eastward from the Gabes to Ras Kaboudia coastline or northward from the Tunisian and Libyan coastlines adjacent to Ras Ajdir.

¹Indeed, the working papers and committee texts contained in the *Official Records of the Third United Nations Conference on the Law of the Sea* reject bathymetry as the primary element of the definition of the continental shelf. See, e.g., Text presented by the Chairman of the Second Committee, United Nations, *Official Records of the Third United Nations Conference on the Law of the Sea*, Fourth Session, U.N. Doc. A/CONF.62/WP.8/Rev. 1/Part II (1976), Art. 64; Text presented by the Chairman of the Second Committee, United Nations, *Official Records of the Third United Nations Conference on the Law of the Sea*, Third Session, U.N. Doc. A/CONF.62/WP.8/Part II (1975), Art. 62; Working paper of the Second Committee: main trends, United Nations, *Official Records of the Third United Nations Conference on the Law of the Sea*, Second Session, U.N. Doc. A/CONF.62/L. 8/Rev. 1/App. I (1974), prov. 68; Japan: revised draft article on the continental shelf, United Nations, *Official Records of the Third United Nations Conference on the Law of the Sea*, Second Session, U.N. Doc. A/CONF.62/C.2/L.31/Rev. 1 (1974). In addition, many negotiating-group texts and informal proposals and suggestions not reproduced in the *Official Records* reflect the same change. See, e.g., Compromise Suggestions by the Chairman of Negotiating Group 6, U.N. Doc. A/CONF.62/L.37 (1979), Art. 76, reprinted in *Stiftung Wissenschaft und Politik, Forschungsinstitut für Internationale Politik und Sicherheit, Dokumente der Dritten Seerechts-konferenz der Vereinten Nationen - Genfer Session 1979*, at 401. (Many of the documents cited in this section of the Counter-Memorial are reprinted in this collection, which will be hereinafter cited as *SWP - Genfer Session*); U.S.S.R.: Informal Proposal, U.N. Doc. NG.6/8 (1979), reprinted in *SWP-Genfer Session 1979*, at 640; Informal Suggestion by Ireland, U.N. Doc. NG.6/1 (1978), reprinted in *SWP-Genfer Session 1978*, at 827; Informal Suggestion by the Arab Group, U.N. Doc. NG.6/2 (1978), reprinted in *SWP-Genfer Session 1978*, at 829; Informal Suggestion by the U.S.S.R., U.N. Doc. C.2/Informal Meeting/14 (1978), reprinted in *SWP-Genfer Session 1978*, at 946. Copies of relevant pages are attached as *Annex 110*, Vol. II. As noted at para. 317 above, bathymetry, under the *DCIT*, is relevant only in determining outer limits of the continental shelf under circumstances which are clearly not applicable to this case.

409. Of equal importance with the eclipse of bathymetry is the significant divergence between the *DCIT* and the Geneva Convention with respect to the rules for determining the delimitation of the continental shelf between States with opposite or adjacent coasts. The Geneva Convention provided in Article 6 as follows:

“1. Where the same continental shelf is adjacent to the territories of two or more States whose coasts are opposite each other, the boundary of the continental shelf appertaining to such States shall be determined by agreement between them. In the absence of agreement, and unless another boundary line is justified by special circumstances, the boundary is the median line, every point of which is equidistant from the nearest points of the baselines from which the breadth of the territorial sea of each State is measured.

2. Where the same continental shelf is adjacent to the territories of two adjacent States, the boundary of the continental shelf shall be determined by agreement between them. In the absence of agreement, and unless another boundary line is justified by special circumstances, the boundary shall be determined by application of the principle of equidistance from the nearest points of the baselines from which the breadth of the territorial sea of each State is measured.

3. In delimiting the boundaries of the continental shelf, any lines which are drawn in accordance with the principles set out in paragraphs 1 and 2 of this article should be defined with reference to charts and geographical features as they exist at a particular date, and reference should be made to fixed permanent identifiable points on the land.”

410. By contrast, Article 83 of the *DCIT* provides:

“1. The delimitation of the continental shelf between States with opposite or adjacent coasts shall be effected by agreement in conformity with international law. Such an agreement shall be in accordance with equitable principles, employing the median or equidistance line, where appropriate, and taking account of all circumstances prevailing in the area concerned.

2. If no agreement can be reached within a reasonable period of time, the States concerned shall resort to the procedures provided for in Part XV.

3. Pending agreement as provided for in paragraph 1, the States concerned, in a spirit of understanding and co-operation, shall make every effort to enter into provisional arrangements of a practical nature and, during this transitional period, not to jeopardize or hamper the reaching of the final agreement. Such arrangements shall be without prejudice to the final delimitation.

4. Where there is an agreement in force between the States concerned, questions relating to the delimitation of the continental shelf shall be determined in accordance with the provisions of that agreement.”

411. This comparison of Article 83 of the *DCIT* to Article 6 of the Geneva Convention demonstrates both a continuity, to the extent that both articles call for a delimitation by agreement between the parties and point out the importance of relevant or special circumstances to that delimitation, and a new trend, to the extent that the *DCIT* abandons the concept of equidistance as a rule and provides that an agreement between the parties shall be in accordance with equitable principles¹.

412. The portion of Article 83 concerned with equitable principles is no doubt based upon paragraph 101(C)(1) of the *dispositif* in the *North Sea Continental Shelf Cases*, which states:

“[D]elimitation is to be effected by agreement in accordance with equitable principles, and taking account of all the relevant circumstances, in such a way as to leave as much as possible to each Party all those parts of the continental shelf that constitute a natural prolongation of its land territory into and under the sea, without encroachment on the natural prolongation of the land territory of the other...”²

413. Therefore, in view of the foregoing, it is clear that by entering into a Special Agreement that requests the Court to render a judgment based in part upon “the new accepted trends in the Third Conference on the Law of the Sea”, the Parties were mutually requesting the Court to decide in accordance with the following propositions:

- (1) that equidistance is not an accepted residual rule, failing agreement between the Parties on a delimitation, but is applicable only where agreed to by the Parties as equitable³;
- (2) that the natural prolongation rule is the cardinal equitable rule of delimitation;
- (3) that bathymetry is not a factor of any importance in determining the extent of the Parties’ natural prolongation; and
- (4) that equitable principles must be controlling.

¹ Article 83 appears to have been among the more difficult to negotiate because of the problems presented in obtaining a consensus between the States supporting the equidistance line and the advocates of equitable principles. See the following documents (not reproduced in the *Official Records*): Report of the Chairman on the work of Negotiating Group 7, U.N. Doc. NG.7/39 (1979), reprinted in *SWP-Genfer Session 1979*, at 681; Statement by the Chairman made at the 28th meeting of NG.7 prepared for the last series of negotiations of the Group, U.N. Doc. NG.7/26 (1979), reprinted in *SWP-Genfer Session 1979*, at 645. The informal proposals of several States gave equal weight to the considerations of equidistance and equitable principles; see, e.g., Mexico: Informal Proposal, U.N. Doc. NG.7/29 (1979), reprinted in *SWP-Genfer Session 1979*, at 665; Ivory Coast: Informal Proposal, U.N. Doc. NG.7/35 (1979) (withdrawn by U.N. Doc. NG.7/35/corr. 1 (1979)), reprinted in *SWP-Genfer Session 1979*, at 674 and 675. (Copies of relevant pages are attached as *Annex III*, Vol. II.) The language finally agreed upon, however, does provide that the agreement between the parties is to be effected in accordance with equitable principles, taking an equidistance line into consideration only where appropriate.

² *I.C.J. Reports 1969*, p. 53, para. 101(C)(1) [*dispositif*].

³ As has been noted at para. 309 above, both Parties have rejected the application of equidistance in this case.

414. In sum, a consideration of the trends in the Third Conference on the Law of the Sea confirms that the equitable principles considered at paragraphs 363 through 382 above, and the relevant circumstances considered at paragraphs 383 through 398 above, including the cardinal principle of natural prolongation, are elements which the Court is requested by the Parties to consider in reaching its judgment. As demonstrated in the ensuing sections of this Counter-Memorial, each of those considerations supports Libya's view of both the principles and rules of international law and the practical method of delimitation which are applicable in this case.

PART IV
THE PRACTICAL METHOD FOR THE
APPLICATION OF THE PRINCIPLES
AND RULES

CHAPTER I
THE SPECIAL AGREEMENT

SECTION 1. The Terms of the Special Agreement

416. Articles 1 through 3 of the Special Agreement specify the ambit within which the Court is requested to render judgment in these proceedings. The English translation of those Articles reads as follows:

“ARTICLE 1

The Court is requested to render its judgment in the following matter:

What principles and rules of international law may be applied for the delimitation of the area of the continental shelf appertaining to the Socialist People's Libyan Arab Jamahiriya and to the area of the continental shelf appertaining to the Republic of Tunisia, and the Court shall take its decision according to equitable principles, and the relevant circumstances which characterise the area, as well as the new accepted trends in the Third Conference on the Law of the Sea.

Also, the Court is further requested to clarify the practical method for the application of these principles and rules in this specific situation, so as to enable the experts of the two countries to delimit these areas without any difficulties.

ARTICLE 2

Following the delivery of the judgment of the Court, the two Parties shall meet to apply these principles and rules in order to determine the line of delimitation of the area of the continental shelf appertaining to each of the two countries, with a view to the conclusion of a treaty in this respect.

ARTICLE 3

In case the agreement mentioned in Article 2 is not reached within a period of three months, renewable by mutual agreement from the date of delivery of the Court's judgment, the two Parties shall together go back to the Court and request any explanations or clarifications which would facilitate the task of the two delegations to arrive at the line separating the two areas of the continental shelf, and the two Parties shall comply with the judgment of the Court and with its explanations and clarifications.”

417. Article 1 of the Special Agreement asks the Court to issue a decision articulating the principles and rules of international law which apply to the delimitation by the Parties of the areas of continental shelf appertaining to the two States¹. To facilitate the task of delimitation reserved by the Parties to themselves, this Article also requests the Court to clarify the practical method for application of those principles and rules by the experts of both Parties.

418. Following delivery of the judgment of the Court, Article 2 provides that the Parties shall meet to apply the principles and rules embodied in that judgment "to determine the line of delimitation of the area of the continental shelf appertaining to each of the two countries". It is important to note that this is an obligation of the Parties, to be performed by the experts mentioned in Article 1, paragraph 2 of the Special Agreement.

419. Article 3 recognizes that agreement on a line of delimitation (or "conclusion of a treaty in this respect") may not be achieved within the time periods specified in the Special Agreement. Accordingly, Article 3 provides for further recourse to the Court for any explanations or clarifications which would enable the "two delegations" to arrive at the line separating the two areas of the continental shelf. Thus, Article 3 protects the effectiveness of the judgment of the Court within the framework of the Special Agreement.

SECTION 2. The Structure and Limits of the Special Agreement

420. By its terms, the Special Agreement draws a clear distinction between (i) principles and rules of international law; (ii) application of those principles and rules by the Parties "in this specific situation" by a practical method indicated by the Court; and (iii) the delimitation of the areas of continental shelf appertaining to the two States through determination of a line of delimitation. This is apparent in the second paragraph of Article 1, in Article 2, and in Article 3. There is no inconsistency. Indeed, there is a consistent and uniform design: (i) the Court is to indicate the principles and rules of international law and the practical method for their application; (ii) the experts appointed by the Parties are "to determine the line of delimitation of the area of the continental shelf appertaining to each of the two countries" by applying these principles and rules by the practical method clarified by the Court; and (iii) the delegations of the Parties are to conclude "a treaty in this respect", i.e., to arrive "at the line separating the two areas of the continental shelf".

421. Viewed as a whole, therefore, the Special Agreement requests the Court to determine the applicable principles and rules of international law; to clarify the practical method by which the Parties will apply those principles and rules; and to provide additional explanations and clarifica-

¹ Article 1 states that the judgment shall reflect equitable principles and the relevant circumstances which characterize the area, as well as the new accepted trends in the Third Conference on the Law of the Sea. Both Parties agree, however, that the Special Agreement does not confer power on the Court to decide this case *ex aequo et bono*. See *Libyan Memorial*, para. 6 and *Tunisian Memorial*, para. 2.24.

tions if the Parties are unable to determine the line of delimitation subsequent to delivery of the judgment of the Court. In view particularly of Article 3 of the Special Agreement, it is apparent that "application" by the Parties and their experts of the principles and rules set forth in the judgment cannot be restricted to a mere mechanical plotting of coordinates, or to a mere mechanical drawing of lines from point to point or on an azimuth¹. These conclusions are supported by the ordinary and natural meaning² of the language of Articles 1 through 3.

422. At this point it becomes important to consider a fundamental preliminary question. This is presented by the fact that the Special Agreement was signed and ratified by both Parties in full knowledge that there was no existing delimitation agreement between them of their territorial sea boundary³. The importance of this point cannot be overstressed since it conclusively confirms the Libyan interpretation of the Special Agreement and conclusively contradicts the Tunisian interpretation.

423. It is appropriate to point out that the Tunisian Memorial concedes that the role of the Court does not extend to the delimitation of the territorial sea⁴. In this respect, there appears to be common cause between the Parties, since Libya agrees that it is obvious that the Special Agreement only relates to continental shelf delimitation and does not extend to the territorial sea boundary. This is supported and confirmed by the language of Article 76, paragraph 1 of the *DCIT* (incorporated by reference into the *consideranda* before the Court by Article I of the Special Agreement), which provides as follows:

¹ As stated in para. 7 of the *Libyan Memorial*: "The express purpose of the request made to the Court in that paragraph is to obtain sufficient clarification of the practical method for the application of these principles and rules to enable the experts of the two countries to delimit the areas without any difficulties."

² It is apparent that in interpreting the Special Agreement effect should be given to the principles laid down in Art. 31 of the Vienna Convention on the Law of Treaties. Art. 31 states: "A treaty shall be interpreted in good faith in accordance with the ordinary meaning to be given to the terms of the treaty..." U.N. Doc. A/CONF.39/27 (1969), opened for signature 23 May 1969, *Official Records of the United Nations Conference on the Law of Treaties (Documents)* 287, reprinted in *International Legal Materials*, Vol. 8, 1969, pp. 691 and 692 (entered into force 27 Jan. 1980). (Copies of these pages are attached as *Annex 112*, Vol. II.) The United Nations Conference on the Law of Treaties adopted the Convention on 22 May 1969. Tunisia acceded to the Convention on 23 June 1971.

