PERMANENT COURT OF ARBITRATION

ARBITRATION UNDER ANNEX VII OF THE UNITED NATIONS CONVENTION ON THE LAW OF THE SEA

In the Matter of Arbitration Between:	:	
REPUBLIC OF GUYANA,	:	
Claimant,	:	Case No. 2004-4
and	:	PCA Reference GU-SU
REPUBLIC OF SURINAME,	:	
Respondent.	:	
	:	Volume 6

Thursday, December 14, 2006

Organization of American States
17th Street and Constitution Avenue, N.W.
Guerrero Conference Room, Second Floor
Washington, D.C.

The hearing in the above-entitled matter convened at 9:32 a.m. before:

H.E. JUDGE L. DOLLIVER M. NELSON, President

PROF. THOMAS M. FRANCK, Arbitrator

DR. KAMAL HOSSAIN, Arbitrator

PROF. IVAN SHEARER, Arbitrator

PROF. HANS SMIT, Arbitrator

Permanent Court of Arbitration:

MR. BROOKS W. DALY, Registrar
MR. DANE RATLIFF

Tribunal Hydrographer:

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C O N T E N T S

P R O C E E D I N G S

PRESIDENT NELSON: Good morning. I can do nothing else but give the floor to Professor Bernie Oxman.

CONTINUED OPENING STATEMENT BY COUNSEL FOR RESPONDENT

PROFESSOR OXMAN: Thank you, Mr. President.

Mr. President, distinguished members of this Tribunal, it is a singular honor to have the opportunity to appear before you and to be asked to do so on behalf of the Republic of Suriname.

Mr. President, before proceeding, I would like to ask your indulgence on two points. First, I seem overnight to have acquired a frog in my throat. This is probably from too much practicing before the mirror. In any event, I do hope you will excuse me.

And the second is that I really will do my very best to minimize repetition of points made by my colleagues yesterday, but I fear that some reference