³ As stated in the *Libyan Memorial*, "Libya has made no unilateral delimitation of the territorial sea boundary as such with Tunisia". *Libyan Memorial*, para. 48. Nor has there been any agreement between the Parties as to the location and direction of that boundary. As further stated in the *Libyan Memorial*: "Neither the 1973 Tunisian Law nor Decree purports to determine the territorial sea boundary between Libya and Tunisia. Indeed, the maritime limits between Libya and Tunisia have never been agreed." *Ibid.*, para. 57.

⁴ See *Tunisian Memorial*, para. 9.01, stating that the delimitation is of "... the areas of the continental shelf appertaining respectively to each of the two Parties, that is to say, the areas of the sea-bed which are subject to the legal régime of the continental shelf, which excludes, obviously, those subject to the legal régime of the territorial sea".

"The continental shelf of a coastal State comprises the sea-bed and subsoil of the submarine areas that extend beyond its territorial sea throughout the natural prolongation of its land territory to the outer edge of the continental margin, or to a distance of 200 nautical miles from the baselines from which the breadth of the territorial sea is measured where the outer edge of the continental margin does not extend up to that distance¹".

A continental shelf delimitation, therefore, must commence at the point of intersection where the territorial sea boundary between two States meets the outer limit of their respective territorial seas.

424. The Tunisian position as to construction of a shelf boundary implies almost ineluctably that a future territorial sea boundary must follow the same line of direction as the shelf boundary follows from the frontier point on the coast. While the Tunisian Memorial is unequivocal in asserting that although the delimitation by the Parties "excludes, obviously, those subject to the legal régime of the territorial sea"², it nevertheless specifies that:

"The line in question must, therefore, be drawn from the outer limit of the territorial sea of the two countries, even if it has to be constructed as from the frontier point on the coast²."

This latter contention could lead to a serious problem. If a line is constructed "as from the frontier point on the coast" (as Tunisia submits) it is inescapable that at some point that line will necessarily cross or intersect the outer limit of the territorial sea of one or another Party (measured from the mean low-water mark or from a baseline acceptable in international law). Consequently, Tunisia's claims as to a starting-point for a line of shelf delimitation, as set forth in its Memorial, will in effect require selection of a termination point for an imaginary line of territorial sea delimitation and thus foreclose any meaningful negotiation or discussion relating to territorial sea delimitation between the Parties.

425. Although the Libyan Memorial indicated Libya's views on the question of where the appropriate territorial sea boundary might be when, if and as delimited between Libya and Tunisia³, its position was carefully

¹ Although the continental shelf as legally defined begins at the outer limit of the territorial sea, this does not alter the fact that, physically, the continental shelf begins where the land ends and the water begins and that the area up to the mean low-water mark should be taken into account in calculating the areas of continental shelf which, according to a given delimitation, appertain to a State. (See para. 430 below and Submission 12 in the *Libyan Memorial* and also Submission 11 in this Counter-Memorial, below.)

² *Tunisian Memorial*, para. 9.01

³ "However, as far as Libya is aware, there has never been an explicit agreement on delimitation of the territorial sea between Libya (or Tripolitania) and Tunisia, although it is clear that the territorial sea boundary could well start from pillar 31 at Ras Ajdir." *Libyan Memorial*, para. 47. The *Libyan Memorial* further states that "in the light of the boundary direction established by the 1910 Convention, it may be assumed that the maritime boundary between Libya and Tunisia would continue seaward from Ras Ajdir in a northerly direction." *Ibid.*, para. 57.

formulated to avoid any implication that the Court would be expected to make a ruling to the same effect (or even a ruling which would bring about that effect *de facto*, if not *de jure*). In sharp contrast, under the interpretation sought by the Tunisian Memorial, Tunisia will for all practical purposes foreclose future consideration of the location of the territorial sea boundary.

426. To illustrate: the invalid contention advanced in paragraph 9.02 of the Tunisian Memorial—that “the delimitation line¹ to be determined should not, in any event, pass to the west of the ZV-45° line as far as the 50-metre isobath”—establishes by necessary implication: (i) that although there has been no delimitation of territorial sea as such, nevertheless the line for shelf delimitation (being constructed “as from the frontier point on the coast”) should commence at a point lying no further west than at the intersection of a 45° azimuth from Ras Ajdir with the outer limit of the Libyan territorial sea; (ii) that any [future] line for territorial sea delimitation would logically be expected to terminate at that same point; and (iii) that the territorial sea delimitation line would also logically be expected to connect the point of commencement (Ras Ajdir) and the point of intersection by a line of shortest distance or a straight line. It is difficult (if not utterly impossible) to draw any other inference from Tunisia’s contention concerning the commencement point for a line of continental shelf delimitation.

427. This problem is compounded (not simplified) by Tunisia’s Submissions². Whereas Libya (in its Memorial, its Submissions, and in this Counter-Memorial) does not request the Court to indicate the precise starting point for a line of delimitation, Tunisia seems to be unaware of the necessary implication of its own submissions. It is therefore not possible to accept the Tunisian submissions as to the line(s) of shelf delimitation without, at the same time, accepting the point at which those lines are to commence, prejudging for all practical purposes the location of the territorial sea boundary.

428. A related point is of course that this confirms the Libyan interpretation of the Special Agreement that it is only for the Parties (and their experts) to specify or construct the line of delimitation in accordance with the principles and rules of international law stated by the Court and by using the practical method clarified by the Court for the application of those principles and rules in this specific situation. Since it is not known where to start the line, there may be substantive difficulties in aiming a line which begins in one spot rather than another. For example, would either of the first two Tunisian lines, the “line of crests” line suggested by

¹ Presumably the words “delimitation line” refer to a shelf, and not a territorial sea, “delimitation line”, but the choice of such an undifferentiated expression by Tunisia is felicitously ambiguous.

² Tunisian Submission II.1 apparently requests “a line which would not appreciably depart from ... lines” commencing at the frontier, illustrated as they are as doing precisely that by Figs. 9.01 and 9.02 of the *Tunisian Memorial*; *idem* as to Tunisian Submissions II.2(a) and II.2(b), which are not only illustrated by Figs. 9.10 and 9.13 but are also specifically expressed in terms of requesting lines drawn “at the Tuniso-Libyan frontier”.

paragraphs 9.06 through 9.08 of the Tunisian Memorial and the "abyssal plain" line suggested in paragraphs 9.09 through 9.11 thereof, remain substantively the same if the territorial sea boundary were agreed or established at an appropriate point twelve miles due north of Ras Ajdir? It is submitted that this is not the case, and indeed the Tunisian Memorial and the Tunisian submissions¹ in constructing the lines either from the land boundary point of termination or "as from" that point, confuse the issue hopelessly.

429. Since the lack of agreement as to a territorial sea boundary renders the precision of an exact line a fruitless endeavour, the terms of the Special Agreement should therefore not be read as implying that all of the elements "right up to the ultimate point before the purely technical work" are within the purview of the judgment to be entered in this proceeding, because there can be no more certainty for the determination of a starting "point" for a line at the edge of the territorial sea than there is for the determination of the outermost point, a matter expressly conceded by Tunisia².

430. Consistent with this conclusion, therefore, Libyan Submission 5 (Submission 6 in this Counter-Memorial) indicates that the method of delimitation should reflect the direction of "a prolongation to the north of the continental landmass ... northward of the terminal point of the land boundary". This does not indicate where the starting point for any delimitation should occur, either at the end of the land boundary or at a point "northward" from that land boundary at the edge of the territorial sea. Libyan Memorial Submission 12 (Submission 11 in this Counter-Memorial) does not respond to this point either: it merely indicates that in order to evaluate the equity of any delimitation "the whole of the sea-bed and subsoil beyond the low-water mark along the coast of each Party is to be taken into account"; this is for purposes of computation, and not for delimitation as such.

SECTION 3. The Tunisian Interpretation of the Special Agreement

431. In addition to the error discussed above in Section 2 relating to the incongruity of a specific "line of delimitation" in the context of an unresolved territorial sea boundary, it becomes increasingly apparent that the interpretation of the Special Agreement espoused by Tunisia in its Memorial does not reflect the ordinary or natural meaning of its terms³.

¹ See *Tunisian Memorial*, paras. 9.01 through 9.37 and the submissions,—in particular para. 9.08, para. 9.11, para. 9.25, paras. 9.30 and 9.33 and Tunisian Submissions II.1 and II.2 at p. 211.

² *Ibid.*, para. 9.35.

³ In this context, see the *1922 Arbitration Award between Colombia and Venezuela*, in which issues similar to those here were considered in connection with the interpretation of an arbitration agreement. (In MCNAIR, Arnold N. and LAUTERPACHT, Sir Hersch (eds.): *Annual Digest of Public International Law Cases, 1919-1922*. London, Longmans, Green & Co., 1929, Case No. 262, pp. 371 and 372.) (Copies of these pages are attached as *Annex 113*, Vol. II.)

Part I, Chapter II of the Tunisian Memorial asserts quite an artificial interpretation of the terms of the Special Agreement and misinterprets its provisions in a manner which supports arguments made in Chapter IX that the Court is asked to do everything but draw a line and that the judgment should in effect direct the Parties to adhere to one of several lines proposed by Tunisia.

432. Moreover, Tunisia's Submission II.1 states that the delimitation contemplated in Article 1 "should lead to the drawing of a line which would not appreciably depart from" the two lines suggested in that Submission, and its Submission II.2 states that "[t]he delimitation line could either: (a) be constituted by a line" or "(b) be determined according to [an] angle of aperture". These lines (as shown below) are either fallacious, or ill-founded, or both, and represent an exaggerated and arbitrary extension of Tunisian pretensions to the east and south, encroaching close upon the Libyan shore.

433. Another misinterpretation of the Special Agreement by Tunisia is its contention that Article 1 contains two distinct questions which require independent resolution by the Court¹. The "second question" proposition rests on a misreading of Article I of the Special Agreement which is both illogical and inconsistent with fundamental canons of treaty interpretation, coupled with an incorrect inference drawn from *North Sea Continental Shelf Cases*: Tunisia asserts that the Court must engage in a more detailed analysis of the relevant circumstances characterizing the area than occurred in the *North Sea Continental Shelf Cases*², that the Parties have invited the Court "to go beyond a conservative concept of the international law of the sea"³ and that, in view of the so-called second "practical method question" contained in the second paragraph of Article 1, the Court should, in effect, construct the line of delimitation⁴.

434. Indeed the Tunisian proposals for lines of delimitation are not and cannot be indications of "the practical method for the application of ... [the] principles and rules in this specific situation". A line does not constitute a "method". The line of delimitation is the result of the application of a method. Thus to suggest lines lacking an adequate logical or legal foundation is not to suggest "practical methods" to the Court.

435. To summarize: the ordinary and natural meaning of the terms of the Special Agreement, read as a whole, does not indicate that all of the matters "right up to the ultimate point before the purely technical work"⁴ are to be within the ambit of the judgment to be rendered in this case. (This is also confirmed by the analysis in Section 2 above relating to the question of the territorial sea.) Such an onerous task cannot now be

¹ See *Tunisian Memorial*, paras. 2.03, 2.21 and 2.24.

² *Ibid.*, paras. 2.20 and 2.21.

³ *Ibid.*, paras. 2.22 through 2.24.

⁴ *Ibid.*, para. 2.27.

visited upon the Court by ignoring the natural and ordinary meaning of the terms of the Special Agreement in the context of the whole text; by misinterpreting the Special Agreement as containing "two questions" in order to place a strained and unrestricted meaning on the second paragraph of Article I of the Agreement; or by inserting in the French translation the words "avec précision", which do not appear in the original Arabic text¹.

¹ In addition to isolating the second paragraph of Art. I from the other Arts. of the Special Agreement, Tunisia has imported into its French translation of that paragraph of the Arabic text (and thence into the Court's translation into English of the French translation) a term which the original Arabic text does not contain: "avec précision", or "precisely". The imported term is employed to modify the request that the Court "specify" (Tunisia) or "clarify" (Libya) "the practical way" (Tunisia) or "the practical method" (Libya) for the application of the principles and rules in this specific situation. The meaning of this term is not reflected in the Special Agreement in its original Arabic version. See *Libyan Memorial*, para. 7. (It should also be noted that the United Nations translation of the original Arabic text of the Special Agreement does not contain this term.)

CHAPTER II THE TUNISIAN "METHODS" AND THEIR INAPPROPRIATENESS

INTRODUCTION

436. The jurisprudence on maritime delimitation, however limited, and the practice of States support the view that there is no obligatory method, and not necessarily any single method, to be applied by the Parties. The essential requirement is that the *result* of the method used must be equitable; this proposition was embodied in Submission 7 to the Libyan Memorial (Submission 10 to this Counter-Memorial). There are, however, certain additional requirements which might seem too self-evident to require stating, but which, for reasons which will become apparent, Libya does feel it necessary to state.

437. The first is that any proposed method must be founded on a view of the facts which has some objective or scientific justification: facts cannot be "invented" to support a proposed method. The second is that the method should have some inherent logic or rationale which is consistent with both the law and the facts. It is in light of these requirements that, in the sections that follow, each of the methods proposed by Tunisia will be examined in turn.

THE TUNISIAN "METHODS"¹

SECTION 1. Equidistance

438. Although Tunisia's widely publicized 1976 Memorandum and its position in negotiations were based upon equidistance, the Tunisian Memorial discloses that this is not, now, a position maintained by Tunisia. Apparently, Tunisia in its Memorial has lately come to the conclusion that even application of the equidistance method does not produce a line of delimitation as far inclined to the south and towards the Libyan coast as Tunisia would like it to be. In any event, and given also that the method is not one required by law, equidistance can be set aside for the present as inapplicable in these proceedings by common accord between the Parties².

91 ¹ See *Map 18* facing p. 180 which graphically portrays the Tunisian claims as set forth in their Memorandum of May 1976 and in the *Tunisian Memorial*.

² In this connection Submissions 6, 8, 10 and 11 in the *Libyan Memorial* are repeated in reordered form (and in the case of the first two, in a consolidated form) as Submissions 13, 14, and 15 to this Counter-Memorial, at pp. 218 and 219 below; it is not considered appropriate to abandon these Submissions even if it is common cause (or appears to be common cause) between the Parties at this stage that the equidistance method is inapplicable, because those Submissions still reflect the position of Libya, and because it is not known to Libya whether Tunisia will maintain the rejection of equidistance apparently contained in its Memorial.

SECTION 2. The "Line of Crests"

439. As demonstrated in paragraph 297 above, there is some basis in the jurisprudence of this Court and of the Court of Arbitration in the *Anglo-French Arbitration* and in State practice for allowing a fundamental discontinuity in the shelf to delimit the respective shelves of two adjacent or opposite States.

440. The Tunisian Memorial¹, basing itself on this Court's Judgment in the *North Sea Continental Shelf Cases* which emphasizes the relevance of the known physical structure, geology and natural resources of the shelf, advances the proposition that the configuration of the respective Libyan and Tunisian coasts is reflected in the bathymetry². This, as shown earlier³, is not correct. From this invalid premise the Tunisian Memorial then proceeds to make the assertion that the limits of the two natural prolongations materialize in the form of the "line of crests"—the so-called "ride de Zira" out to the 200 metre isobath and the "ride de Zuara" beyond, to the 300 metre isobath. We are told that these "rides" (or ridges) are tectonic in origin and are in places barely below the surface of the waters⁴ and that they correspond with the upper part of a saliferous uplift zone, separating the Ashtart and Tripolitanian basins⁵.

441. This assertion poses a real problem for Libya in formulating its reaction to it: the problem is that *these "rides" cannot be found*.

③⑥ 442. It will be noted that the Tunisian Figure 9.01, which shows the two "rides", has no acknowledged source or authentication. The footnote on page 199 of the Tunisian Memorial refers to an article by Winnock and Bea. However, that article contains no mention whatever of these "rides" and the Figure referred to (Figure 12) is not, in fact, a figure to demonstrate isobaths (bathymetry) but is rather to demonstrate isopachs (the depth of sedimentary deposits).

443. Libya has endeavoured to make its own independent research into the location and nature of the features described as the "rides" of Zira and Zuara, using experts of internationally recognized competence in the field. On the basis of this research, it would seem that the so-called "Zira ridge" can be related to kinks in the 50 metre and 100 metre isobaths, but even as a kink in the isobaths such a feature is quite trivial (if it exists at all). On the basis of Tunisia's own map⁶, the inclination or slope of the "Zira ridge" could only be between 1 and 2 per cent.: an almost imperceptible slope. The "Zuara ridge" does not appear to have any identification with bathymetry, even on Tunisian Carte No. 2, and is not featured or named there. Libya is placing before the Court (as Exhibits to this Counter-Memorial) a relief model and block diagrams showing the contours of the sea-bed and these will demonstrate beyond any doubt that these features

¹ See *Tunisian Memorial*, para. 9.05.

² *Ibid.*, para. 9.06.

³ See paras. 217 and 234ff. above.

⁴ See *Tunisian Memorial*, para. 5.29.

⁵ *Ibid.*, para. 9.07.

④⑥ ⁶ *Ibid.*, Carte No. 2.

are the product of a fertile imagination but are not in any sense a "fundamental discontinuity" in the shelf. Therefore, the Tunisian Memorial not only refashions geography (as in the case of the ingenious, though unreal, geometric models discussed below) but re-designs submarine surfaces as well, inventing ridges and creating valleys where nature—in the opinion of Tunisia—has negligently omitted to complete its handiwork¹.

SECTION 3. The "Abyssal Plain" Line

444. Chapter IX of the Tunisian Memorial develops a second "practical method" of determining a shelf boundary; this becomes the subject of Tunisian Submission II.1.

445. In essence, the suggestion is that the continental margins converge in the direction of the central abyssal plain, thus affording a line of direction which is a valid factor to be taken into account in delimiting the shelf. The juridical basis for this method is said to lie in the Court's Judgment in the *North Sea Continental Shelf Cases*, identifying "the physical and geological structure, and natural resources, of the continental shelf areas involved" as a relevant factor.

446. It must be obvious that the Court could have had no such application of the factor of "the physical and geological structure" in mind. This is for the reason that the North Sea contains no abyssal plain. Indeed, there are many areas of the world where such a method could have no possible application, either because of the complete absence of an abyssal plain (Persian Gulf, South China Seas, the Baltic, large areas of the Pacific off the coasts of the United States, Central and Southern America) or because the abyssal plain is too remote from the coasts to have any practical relevance to shelf delimitation. In this respect, one finds abyssal plains at distances of between 500 and 1,000 miles from certain coasts, distances so great that the abyssal plain would be part of the deep sea-bed, and could have no bearing upon the shelf or its delimitation. For example, the Sri Lanka Abyssal Plain lies 500 miles south of Sri Lanka; the Sohm Abyssal Plain lies 1,000 miles east of the Gulf of Maine; the Argentine Abyssal Plain lies 700 miles east of Argentina and Uruguay; and the Alaska and Tufts Abyssal Plains lie between 600 and 800 miles from the coasts of Alaska and British Columbia.

447. Thus, as a "method" of general application, it is apparent that use of abyssal plains would subject shelf boundaries to the influence of remote factors which lie far outside the shelf. Many of these abyssal plains, moreover, stretch for hundreds of miles, running parallel to the continental margin. This is true of the plains that lie in the Atlantic, to the east of the North American continental margin and to the west of the European continental margin. Such plains do not provide any centre towards which

¹ As noted at paras. 290 and 313 through 317 above, the illusory quality of such particular features of the submarine landscape has also entered into an even larger distortion: the insertion of a "borderland" between two artificially contrived "natural prolongations", alleged to constitute two separate shelves. See also para. 452 below, for the non-existent "Ionian Abyssal Plain".



Figure 20

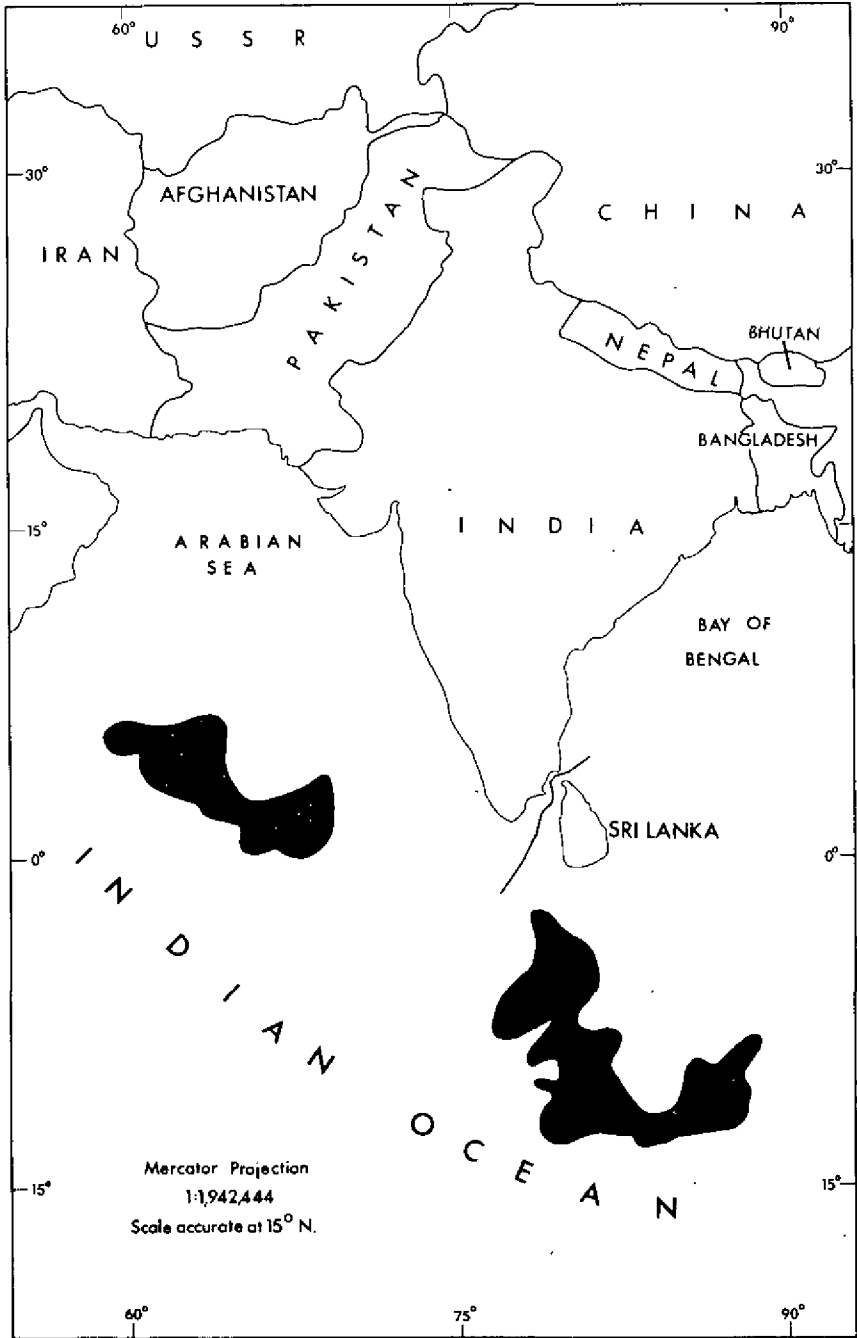


Figure 21

it might even colourably be argued that the shelf slopes. They are simply too extensive to support the thesis or the "method" now proposed by Tunisia.

448. Moreover the assumption that—even where an abyssal plain does lie in reasonable proximity to a shelf—there is a normal relationship between the shelf, the direction of the shelf, and the location of the abyssal plain is scientifically untenable. The tectonic evolution of shelves and abyssal plains does not support the view that the latter indicate the "direction" of the former. The tectonic evolution has been far more haphazard. Most abyssal plains are elongated in shape and lie parallel to the continental coasts and beyond the continental margins. As they grow, the continental margins tend to transgress or overlap the abyssal plains. And the plains generally lie above the oceanic crust and are not related to the geological structures on the continent, so they would only fortuitously be related to any boundary between shelves, and even more fortuitously to boundaries on the same shelf. For example, off the Atlantic seaboard of the United States there is a series of abyssal plains which, to the north of Maine, run east/west (the Sohm Abyssal Plain) but off Florida run north/south (the Hatteras Abyssal Plain). The same is true off the West African coast. Off Sierra Leone and Ghana the abyssal plain runs north/south. There is, therefore, no predictable pattern, no established relationship, between slope and plain which would allow the adoption of the "method" advocated by Tunisia.

449. It will also be apparent to the Court that Tunisia has not been able to cite a single example of the use of this method in State practice, nor a single reference to suggest that, in the whole history of the evolution of the shelf doctrine, such a "method" was ever contemplated.

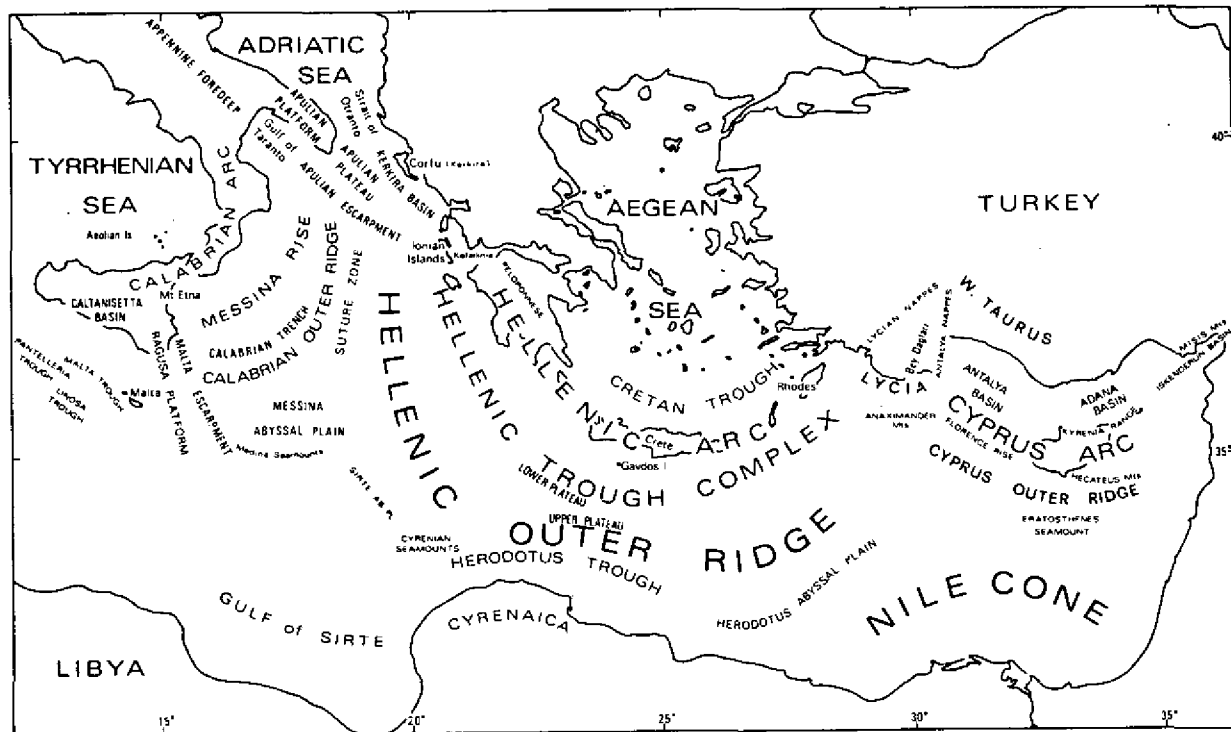
450. It can be shown that, in certain situations, such a "method" would produce absurd results which the adjacent States would never have tolerated. For example, *Figure 20* shows the actual location of the maritime boundary between Senegal and Guinea Bissau¹. The approximate positions of the two nearest abyssal plains are also marked. It is obvious that the Tunisian method would have produced boundaries radically different from those agreed by the States concerned and demonstrably "inequitable". *Figure 21* shows the same process in relation to the Indian/Sri Lankan maritime boundary² in the Gulf of Manaar. Again, it is clear that the method advocated by Tunisia would have produced a boundary quite unacceptable to the parties.

451. It might well be that, in another case, the Tunisian "method" would produce a result not markedly different from the boundary actually agreed. Yet this would be fortuitous and not of itself proof of the validity of the method. The France/Spain Agreement of 5 April 1975³ established a line in the Bay of Biscay which, in its first sector, is an equidistance line, but in its second sector swings south, closer to the Spanish shore. It

¹ *Limits in the Seas*, No. 85, 23 Mar. 1979.

² *Limits in the Seas*, No. 77, 16 Feb. 1978.

³ *Limits in the Seas*, No. 83, 12 Feb. 1979.



Location map for the eastern Mediterranean showing the geographical names used in this paper.

might be possible to rationalize such a shift in direction by reference to the direction of the Biscay Abyssal Plain. Yet that would be pure rationalization, for it is known that the reason for the deviation had nothing whatever to do with the location of the abyssal plain¹. It was dictated by the ratio of the coastlines of the two States, measured as lines of general direction, and the shelf areas. France had the longer coast and the broader shelf off its coast.

452. The application of the "method" suggested by Tunisia to the specific case of the "Ionian Abyssal Plain" raises a number of difficulties. There is, in fact, no "Ionian Abyssal Plain". The Ionian Basin actually contains two abyssal plains—the Messina Abyssal Plain and the Sirt Abyssal Plain. These are separated by a gap which includes the Medina Bank, and neither plain has any relationship with the Pelagian Basin². A further difficulty arises from the fact that the "Ionian Abyssal Plain" is suggested by Tunisia to be capable of showing the orientation of the continental margin of each of the littoral States, namely Tunisia, Italy, Malta, Greece and Libya³. The implication, therefore, is that delimitations on the same "method" would be equitable as between all those States. However, application of that same "method" to three of these States has not been attempted by Tunisia, and no doubt for good reason. The fact is that, when the "method" is applied, it provides results which appear *prima facie* reasonable only in so far as the resulting lines happen to coincide broadly with geographical equidistance lines. In some cases there is no such coincidence and the lines produced would be likely to prove totally unacceptable to the States concerned. In other cases, the "method" is inapplicable simply because, in the particular area, the decision on which States are to be regarded as adjacent is highly controversial. It is, in fact, a "method" which allows Tunisia to trespass into areas of shelf which are only of concern to Libya and Malta, for it postulates a Tunisian boundary projecting towards the "Ionian Abyssal Plain", into an area which is far to the east of any area of shelf which might remotely be considered to appertain to Tunisia.

453. The conclusion to be reached is inescapable. Tunisia has made an extreme and implausible claim, and, to support that claim, has conjured up a "method" which has neither legal nor scientific justification. It is an attempt to provide a rational basis for a highly irrational line and, as such, it fails.

SECTION 4. The Geometric "Methods"

454. The adoption of geometrical techniques for the determination of a continental shelf boundary has a certain novelty, especially in the form which these techniques take in the two geometrical "methods" suggested in the Tunisian Memorial. It does not appear that such "methods" have any precedent in State practice. No doubt the reason is that geometry is

¹ *Limits in the Seas*, No. 83, 12 Feb. 1979, pp. 12 through 14.

² See para. 21 above. See also the reproduction of a published map facing this page which shows the two abyssal plains; after N.H. Kenyon and R.H. Beiderson in: *Structural History of the Mediterranean Basins*, 1976, p. 238.

³ See *Tunisian Memorial*, para. 9.09.

neutral; it does not reflect the natural prolongation of the landmass. Any geometric method should therefore be applied only if consistent with the natural circumstances and the legal principles governing the regime of the continental shelf. Nature does not follow geometry.

455. Nor does cartography follow geometry. Indeed, a cartographic representation of a geometrical construct which does not take into consideration the fact that there is always an element of distortion presented by any cartographic representation contains a built-in fallacy: the geometrical exercise may be convincing on the two-dimensional page, but becomes increasingly less so on the three-dimensional surface of the earth. If (as is the case with the two Tunisian "methods" discussed below) the geometrical exercises are unconvincing and fallacious from the start, it makes them even more unconvincing to note that none of the figures in the geometrical section of the Tunisian Memorial indicates a cartographic projection or even whether it is necessary or appropriate to consider the question of distortion. Although scale variations in the area concerned may only be apparently minor at those latitudes, even a minor variation may be highly significant in terms of exploration for and exploitation of oil and gas resources: "[t]he natural resources of the subsoil of the sea in those parts which consist of continental shelf [which] are the very object of the legal régime established subsequent to the Truman Proclamation¹." It may well be the case, therefore, that one of the details which should fall to be considered by the experts of the Parties in order to "delimit these areas without any difficulties" would be to reach an informed agreement or understanding concerning the cartographic projection to be employed to express the representation of the line of delimitation².

¹ *I.C.J. Reports 1969*, p. 51, para. 97.

² The question of cartography arose in dramatic form in the *Anglo-French Arbitration* and caused the Court to reconvene and promulgate a second decision on 14 March 1978. (*Anglo-French Arbitration* (Cmd. 7438), pp. 132ff.) It may be noted that although issues related to cartography did not arise in the *North Sea Continental Shelf Cases*, where the Court was not requested to specify practical methods for delimitation and where the Parties, in any event, agreed upon the delimitation subsequent to the Judgment in that case, it was otherwise in the *Anglo-French Arbitration*; following the initial Decision of the Court in 1977, the United Kingdom raised two questions, one of which related to techniques used for the "drawing of the boundary in the South-Western Approaches" that did not consider "scale distortions inherent in charts drawn on the Mercator Projection". (*Ibid.*, p. 135; it should be noted that the second question raised by the United Kingdom dealt with the enclaves around the Channel Islands.) Briefly stated, the United Kingdom maintained that the problem resulted from constructing a segment of the boundary line based on lines of constant bearing (rhumb lines or loxodromes) that failed to compensate for the curvature of the earth. (*Ibid.*, p. 143, para. 14.) The Court, by four votes to one, decided that the segment of the boundary line in question was not "in such contradiction with the findings of the Court. . . as to be incompatible with the method of delimitation prescribed in those findings". (*Ibid.*, pp. 194 and 195, para. 114(5)a.) Nevertheless, it also pointed out that State practice indicated the use of Transverse Mercator and Mercator projections as well as geodesic techniques in the delimitation of maritime boundaries. (*Ibid.*, p. 191, para. 105.) However, as *Annex 7*, Vol. III demonstrates, any cartographic projection used for portraying the earth's surface distorts, to some degree, directions, distances, areas and shapes. No projection maintains accuracy as to all of these properties. For these reasons, therefore, it is quite clear that the
(footnote continued on the next page)

456. Returning then to the novel Tunisian geometric exercises: even if novelty is not be regarded as a bar to such "methods", it would surely be expected that a geometrical method would embody the logical consistency which is the particular merit of the science of mathematics.

457. In *Annex 8*, Volume III of this Counter-Memorial the Court will find a detailed commentary on the two Tunisian geometrical "methods". For ease of reading, that *Annex* reproduces the various Figures from the Tunisian Memorial¹ and, after each Figure, appends a short commentary. The purpose of this commentary is to examine both the logic of the sequence of diagrammatic illustration and its application to the specific shelf area in dispute between the Parties. What follows, therefore, is a brief, and rather general, statement of Libya's reaction to the two Tunisian geometrical "methods", which ought to be read in conjunction with the detailed commentary in *Annex 8*, Volume III.

(1) *The First Geometric "Method"—The "Anti-Amputation" Line*

I, 194

458. The first "method" really depends upon the use of a bisector ("bissectrice") of the angle formed by two coasts. There is, however, an immediate, arbitrary—or at least subjective—element: that is, the selection of the two coastal lengths. As Figure 9.10 of the Tunisian Memorial shows, Tunisia has adopted two coasts. That for Tunisia stretches from Ras Mustapha, near Cape Bon, in the north, down to a point inland of Gabes, and thence eastward to a point on the 50 metre isobath off Ras Ajdir. That for Libya continues from that same point, eastward as far as Ras Zarrouk. In neither case can these coasts be regarded as a reasonable basis for any hypothesis. The Tunisian line is not a true indication of the general direction of the Tunisian coast, and it includes a long stretch of coast (north of Ras Kaboudia) which must already have been taken fully into account for purposes of the existing delimitation between Tunisia and Italy². The Libyan line more nearly reflects the true coast, but extends beyond the section of coast abutting on the area for delimitation in the present case. As shown above³, at least east of Tripoli and probably even further west, areas of shelf there abutting the Libyan coast are relevant only to a future potential delimitation between Libya and Malta.

459. Ultimately, of course, the geometrical exercises have to be concerned with areas, for the Tunisian Memorial rightly recognizes that the object must be to secure an equitable delimitation of an area of shelf. However, such an area is defined not only by reference to the coasts. There has to be an outer limit to the area, at sea. This leads to the second, arbitrary element. For in the early figures⁴ the outer limit is simply a straight line joining the extreme points of the two coasts. In the later

(footnote continued from the preceding page)

question of cartographic projection, which was a significant one for the Court of Arbitration and the Parties in those proceedings, is also relevant to this case.

¹ See *Tunisian Memorial*, Figs. 9.03 through 9.13.

² See para. 330 above.

³ See para. 331 above.

⁴ See *Tunisian Memorial*, Fig. 9.04.

figures¹, the outer limit becomes lines parallel to these straight lines of "coastal fronts". In neither case can the selection of so arbitrary an outer limit to the shelf area be justified. Moreover, if, for the sake of consistency, parallelograms are used to define the area for delimitation, and I, 194 Tunisian Figure 9.10 is completed by adding the parallelograms, the result is startling. The areas subject to delimitation (and by reference to which the delimitation line proposed by Tunisia is deemed equitable) then appear to include large parts of the Italian shelf and even part of the mainland of Sicily².

460. However, the basic flaw in this method is not, in fact, the arbitrariness of the definition of the coasts or of the area subject to delimitation. It is the rationale for the transfer of the angle of the "bissectrice" from Gabes to Ras Ajdir. As shown earlier³, with a right-angled or any acute-angled coast it is inescapable that the two coasts immediately on either side of the angle must abut on the same area of shelf. To say that a line bisecting the angle "amputates" the shelf attaching to one coast or the other is to ignore this fact. There is no inequity in this, for it is not the function of equity to refashion nature or to "remedy" a supposed inequity which does not in fact exist.

I, 192-194 461. The "remedy" which Tunisia proposes is somewhat extraordinary. It consists of transferring the angle of the "bissectrice" to the frontier and projecting the maritime boundary at that same angle. The essential aim of this exercise is to escape from the supposed "amputation" by giving to the one length of coast (SF in Figures 9.06 through 9.09) an area of shelf which lies in front of the adjoining coast (FB in those Figures). In real terms, it seeks to compensate the Tunisian coast from Gabes to Ras Ajdir by allocating to it areas of shelf that lie immediately in front of the adjoining Libyan coast. Of course, Tunisia purports to preserve the "equity" of the exercise by angling over, eastward, the shelf area attaching to the Libyan coast. This only perpetuates the problem, however, for each stretch of coast achieves its "equitable share" only by attaching to itself the shelf area that lies in front of the coast immediately to the east. The fallacy of the whole system is easily exposed by assuming that, at some point, a third State, C, exists⁴. Such a State would immediately oppose the shelf of its neighbor "leaning over" in front of its coast: it would be the most blatant "encroachment".

I, 193 462. It will also be apparent that, in transferring the angle of the "bissectrice" to the frontier point, Tunisia has also notionally transferred its whole northerly projecting coast. It is as if the Tunisian coast ran north from Ras Ajdir. This becomes quite clear upon examination of Figure 9.07. In the Commentary, the geometrical exercise has been completed to make it consistent with the premise of the parallelograms.

I, 192 ¹ See *Tunisian Memorial*, Fig. 9.05.

² See, by contrast, the logical treatment accorded to this problem in Sec. 1 of Chap. III of this Part IV, at paras. 482 through 490 below.

³ See paras. 336 and 337 above.

I, 192 ⁴ See *Tunisian Memorial*, Commentary on Fig. 9.05.

I, 192
I, 193

The dotted line from F (Ras Ajdir) has been continued to a newly-inserted point X, so as to complete the parallelograms on which the equity of the allocation of areas depends. For, by reference to the earlier illustration in Figure 9.05, it is the purpose of the parallelograms to maintain the ratio of areas to coastal lengths. Yet, in Figure 9.07, once the parallelograms have been completed, it becomes immediately apparent that the Figure treats the Tunisian coast as if it turned northward at Ras Ajdir. In other words, the whole area ASFX, the area to the west of this "notional" Tunisian coast, is ignored for purposes of comparison. In real terms, it is as if the entire area west of a line running north of Ras Ajdir were to be allocated to Tunisia and not counted at all for purposes of comparison between the shelf areas accruing to Tunisia and those accruing to Libya.

(2) *The Second Geometric "Method"—The "Angular Aperture" Line*

463. As explained in the Tunisian Memorial¹, this "method" purports to identify the coastal fronts, to measure the angle of the opening of the two coasts at the frontier point, and then to divide that angle in the ratio of the lengths of the two coastal fronts. The line dividing the angle is then offered as an appropriate line of delimitation.

I, 196

464. As with the previous "method", much depends upon the initial identification of the two coastal fronts. In the first section (Figure 9.12) the Tunisian coastal front is El Mzebla (an unacceptable base-point, to the east of the Kerkennah Islands and covered at all times by between 1.6 and 2 metres of water) and Ras Ajdir. This is a somewhat ambitious "coastal front", since it lies far to the east of even the controversial 1973 Tunisian baselines, is totally detached from the Tunisian coast and, like the first method, notionally treats the Tunisian coast as if it ran north from Ras Ajdir. The "method" is thus condemned at the outset by the sheer unreality of the coastal front proposed for Tunisia.

465. We are then told that a line dividing the angle of aperture of the two coastal fronts in the ratio of the lengths of the two coasts would be on a bearing of 60°². We are not told what the actual coastal lengths are, but only that the Tunisian coast is measured by reference to the Tunisian 1973 straight baselines³.

466. Apparently, however, a line at 60° is not sufficiently inclined towards the east and south to be consistent with Tunisian ambitions. For a second section is then added, for reasons which are not made apparent⁴. A new angle of aperture is constructed, not at Ras Ajdir, but at the terminal point of the delimitation line for the first section. It is immediately apparent that this second angle of aperture—which appears to be approximately 143°—bears no resemblance whatever to the actual angle of the two coasts. This angle is then divided, presumably in the ratio of

¹ See *Tunisian Memorial*, paras. 9.28 through 9.34.

² *Ibid.*, para. 9.33.

³ As indicated in the *Libyan Memorial*, para. 56, Libya does not admit the validity of these baselines.

⁴ See *Tunisian Memorial*, para. 9.33.

the coastal lengths of Ras Ajdir to Ras Mustapha (for Tunisia) and Ras Ajdir to Ras Zarrouk (for Libya). As indicated above, these cannot be the coasts abutting on the area subject to the present delimitation: they are unrealistic as coastal fronts in issue here. The delimitation line produced by the division of this angle inclines even more sharply eastward than the line for the first section, and even projects beyond the "triangle" which is the basis of the first section.

467. The overall impression left by both geometrical exercises is threefold. *First*, as "methods" of delimitation they are not only devoid of legal justification but are also actually inconsistent with the fundamental principle of natural prolongation. *Second*, even as abstract geometrical exercises they contain inherent contradictions and inconsistencies. *Third*, they are "contrived" in the sense that they are an attempt to rationalize, on apparently scientific grounds, preconceived lines of delimitation far more advanced to the east and south and closer to the Libyan shore than any former Tunisian pretensions.

CHAPTER III

THE PRACTICAL METHOD RESPECTING THE PRINCIPLE OF
NATURAL PROLONGATION

INTRODUCTION

468. A general formulation of the appropriate method for application of the principles and rules for the delimitation of areas of shelf in this case was given in Part III, Chapter I of the Libyan Memorial and, specifically, in paragraph 178 where it was stated:

“It therefore follows that the Parties must respect the physical facts and adopt a boundary which projects in a northerly direction from the terminal point of the land boundary at Ras Ajdir. In so doing, they will produce an equitable result because it is a result which respects the inherent title, the *ipso jure* rights, of each State.”

469. This conclusion was based upon the following finding:

“All the evidence—geological, geomorphological and geographical—points inescapably to the conclusion that the shelf off the North African coast concerned is a projection to the north of the land territory¹.”

470. And, as stated in Submission 5 in the Libyan Memorial:

“In the present case the continental shelf off the coast of North Africa is a prolongation to the north of the continental landmass, and therefore the appropriate method of delimitation of the areas of continental shelf appertaining to each Party in this specific situation is to reflect the direction of this prolongation northward of the terminal point of the land boundary².”

471. The Prefatory Note³ to the Libyan Memorial explained that the Memorial in part intended to stress “those preponderant considerations of fact and law which, in the view of Libya, lead to and justify its Submissions”, and that Libya reserved “the right to supplement these considerations and its Submissions in the light of the Tunisian pleadings and the further development of the issues between the Parties”.

472. In view of the emphasis placed by the Tunisian Memorial upon the actual suggestion of precise lines for the delimitation⁴, apparently based upon a misreading of the so-called “second question” put to the Court by the second paragraph of Article I of the Special Agreement⁵, it is therefore appropriate for Libya to indicate the degree of detail that might be appropriate for the formulation of the “practical method” for application of the principles and rules of international law. This Chapter contains the formulation of what Libya holds to be the practical method by

¹ See *Libyan Memorial*, para. 178.

² Submission 6 to this Counter-Memorial.

³ See *Libyan Memorial*, para. 10.

⁴ See *Tunisian Memorial*, paras. 9.01 through 9.37.

⁵ See paras. 433 through 435 above.

which the principle of natural prolongation can be applied in this case¹ (even though such a formulation does not contain a precise line of delimitation).

473. For the convenience of the Court this practical method, elaborated and developed in Sections 2 and 3 immediately below, and expressed in more general terms in Submission 7 to this Counter-Memorial, may be stated as follows:

The practical method for the application of the principles and rules of international law in this specific situation is for the Parties and their experts to agree upon a delimitation of the continental shelf which

- i. continues northward from the maritime boundary at the outer limit of the territorial sea in a direction reflecting the natural prolongation to the north of the landmasses concerned*
- ii. respects the western maritime boundary established by the 1955 Petroleum Law and Regulation and Map No. 1 thereunder*
- iii. reflects at the approximate parallel of Ras Yonga the significant change in general direction of the Tunisian coast which might reasonably be required to be taken into account in order to achieve a delimitation in accordance with equitable principles, and thus*
- iv. respects the relevant circumstances which characterize the area within the context of the Special Agreement, without affecting the rights of States not Parties to these proceedings.*

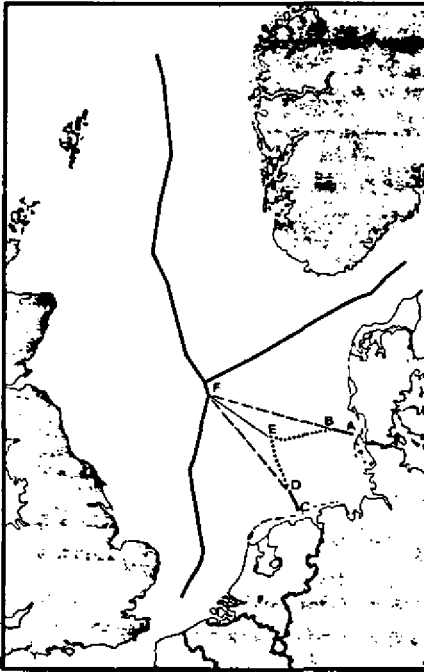
SECTION 1. The Area within Which the Delimitation Must Be Effected

474. It is significant that Article 1 of the Special Agreement refers twice to the concept of "areas" of continental shelf appertaining to the

¹ This Chapter is not a mere rebuttal of the Tunisian "methods" advanced in Chap. IX of the *Tunisian Memorial*, since those "methods" represent four different and not necessarily consistent or congruent approaches, based upon different premises and assumptions. Such a rebuttal has been accomplished in Part IV, Chap. II above (paras. 436 through 467) and in *Annex 8* to Vol. III of this Counter-Memorial. Nevertheless, in light of the tendency displayed by the pleadings in the *Tunisian Memorial* (e.g., Chap. IX), it is now particularly appropriate to formulate, in accordance with Art. 49 of the Rules of Court, a more precise indication of what had more generally been described in the *Libyan Memorial* and Submission 5 therein (Submission 6 to this Counter-Memorial) as "the appropriate method of delimitation of the areas of continental shelf appertaining to each Party in this specific situation".

Parties in the context of the judgment requested of the Court. In contrast, Articles 2 and 3 refer to the "line" of delimitation in connection with the task of the Parties and their experts.

475. There could have been no great divergence of opinion as to the extent of the area subject to delimitation in the *North Sea Continental Shelf Cases* because the area in question was explicitly circumscribed and limited by various bilateral delimitation agreements between two of the Parties and other States, and indeed in terms of the very presentation of the case to the Court. This is best illustrated by reference to Map 3 attached to the Court's opinion, which clearly sets out the area in which the delimitation at issue in those proceedings was to take effect¹:



476. It is equally noteworthy that the Court of Arbitration in the *Anglo-French Arbitration* also operated within a relatively restricted area. Although certainly broader than the narrow segment of North Sea considered by this Court in 1969, the areas of continental shelf under consideration in the *Anglo-French Arbitration* were (in contrast to these proceedings) limited to the English Channel, the Western Approaches, and areas of the Atlantic Ocean to the west extending out to a precise limit (the 1,000 metre isobath).

¹ *I.C.J. Reports 1969*, at p. 15.

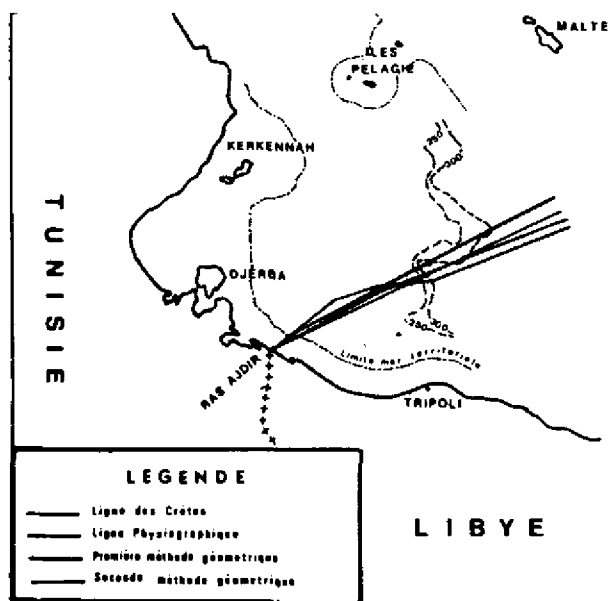
477. Viewed from the perspective of the *North Sea Continental Shelf Cases* and the *Anglo-French Arbitration*, it thus appears appropriate for the Court to consider the extent of the area of continental shelf within which the Parties and their experts will effectuate a delimitation pursuant to the judgment in this case.

478. Set forth in the following pages is an analysis of the principles and rules which, in Libya's view, should be applied in determining the extent of the area of shelf in question. These include two fundamental propositions, set forth as (1) and (2).

(1) *The Extreme Claims of a Party Are Not Necessarily Determinative of the Continental Shelf to Be Delimited*

479. Extreme territorial claims that are exaggerated, artificial and *prima facie* inequitable should not define the outside boundaries or parameters of the area of continental shelf relevant to the delimitation process, because the area and coastal fronts concerned would be inequitably enlarged.

480. In this connection, it must be emphasized that the extreme pretensions or claims of Tunisia to areas of continental shelf remote from its shores but lying almost immediately offshore the Libyan coastline are arbitrary, and must be disregarded in determining the outside limits of the area subject to delimitation (or in any other context). These extreme claims, presented in paragraphs 9.06 through 9.08, 9.09 through 9.11, 9.22 through 9.26 and 9.27 through 9.35 of the Tunisian Memorial, as outlined in Figure 9.14 of that Memorial and reproduced below, reveal their ambitious implausibility in the context of an equitable delimitation of the shelf area at issue in this case:

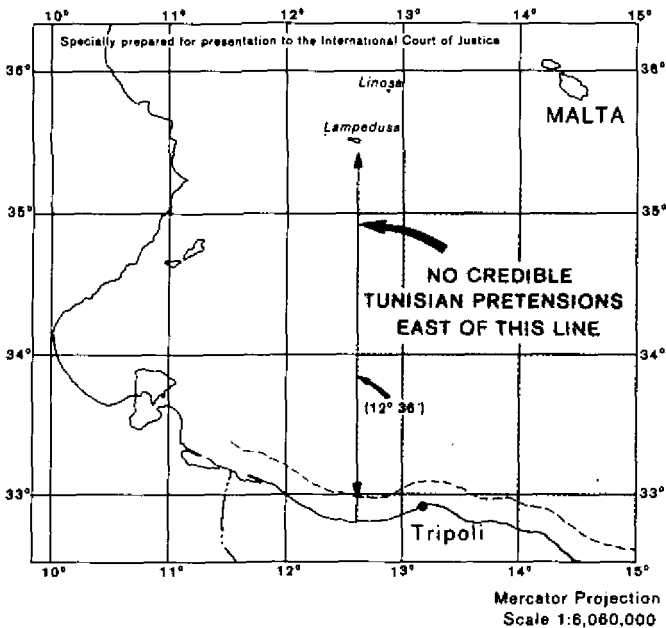


481. Identification of an area of concern by application of the principles set forth in this Chapter, instead of the extreme claims advanced by Tunisia and illustrated immediately above, will enable the Court to assess the degree to which claims advanced by each Party are consistent with an equitable delimitation.

(2) The Court Should Not Contemplate the Division of an Area Which Would in No Event Fall to Be Delimited between the Parties

482. All areas of shelf which either appertain to a third State, or are divisible between either Tunisia or Libya and a third State, should be excluded from the purview of a delimitation to be effected by the Parties in this case. It therefore follows that one element of the practical method for the application of the principles and rules of international law in this specific situation must be to avoid affecting the rights of States not Parties to these proceedings.

483. The first step is to note that Lampedusa is the most significant of the three relevant Italian islands, and is indicative of the northernmost point of a theoretical boundary for the area of concern to Libya and Tunisia in these proceedings. It is only logical, then, to connect that point with the point on the edge of the Libyan territorial sea directly to its south, to arrive at a theoretical "outer limit" for the area of concern. To the east of that line there can be no credible pretension of Tunisia to areas of continental shelf. This theoretical "outer limit" for the area of concern is shown on the Diagram below:



484. The intersection of the line from the Island of Lampedusa with the Libyan territorial sea to its south occurs some 32 nautical miles to the west of Tripoli at the intersection with the $12^{\circ}36'$ east meridian¹. It thus appears to be reasonable from any point of view, as no conceivably appropriate or equitable claim by Tunisia could or should cut across the Libyan coastline directly in front of Tripoli.

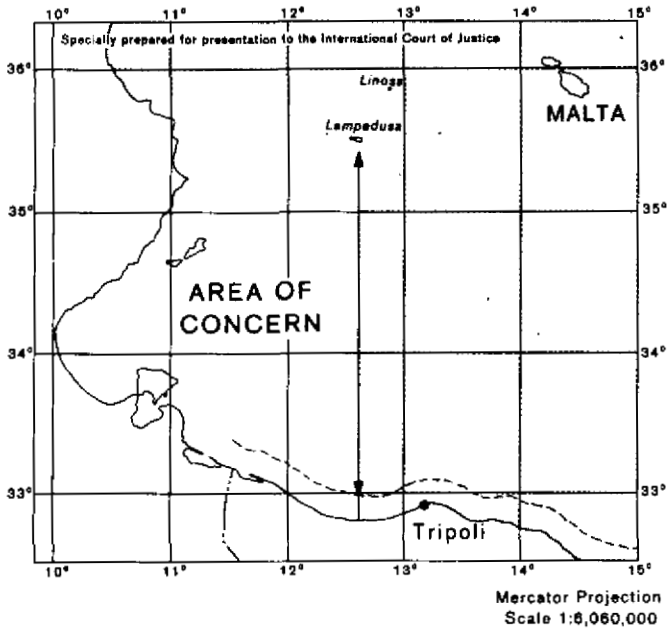
485. It must always be recalled, however, that closing the area of concern to the east by the line indicated in the Diagram on the preceding page does not in any sense imply that Tunisia possesses putative shelf rights in all areas to the west of that line. Indeed, any *de jure* appurtenance of shelf within the area of concern must as a matter of law be governed by the recognition of the natural prolongation northward. The practical method espoused by Libya and described in Sections 2 and 3 below is intended to permit the delineation of this direction of the natural prolongation; Section 3 describes the practical method which can be utilized by the experts to establish an appropriate angle of divergence or deviation of the line of delimitation in order to take account of the relevant circumstances of geography, and indicates the reasonable eastward and westward limits of the area within which such an angle of divergence would appear to lie.

486. As to the northern portion of that area: the northward prolongations of both Tunisia and Libya naturally extend throughout those areas of the Pelagian Sea lying between the Lampedusan Island group and the Tunisian shore and, since they both continue in a generally northward direction, it is unnecessary to "close" the area by a line of latitude. Both Tunisia and Libya may share in those areas of shelf².

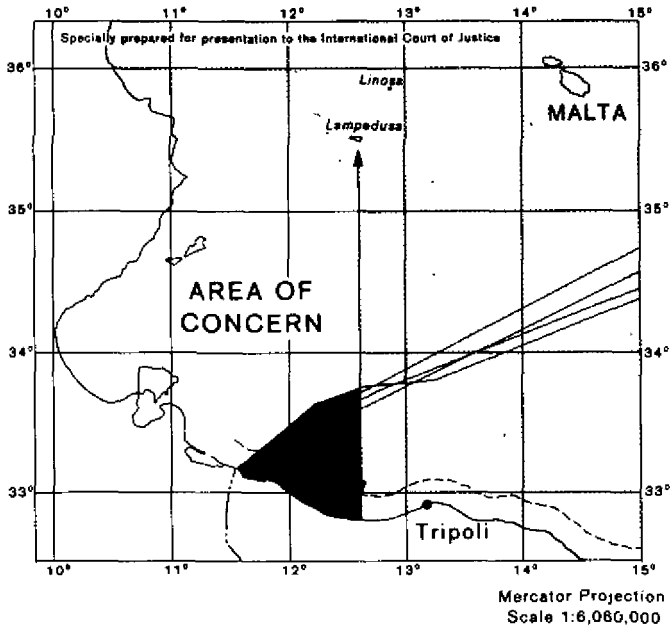
487. In the result, therefore, the area of concern can be viewed as shown in the Diagram on the following page.

¹ The bearing from Tripoli to this point of intersection is approximately N 280° E.

² The potential interest of Italy relative to the Island of Pantelleria and Sicily may of course ultimately have an effect on the northernmost limit to areas of continental shelf appurtenant to either or both of Tunisia or Libya but, to the extent that such areas are substantially equally divided by a projected delimitation line running in a generally northward direction, there is no need to specify a northern limit for the area of concern—at least for the purpose of evaluating the equitableness or proportionality of a proposed delimitation as between Libya and Tunisia.



488. It is illuminating to contrast Tunisia's pretensions in the area of concern by superimposing upon it the "sheaf of lines" contended for by Tunisia in its Memorial¹. This is illustrated on the Diagram appearing on page 196.



489. As indicated in the Diagram immediately above, not only does the Tunisian “sheaf of lines” completely evade the potentially marginal area of diverging lines of direction north of Ras Yonga, illustrated in the Diagram appearing on page 202 below, but actually “amputates”—in the correct sense of that word—the area of concern illustrated above: i.e., the area of the most extreme limits of claim which could be reasonably asserted by Tunisia in these proceedings. This is inequitable and disproportionate upon its face¹. This Diagram indicates that Tunisia is prepared to concede to Libya only a miniscule fraction of the area of concern.

490. In conclusion, therefore, the concept of the area of concern has been discussed in this Section 1 for two purposes. *First*: the discussion has been intended to place before the Court a clear and accurate picture of the relevant extent of the areas of continental shelf actually involved in these proceedings, within the meaning and context of the “area” and “areas” repeatedly emphasized in Articles 1, 2, and 3 of the Special Agreement.

¹ As discussed in Sec. 4 below, this conclusion is supported by an analysis of the concept of “proportionality” as applied to the relevant circumstances of this case.

Second: it is also advanced in order to lay the groundwork for verifying, by reference to the concept of "proportionality" discussed in Section 4 below, the appropriateness of the practical method proposed by Libya, as supported by the other confirmatory considerations discussed in Section 5 below. At the same time, it demonstrates in bold relief the utter impropriety and disproportionality of the so-called "sheaf of lines" proposed by Tunisia as its "practical method(s)" of delimitation.

SECTION 2. Determination of the Natural Prolongation

491. As indicated in paragraphs 275 through 284 above, the scientific evidence supports the proposition contained in Submission 5 in the Libyan Memorial (reproduced as Submission 6 in this Counter-Memorial) that the continental shelf is a projection to the north of the North African landmass lying to the south. As was demonstrated in Annex II to the Libyan Memorial and confirmed in this Counter-Memorial, and in *Annexes 11, 12A and 12B, Volume III*, the scientific basis for this conclusion is solid and definitive and rests in part upon the following factors:

- i. The relevant continental shelf area is the extension to the north of the North African landmass to the south¹.
- ii. This area of continental shelf is part of the Pelagian Basin, itself a part of the African plate. This entire Basin area is a geological and physiographic unit. Contrary to the allegations in the Tunisian Memorial, there are no geologic or physiographic features of sufficient importance to influence a delimitation of the relevant continental shelf area².
- iii. The Pelagian Basin has a distinct affinity to the African landmass and is a different region from the Atlas Mountain region of Tunisia. This affinity is shown by the fact that the main geologic and physiographic features of the Pelagian Sea area are related to Africa. Examples are the Sirt Basin rift system which runs across the Pelagian Sea; the zones of depression and elevation running parallel to the north-facing Libyan and Tunisian coasts; and the ancient coastline which followed the general North African east/west coastal direction and cut across present-day Tunisia south of the present line of *chotts*, at a time before the Atlas Mountains had been formed and before the northward-thrusting coast of Tunisia existed³.
- iv. *Facies* data also confirm the northward prolongation of the North African landmass from the northward-facing coasts of Libya and Tunisia on to the continental shelf, as well as the basic affinity of this shelf to the North African landmass to the south⁴.

¹ See para. 284 above.

² See paras. 233 and 234 above.

³ See paras. 240, 241, 271 and 272 above.

⁴ See para. 267 above.

- v. The geography and topography of the Jabal Nefusa and the Jeffara Plain of Tripolitania and of southeastern Tunisia confirm the fact that the continental shelf area to the north is the natural extension of the North African landmass to the south¹.

492. Thus, the geological and geographical factors summarized above dictate a northerly direction for the delimitation. The experts appointed by the Parties will thus be obliged to construct a line of delimitation from the outer limit of the territorial sea which is consistent with the northerly direction of the natural prolongation and the other relevant criteria discussed above.

SECTION 3. Reflection of Relevant Geographical Circumstances

493. In cases such as the present, where the scientific factors of a geological and geographical nature indicate the direction which the natural prolongation or extension of the landmass must take, it would not normally be necessary to examine other geographical features except to avoid a patently unfair or grossly inequitable result². However, Article 1 of the Special Agreement requests the Court not merely to "take its decision according to equitable principles", but also according to "the relevant circumstances which characterise the area". The Parties have therefore agreed that all the relevant circumstances should be taken into account if necessary to achieve an equitable result.

494. In this case, geography supports and confirms geology, which indicates that the natural prolongation of the landmasses into and under the sea is to the north³. Because the land boundary at Ras Ajdir lies on a stretch of coastline which runs west-northwest/east-southeast, the geographic projection of the continental shelf from that coast necessarily presupposes a northward prolongation of all north-facing coasts (Libyan and Tunisian). At least up to the latitude of Ras Yonga⁴, therefore, virtually all the relevant continental shelf which could appertain to Tunisia in geographic terms is the result of its necessarily northward projection west of the land boundary at Ras Ajdir. This results from the configuration and nature of the Tunisian coastline from Ras Ajdir to Gabes, which essentially follows the generally east/west extension of the overall North African coastline⁵.

495. It is useful to recall the report of the Committee of Hydrographic Experts which was submitted to the International Law Commission in

¹ See para. 243 above.

² In situations such as those involved in the *Anglo-French Arbitration*, where the geological evidence was inconclusive or sufficiently ambiguous so as to be set aside as a determinant factor, the relevant circumstances of geography became a dominant factor, particularly in the context of construction of a median or equidistance line responsive to the geographical configurations of the relevant coasts.

³ See *Annex 2*, Vol. III prepared by Drs. Blake and Anderson concerning the coasts of Tunisia and Libya from Cape Bon to Ras Zarroug.

⁴ See paras. 498 through 501 below.

⁵ The northward turn of the Tunisian coastline at Gabes is an anomalous variance to this predominant east/west trend which, as noted in para. 114 of the *Libyan Memorial*, is a classic example of "an incidental special feature". *I.C.J. Reports 1969*, p. 50, para. 91.

1953. As this Court has noted¹, that report stressed that there were at least three other methods of delimitation, in addition to the equidistance method, which fell to be considered. In the words of the Court:

“Equidistance was in fact only one of four methods suggested to [the Committee of Hydrographic Experts] . . . the other three being the continuation in the seaward direction of the land frontier between the two adjacent States concerned; the drawing of a perpendicular to the coast at the point of its intersection with this land frontier; and the drawing of a line perpendicular to the line of the ‘general direction’ of the coast.”

496. As noted in the Libyan Memorial, the drawing of lines of delimitation which reflect the projection of the territorial land boundaries of a State into and under the sea is clearly accepted in State practice and justified in the particular circumstances of this case². The appropriateness in these specific circumstances of selecting the northward extension of the land boundary from its terminal point at Ras Ajdir is made clear by the geographic configuration of the coasts concerned, and by the fact that at Ras Ajdir the land boundary runs north and is roughly perpendicular to the coasts at the point of its intersection as well as generally perpendicular to a more extensive length of coastal front. Moreover, this accords with the position publicly asserted by Libya as to its entitlement to grant concessions in an area of shelf running due north from Ras Ajdir (by the publication of Petroleum Law No. 25 of 1955, Petroleum Regulation No. 1 and Map No. 1 annexed thereto, as more fully discussed in paragraphs 27 to 30 above).

497. It therefore follows that in its first part the practical method for the application of the principles and rules of international law in this specific situation is to continue the reflection of the direction of the natural northward prolongation from the outer limit of the territorial sea, and to plot a line of delimitation which reflects that general line of direction and is not otherwise inconsistent with it. There is no other way in which an appropriate maritime boundary could be constructed in the specific circumstances of this case; if it was drawn without reference to the general direction of the land boundary it would depart at a sharp and unjustified

¹ *I.C.J. Reports 1969*, p. 34, paras. 50 and 51.

² *Ibid.*, p. 34, para. 51. It is interesting to note that the Court continued to specify (in para. 51) that:

“Furthermore the matter was not even put to the experts directly as a question of continental shelf delimitation, but in the context of the delimitation of the lateral boundary between adjacent territorial waters, no account being taken of the possibility that the situation respecting territorial waters might be different.”

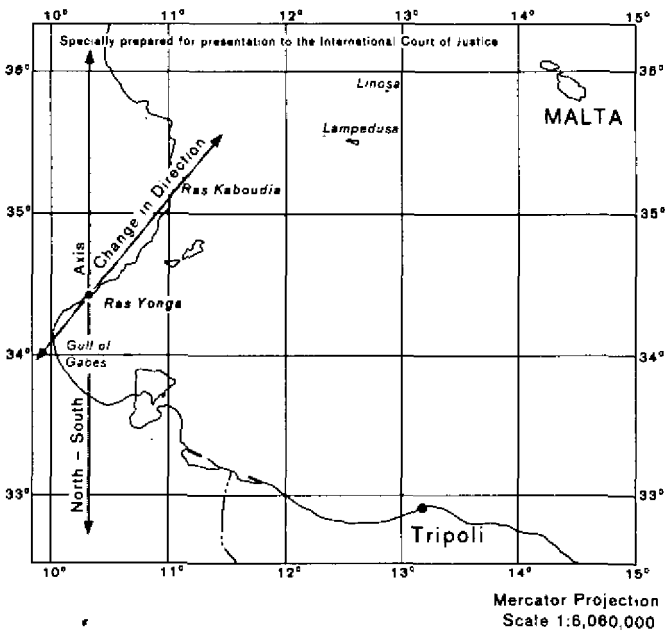
This becomes particularly relevant in the discussion contained in paras. 422 through 431 above.

³ See *Libyan Memorial*, paras. 116 through 120.

angle to the land boundary and would cut across the face of either coast concerned: across the Island of Djerba, in Tunisia in the west, or across the face of the Libyan shoreline, in front of Tripoli, in the east¹.

498. However, to achieve an equitable result over the entire course of the delimitation a relevant geographical circumstance which characterizes the area should also be considered by the experts of the Parties. This circumstance is the promontory of the Sahel, which brings about a marked change in direction of the Tunisian coast toward the northeast at approximately the Kneiss Islets or Ras Yonga.

499. As the Diagram below shows, Ras Yonga is the true natural entrance point of the Gulf of Gabes, and is so identified in navigational handbooks². It is at this point that the Gulf ends and the direction of the coast changes to the northeast. In addition, it is in this vicinity that the region of Tunisia known as the Sahel begins: as discussed in detail in *Annex I*, Volume III, the Sahel region differs in many climatic and ecological aspects from the "Gulf of Gabes region" or the region of the Jeffara Plain.

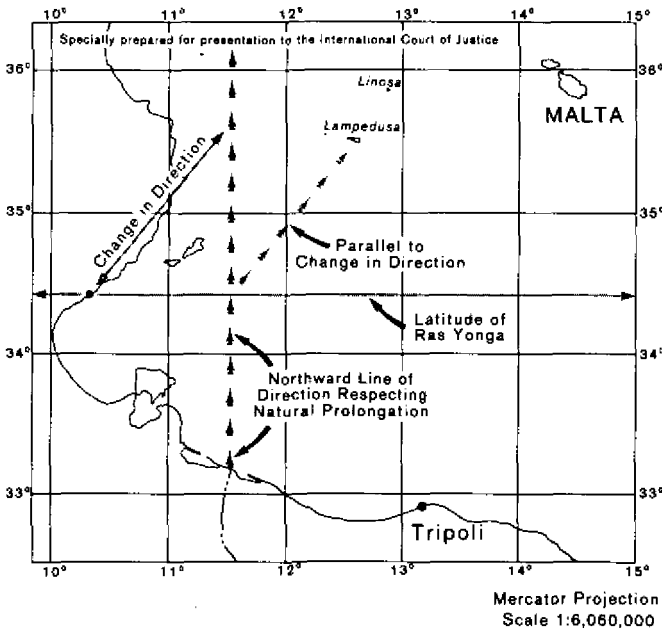


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¹ The Court need only refer to Fig. 9.14 to the *Tunisian Memorial*, reproduced at p. 192 above, to observe the obvious inappropriateness of such suggested lines of delimitation (leaving aside the impropriety of the "methods" which are advanced to support them in the *Tunisian Memorial*).

² See *Libyan Memorial, Annexes I-18 and I-19*. See also para. 82 above.

500. Returning to the practical method for the construction (by the experts of the Parties) of a line which takes this relevant circumstance of geography into consideration, it is apparent that a line drawn from Ras Yonga to Ras Kaboudia gives the general direction of that part of the Tunisian landmass. That line will show the angle of the convexity. If this coastal configuration were the only relevant circumstance in this case, it could be taken into account by reflecting the same angle of divergence in the direction of the delimitation, and thus giving to the line of delimitation the same approximate change in direction as that which occurs in the Tunisian coast. This theoretical divergence from the initial direction of the delimitation is illustrated in the Diagram below:

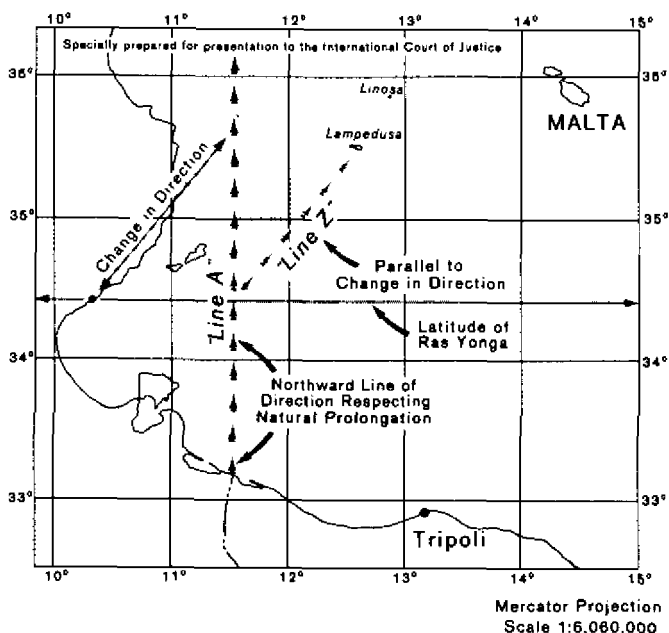


501. North of the latitude of Ras Yonga, therefore, such an initial angle of divergence to the northeast would fully take into account the relevant circumstance of geography which characterizes the area, reflecting the veering of the Tunisian coast at those latitudes and the specific geographical circumstances of the Ras Kaboudia promontory¹. Yet such a solution would not be appropriate because what must ultimately be

¹ If the original line of direction were to be continued northward from Ras Ajdir indefinitely, it would pass close by the Kerkennah Islands and would in effect cut directly in front of the Tunisian coastline, in much the same way as (although with considerably more justification than) the "sheaf of lines" proposed by Tunisia (portrayed in Fig. 9.14 of the *Tunisian Memorial*, reproduced at p. 192).

reflected is not simply a particular circumstance of geography, but *all* the relevant circumstances. Thus a balancing is required in order to achieve an equitable result: a balancing between the northward line of direction reflecting natural prolongation, on the one hand, and the original line or angle of veering or divergence to the northeast, on the other hand.

502. The balancing of relevant circumstances resulting from the consideration of these elements will be accomplished within the context and the limitations of the two divergent general lines of direction as described in the preceding paragraph. This is to be accomplished by the experts of the Parties as the second part of the practical method applying the principles and rules of international law in the area of concern. The cartographic representation of the area to be delimited north of the latitude of Ras Yonga by application of this practical method is as shown by the Diagram below:



503. The northerly line of direction is indicated on the Diagram above as "Line A", for illustrative purposes only, and represents neither a specific meridian nor an exact line of direction; these are to be determined by the experts of the Parties consonant with the principles and rules of international law indicated by the Court in these proceedings. Similarly, "Line Z" is also not a precise proposed line of delimitation, but is rather intended to illustrate the original northeasterly angle of veering or divergence

reflecting the change in direction of the Tunisian coast north of the latitude of Ras Yonga, which Libya perceives will have to be taken into account by the experts in order to arrive at a delimitation in accordance with equitable principles. Indeed, "Line A" and "Line Z" cannot by definition be proposed lines of delimitation since they are merely the outer limits of an upper area which contains the likely shelf boundary north of Ras Yonga: the actual line of delimitation is neither known nor specified, but it should lie somewhere within the shaded area closed by "Line A" and "Line Z" in the Diagram on the preceding page.

504. In conclusion, therefore, it becomes clear that, as shown in the Diagram on page 202, an area of shelf lies between the northerly "Line A" reflecting the natural prolongation of the North African landmass, on the one hand, and the northeasterly "Line Z" reflecting the parallel to the change in direction of the Tunisian coast, on the other. This represents a marginal area of divergence where several differing considerations must be balanced in order to achieve an equitable result. The division of this marginal area in agreed or equal proportions between the Parties would approach a delimitation which takes account of the relevant circumstances and which brings about an equitable result.

505. It therefore follows that in its second part the practical method for the application of the principles and rules of international law in this specific situation is to determine whether a significant change in the general direction of the Tunisian coast might reasonably be required to be taken into account in order to achieve a delimitation reflecting the relevant circumstances in accordance with equitable principles.

SECTION 4. Proportionality

506. It is now necessary to determine whether the practical method described above would be in accordance with the principles and rules of international law and would in fact bring about an equitable result. It would be appropriate first to recall the words of the Court in paragraph 101(D)(3) of the *North Sea Continental Shelf Cases* (*dispositif*) to the effect that, in the course of negotiations concerning an ultimate delimitation, the factors to be taken into account are to include:

"the element of a reasonable degree of proportionality, which a delimitation carried out in accordance with equitable principles ought to bring about between the extent of the continental shelf areas appertaining to the coastal State and the length of its coast measured in the general direction of the coastline, account being

taken for this purpose of the effects, actual or prospective, of any other continental shelf delimitations between adjacent States in the same region¹."

507. As shown above in the Diagram appearing at page 196, the contrast between the logically delineated area of concern and the extreme Tunisian claims is startling. On the assumption that the Court considers the concept of "proportionality" as applicable in the broader context of actual or prospective effects of any other continental shelf delimitations between States in the same region, whether adjacent or opposite², clearly any delimitation along the Tunisian "lines" suggested by Chapter IX of the Tunisian Memorial would not merely have a disproportionate result: it would have a grossly disproportionate result. Indeed, as is so readily apparent pictorially from the Diagram appearing on page 196, the results of any such delimitation would be inequitable and inappropriate even if Malta or Italy did not exist.

508. In the *North Sea Continental Shelf Cases* the concept of "proportionality" was raised by the Federal Republic of Germany in an attempt to ascribe to itself "a just and equitable share", that is: a proportionately greater area of shelf than the very restricted area to which application of the equidistance method, drawn in the context of the particular circumstances of the convexity of the coasts concerned, would have led. The Court rejected this concept of "proportionality" because it was "quite foreign to, and inconsistent with, the basic concept of continental shelf entitlement"³. The paradigm in the *North Sea Continental Shelf Cases* featured the instance where one State (the Federal Republic of Germany) suffered from a coastline which was severely concave. Such concavity, when joined with the method of equidistance, resulted in the dramatic double "amputation" shown by the dotted lines D-E and E-B in Map 3 set forth at page 15 of the *North Sea Continental Shelf Cases* Judgment and reproduced at page 191 above⁴.

509. Yet, on the other hand, the Court could not disregard proportionality, since it could not be said that a delimitation effected in accordance with equitable principles could be a delimitation which did not possess at least "a reasonable degree of proportionality". This was, however, quite clearly recognized by the Court in its *dispositif* as having reference only to the portion of the continental shelf concerned which constituted an "area

¹ *I.C.J. Reports 1969*, p. 54.

² It would distort the reasoning of the Court not to extend the applicability of para. 101(D)(3) of the 1969 *dispositif* to situations such as the present one where Tunisia and Libya are *adjacent* States, but where Tunisia and Italy (and Malta and Libya) are *opposite* States. It must also be recalled that Tunisia has already taken into account (although in Libya's contention inequitably and incorrectly so) an opposite State's delimitation by entering into the 1971 Delimitation Agreement with Italy.

³ *I.C.J. Reports 1969*, p. 22, para. 20.

⁴ *Ibid.*, p. 15; see also Examples I and II on p. 16, *ibid.*, and para. 8 of the Judgment, at p. 17. In the present case, however, Tunisia "amputates" herself and cannot be heard to advance "proportionality" in the manner in which the Federal Republic of Germany did so in the *North Sea Continental Shelf Cases*.

of overlap". Proportionality was to be taken into account under 101(D), "in the course of the negotiations" in respect of the agreement to be reached by the Parties in relation to the shelf areas relating to paragraph 101(C)(2), and not to the areas contemplated by paragraph 101(C)(1). The "101(C)(1) areas" were of a different nature from the "101(C)(2) areas": they were those as to which a delimitation was to be agreed recognizing the natural prolongation of land territory of each Party concerned without encroachment on the natural prolongation of the land territory of the other Party¹. The 101(C)(2) areas were "areas that overlap" which "the delimitation [left] . . . to the Parties. . .".

510. In Libya's view, the concept of proportionality is applicable solely to areas where the application of the principle of natural prolongation leads to conflicting results, or where (as in the present case) the question put to the Court requires it to give effect to relevant circumstances which might create a "marginal area" of divergence (as indicated in paragraphs 504 and 505 above²). Proportionality has no place in connection with *de jure* appurtenance. Indeed, to impose proportionality as a restraint upon a delimitation of areas of shelf that *de jure* and *ab initio* appertain to State A, in favor of State B, because of the proportion borne by its smaller (theoretical) area of shelf to the length of its longer (theoretical) coastlines, would be contradictory to the fundamental legal concept that the continental shelf is the natural prolongation—in that example—of the landmass of State A into and under the sea.

511. This conclusion is confirmed by the decision of 30 June 1977 in the *Anglo-French Arbitration*. At paragraph 101, the Court of Arbitration stated:

"In short, it is disproportion rather than any general principle of proportionality which is the relevant criterion or factor. The equitable delimitation of the continental shelf is not, as this Court has already emphasized in paragraph 78, a question of apportioning — sharing out — the continental shelf amongst the States abutting upon it. Nor is it a question of simply assigning to them areas of the shelf in proportion to the length of their coastlines; for to do this would be to substitute for the delimitation of boundaries a distributive apportionment of shares. Furthermore, the fundamental principle that the continental shelf appertains to a coastal State as being the natural prolongation of its territory places definite limits on recourse to the factor of proportionality³."

512. There are "definite limits on recourse to the factor of proportionality" in this case as well since, in accordance with Libyan Submission 5 to the Memorial (and Submission 6 to this Counter-Memorial):

¹ This interpretation is reinforced by a close reading of the *dispositif* and particularly by examining the words, "in the course of the negotiations", in the first sentence of paragraph 101(D). How can there be "negotiations" concerning *de jure* appurtenant areas of shelf?

² Although it is analytically different from "areas that overlap", it may be possible to conceive of this area of divergence—for these purposes at least—as equivalent to the areas referred to in para. 101(C)(2) of the *North Sea Continental Shelf Cases dispositif*.

³ *Anglo-French Arbitration* (Cmnd. 7438), pp. 60 and 61, para. 101.

"In the present case the continental shelf off the coast of North Africa is a prolongation to the north of the continental landmass, and therefore the appropriate method of delimitation of the areas of continental shelf appertaining to each Party in this specific situation is to reflect the direction of this prolongation northward of the terminal point of the land boundary."

Since the practical method suggested for delimitation by the Parties and their experts includes the actual recognition of this natural prolongation to the north of the continental landmass, "proportionality" as such—whether used in the sense of the *North Sea Continental Shelf Cases dispositif*, or in terms of the *Anglo-French Arbitration*—has a limited role. In fact, the test of "proportionality" as enunciated in paragraph 101(D)(3) of the *dispositif* in the *North Sea Continental Shelf Cases* is only applicable to the "areas that overlap" (the "101(C)(2) areas") in that case or—by analogy to the differing circumstances in the present case—to the marginal area of divergence described in Section 3 above (and in particular, in paragraphs 504 and 505). If this is the case, then it follows that the shaded area of divergence north of Ras Yonga, between "Line A" and "Line Z" in the Diagram at page 202 above, is to be delimited by the Parties in a manner which takes into account the proportion borne by the proposed respective areas of shelf within the area of divergence to the lengths of relevant coastal fronts. It is this area to which the concept of proportionality enunciated in paragraph 101(D)(3) of the *North Sea Continental Shelf Cases* Judgment is applicable.

513. This view is reinforced by the language and reasoning in the *Anglo-French Arbitration*. Moreover, the Court of Arbitration in fact refined the concept of "proportionality" into a test of the equity of any result reached in the course of delimitation. Paragraph 101 of the Award in the *Anglo-French Arbitration* continues (from the language immediately quoted in paragraph 511 above relating to the "definite limits on recourse to the factor of proportionality") as follows:

"As was emphasized in the *North Sea Continental Shelf* cases (I.C.J. Reports 1969, paragraph 91), there can never be a question of completely refashioning nature, such as by rendering the situation of a State with an extensive coastline similar to that of a State with a restricted coastline; it is rather a question of remedying the disproportionality and inequitable effects produced by particular geographical configurations or features in situations where otherwise the appurtenance of roughly comparable attributions of continental shelf to each State would be indicated by the geographical facts. Proportionality therefore is to be used as a criterion or factor relevant in evaluating the equities of certain geographical situations, not as a general principle providing an independent source of rights to areas of continental shelf¹."

¹*Anglo-French Arbitration* (Cmnd. 7438), p. 61, para. 101.

In the context of the present proceedings, therefore, the concept of proportionality should be applied in the following manner:

514. *First*, proportionality should clearly be applied by the Parties and their experts as a “criterion or factor relevant in evaluating the equities of” the relevant circumstances of geography in this case. It therefore applies specifically to the area of “divergence” described in Section 3 above (in particular in paragraphs 504 and 505) and illustrated in the Diagram at page 202. Yet it should be made clear that this element is one to be applied by the *Parties* (as the Parties in the *North Sea Continental Shelf Cases* were advised to take it into account in the course of their negotiations), and not one as to which the *Court* should be expected to make a specific determination.

515. *Second*, its application should be limited to that area of divergence, consistent with the established legal conclusion that proportionality does not relate, and cannot relate, to the total partition of the whole area of shelf concerned. In the words of the Court of Arbitration:

“The abatement of these disproportionate effects ... does not entail any nice calculations of proportionality in regard to the total areas of continental shelf accruing to the Parties.... This is *because ... the element of ‘proportionality’ in the delimitation of the continental shelf does not relate to the total partition of the area of shelf among the coastal States concerned*, its rôle being rather that of a criterion to assess the distorting effects of particular geographical features and the extent of the resulting inequity!”.

516. It is difficult to stress sufficiently the importance of the words italicized above. To apply “proportionality” in a mechanical way to the entire area of shelf lying offshore Libya and Tunisia would be inconsistent with and directly contradictory to the reasoning of the Court of Arbitration in the *Anglo-French Arbitration*. “Proportionality” is not a test to be applied in a mechanical or rigid manner. It confers no title to areas of shelf: it only can serve to confirm the equitableness of a proposed delimitation. It does not apply to all or even to most of the area of shelf which can reasonably be subject to delimitation in these proceedings (the “area of concern”), since most of that area is to be determined as belonging *de jure* to one or the other Party by respecting the juridical principle of natural prolongation. But it can serve a useful function in determining the broad equity of a division of an area such as the area of divergence indicated in Section 3 above: the area illustrated in the Diagram at page 202 should be agreed for division between the Parties keeping in mind the element of proportionality.

517. It goes without saying, moreover, that by any test or analysis the Tunisian “sheaf of lines”, which truly and unequivocally “amputates” the area of concern (as shown in the Diagram at page 196 above) would bring about a grossly disproportionate result. It should thus be rejected in its entirety by the Parties and their experts as incapable of achieving an

¹ *Anglo-French Arbitration* (Cmnd. 7438), p. 117, para 250. (Italics added.)

equitable delimitation which satisfies even a minimum test of proportionality. It follows, without more, that the "methods" which have produced that sheaf of lines must also be rejected in their entirety.

518. It is now appropriate to verify the general propriety or appropriateness of the practical method as described above, and the equitableness of the result produced by its application, in relation to the more concrete relevant circumstances (or "factors") which the Court enunciated in paragraphs 95 through 98 of its Judgment in the *North Sea Continental Shelf Cases* and repeated in substance in paragraphs 101(D)(1), (2) and (3) of its *dispositif*¹.

SECTION 5. Verification of the General Propriety of Such a Method and the Equitableness of the Result Produced by Its Application

519. The practical method suggested by Libya will result in a line of delimitation that proceeds northward from the edge of the territorial sea north of Ras Ajdir until the approximate latitude of Ras Yonga and which would then veer in a northeastward direction. Although it is not appropriate, given the terms of the Special Agreement, for the Parties to specify at this stage where a precise line of delimitation should lie north of Ras Yonga, in light of the discussion in Section 4 above, it would appear that the line would be found within the shaded area enclosed by "Line A" and "Line Z" in the Diagram appearing at page 202 above². Taking the application of the practical method as a whole, therefore, it remains to be seen whether its application would be in accord with other relevant factors and would produce an equitable result. To this end, the method will be examined in its entirety and over the whole of the length of any hypothetical line of delimitation which it might produce.

520. The Court in 1969 indicated in its *dispositif* that the Parties should take three factors into account in their delimitation. The *first factor* was "the general configuration of the coasts of the Parties, as well as the presence of any special or unusual features"³. This factor has been taken into account by the divergence described in detail in Section 3 above.

521. Taking into account the *second of the factors* mentioned in the *dispositif*, i.e., "the physical and geological structure, and natural

¹ *I.C.J. Reports 1969*, p. 54.

² See para. 503 above.

³ *I.C.J. Reports 1969*, p. 54, para. 101(D)(1); reference should be made to the various factors enunciated in paras. 95 through 98 of the Court's Judgment in the *North Sea Continental Shelf Cases*, and repeated in substance in the three specific factors in paragraphs 101(D)(1), (2), and (3) of the Court's *dispositif*. (*Ibid.*, pp. 51 through 54.)

resources, of the continental shelf areas involved¹, the practical method proposed would leave the two sedimentary basins² on the Tunisian side. Moreover, the productive Tunisian Ashtart petroleum field would be left on the Tunisian side, well clear of any line which the Parties might agree to in conformity with either the northerly direction or northeasterly direction to the delimitation.

522. As to the Court's *third factor*, to the effect that "account [should be] ... taken ... of the effects, actual or prospective, of any other continental shelf delimitations between adjacent States in the same region", it may be stated that the practical method proposed would also respect existing delimitations in the sense that the Parties would have to consider whether the line of delimitation would cease at the point at which it met the 1971 Italo/Tunisian delimitation line, and would affect no other foreseeable delimitations (e.g., between Libya and Malta and/or Italy³).

523. The practical method suggested by Libya is also justified by several other considerations that are relevant to a delimitation of the continental shelf in this case.

524. *First*, such a method would conform to the first concrete and uncontested indication of sovereignty by one of the Parties, i.e., the limits of the Libyan Petroleum Zone No. 1 of 1955⁴. This was defined as being bounded by a line "to the border of Tunisia, thence in a general northerly direction along the international boundary⁵".

525. *Second*, this northerly projection is in accord with the related history of the maritime jurisdiction exercised by the Parties in this general area, including specifically the location of vessel arrests and—to the extent relevant (if at all)—the fishing practices of both States as well as of third

¹ *I.C.J. Reports 1969*, p. 54, para. 101(D)(2), and see also in the opinion: "Another factor to be taken into consideration in the delimitation of areas of continental shelf as between adjacent States is the unity of any deposits. The natural resources of the subsoil of the sea in those parts which consist of continental shelf are the very object of the legal régime established subsequent to the Truman Proclamation." *Ibid.*, p. 51, para. 7.

² See *Tunisian Memorial*, Map No. 6, portraying the Sillon sédimentaire du Golfe de Gabès and Sillons sédimentaires de la Tunisie du Nord.

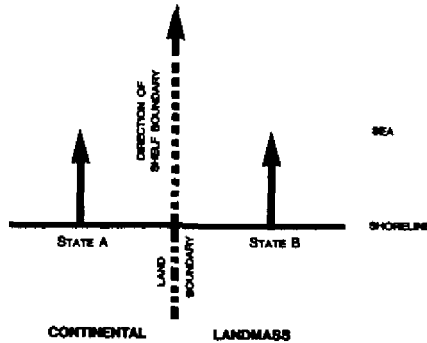
³ The Court's third factor, as expressed in para. 101(D)(3) of the 1969 *dispositif* (*ibid.*, p. 54), also embraced the criterion of proportionality: this is examined in Section 4 above.

⁴ To the extent that the 1971 Italo/Tunisian delimitation fixed a line of delimitation lying to the east of this point of intersection, it would mean that this was *ultra vires*, i.e., a delimitation in areas of Libyan shelf to which Libya was not a party. This 1971 agreement is *res inter alios acta* and not binding on Libya. Moreover, the practice of States in revising delimitation agreements to take account of an authoritative determination of the law is well established. After the 1969 Judgment and in order to adjust to the 1971 Agreements between Germany, The Netherlands and Denmark consequential on that Judgment, the United Kingdom had to adjust its 1965 Agreements with The Netherlands and Denmark to accommodate the new 1971 boundaries (see *Limits in the Seas*, No. 10 Revised). There is no reason why the 1971 Italo/Tunisian delimitation cannot similarly be modified.

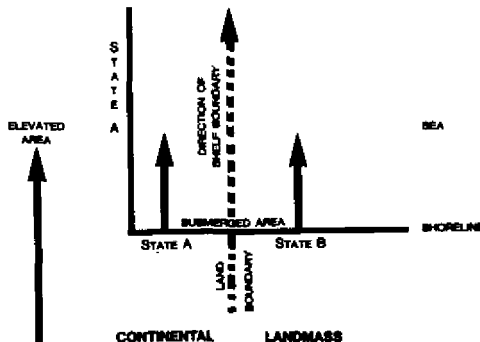
⁵ See *Libyan Memorial*, para. 34 and *Annex I-9D* and para. 29 above.

party States¹. Although not legally relevant to questions of shelf delimitation, it should be noted that the areas within which the actual, established fishing rights of Tunisia have been exercised would be on the Tunisian side of any line consistent with these two segments of general direction.

526. *Third*, Tunisia is not "deprived" of its shelf in the relevant area. The method proposed gives full weight to the Tunisian coast west of Ras Ajdir, for it too would have its projection to the north. The matter can best be illustrated diagrammatically, as follows. If it is supposed there is a continental landmass with the shelf to the north and a straight coastline running east/west, then the direction of the shelf boundary is clear: it would run due north, as in the Diagram below:



However, if, as in the present case, the coast of "State A" turns through nearly 90°, then (since the shelf is a projection of the continental landmass rather than of the coast) the boundary would logically still remain the same. The reason for this is that, despite the change of direction of the coast of one of the Parties, the essential relationship between the North African landmass and the shelf area, as its prolongation to the north, remains the same. In effect, the State (Tunisia) whose coastline has changed direction has the same prolongation to the north, but it is elevated above the sea rather than submerged. The following Diagram will illustrate the position:



¹ See generally Part I, Chap. III above.

527. *Fourth*, this northerly projection would result in a delimitation which does not place the oil fields drilled under concessions granted by one Party in the shelf area of the other¹. As mentioned in paragraph 521 above, the proposed practical method would leave the important Tunisian producing oil field (Ashtart) on the Tunisian side of the delimitation.

528. *Fifth*, as again mentioned in paragraph 521, the proposed practical method would (consistent with the "unity of deposits" injunction in paragraph 97 of the *North Sea Continental Shelf Cases*) leave the two sedimentary basins on the Tunisian side².

529. *Sixth*, as more fully discussed in paragraph 497 above, a northerly projection from the edge of the territorial sea is logical and consistent with the last directional trend of the land boundary.

530. *Seventh*, a northerly projection respects the national security of each State to the extent that this issue is raised by the particular circumstances of the area. For example, it is important to note that definite issues of national security are presented by any line other than a northward line from Ras Ajdir. To cut across the face of the Libyan coast, as is so blatantly done by the Tunisian lines produced by the four Tunisian "methods" illustrated in Figure 9.14 of the Tunisian Memorial³, is inconsistent with national sovereignty and the fundamental principle that sovereign States must be able to control vital elements of their own security and military interests without encroachment or potential interference by others. The "sheaf of lines" there depicted cuts across the Libyan continental shelf due north of Tripoli at a distance of approximately 39 nautical miles from the outer limits of the territorial sea, or 51 nautical miles from the Tripoli waterfront. It is notable in this context that Tunis does not abut on this area of shelf, although Tripoli does; and that no major Tunisian city is situated similarly to the city of Tripoli on the Pelagian Sea littoral.

531. In conclusion, therefore: the factors enumerated above, when considered in light of the relevant circumstances which characterise the area, confirm the appropriateness of the practical method proposed by Libya, its conformity with the principles and rules governing the institution of the continental shelf, and its consonance with equitable principles as well as the new accepted trends in the Third Conference on the Law of the Sea.

¹ See paras. 39 through 41 above; and see also *Maps 6 and 7* facing pp. 20 and 26 respectively above.

² See fn. 2 to para. 521, on p. 209 above.

³ Reproduced on p. 187 above.

SUBMISSIONS

and Introductory Note

Introductory Note

Libya confirms and maintains the Submissions made in its Memorial and, in the light of the Tunisian Memorial, adds a number of Submissions. Since it has been found convenient to rearrange and consolidate some of the original Submissions and to reproduce all Submissions in a logical sequence, in the interest of clarity and simplicity and for the convenience of the Court, there follows a brief narrative description of the changes made in the order of the Submissions as given in the Libyan Memorial. No changes of substance have been made in those Submissions.

Counter-Memorial Submissions 2, 3, 4, 7 and 12 are new.

The twelve Submissions in the Memorial have been reordered as follows: Memorial Submissions 3 and 9 have been consolidated into Counter-Memorial Submission 9, and Memorial Submissions 6 and 8 have been combined into Counter-Memorial Submission 13. Of the other eight Submissions in the Memorial: Submission 1 remains Submission 1; Submission 4 has become 5; Submission 5 has become 6; Submission 2 has become 8; Submission 7 has become 10; Submission 12 has become 11; Submission 10 has become 14; and Submission 11 has become 15.

SUBMISSIONS

In view of the facts set forth in Part I of the Libyan Memorial, the statement of the law contained in Part II, and the arguments applying the law to the facts as stated in Part III of the Libyan Memorial; and

In view of the observations concerning the facts as stated in the Tunisian Memorial and statement of law as therein contained, and the additional facts and the statement of law contained in this Counter-Memorial;

Considering that the Special Agreement between the Parties requests the Court to render its judgment as to what principles and rules of international law may be applied for the delimitation of the area of the continental shelf appertaining to the Socialist People's Libyan Arab Jamahiriya and to the area of the continental shelf appertaining to the Republic of Tunisia, and requests the Court to take its decision according to equitable principles, and the relevant circumstances which characterise the area, as well as the new accepted trends in the Third Conference on the Law of the Sea;

May it please the Court, rejecting all contrary claims and Submissions set forth in the Tunisian Memorial,

To adjudge and declare as follows:

1. The concept of the continental shelf as the natural prolongation of the land territory into and under the sea is fundamental to the juridical concept of the continental shelf, and a State is entitled *ipso facto* and *ab initio* to the continental shelf which is the natural prolongation of its land territory into and under the sea.
2. The natural prolongation of the land territory of a State into and under the sea which establishes its *ipso jure* title to the appurtenant continental shelf is determined by the whole physical structure of the landmass as indicated primarily by geology.
3. Submarine ridges on the sea-bed, even if and where ascertained, which do not disrupt the essential unity of the continental shelf provide no scientific basis for a legal principle of delimitation.
4. The "fishing rights" claimed by Tunisia as "historic rights", even if and where ascertained, are in any event irrelevant to shelf delimitation in the present case.
5. The direction of natural prolongation is determined by the general geological and geographical relationship of the continental shelf to the continental landmass, and not by the incidental or accidental direction of any particular part of the coast.
6. In the present case the continental shelf off the coast of North Africa is a prolongation to the north of the continental landmass, and therefore the appropriate method of delimitation of the areas of

continental shelf appertaining to each Party in this specific situation is to reflect the direction of this prolongation northward of the terminal point of the land boundary.

7. The practical method for the application of the principles and rules of international law in this specific situation is therefore to continue the reflection of the direction of the natural northward prolongation from the outer limit of the territorial sea, at least as far as the parallel where there occurs a significant change in the general direction of the Tunisian coast which might reasonably be required to be taken into account in order to achieve a delimitation respecting the relevant circumstances in accordance with equitable principles, without affecting the rights of States not Parties to these proceedings.

8. Any delimitation should leave as much as possible to each Party all those parts of the continental shelf that constitute its natural prolongation.

9. A delimitation which gives effect to the principle of natural prolongation is one which respects the inherent *ipso jure* rights of each State, and the assertion of such rights is therefore in accordance with equitable principles. A principle or method of delimitation which disregards the *ipso jure* title of a coastal State to the continental shelf constituting the natural prolongation of its land territory is, *ipso facto*, illegal and necessarily inequitable.

10. Whether the application of a particular method of delimitation is in accordance with equitable principles is to be tested by its results.

11. For the purpose of achieving an equitable delimitation, the whole of the sea-bed and subsoil beyond the low-water mark along the coast of each Party is to be taken into account.

12. While the concept of proportionality is not applicable to the geological and juridical appurtenance of continental shelf which confers *ipso jure* entitlement on a State, it may properly be used as a criterion to evaluate the effect of geographical features on a delimitation in marginal areas.

13. Application of the equidistance method is not obligatory on the Parties either by treaty or as a rule of customary international law. The equidistance method is in itself neither a "rule" nor a "principle" and is not necessarily "equitable" since its application in particular circumstances may lead to inequitable results.

14. In the present case, given the particular geographical configuration, the equidistance method would result in a delimitation of the continental shelf which would be inequitable, inappropriate, and not in conformity with international law.

15. The baselines promulgated by Tunisia in 1973 are not opposable to Libya for the purposes of the delimitation and the results of giving effect to them would in any event be inappropriate and inequitable.
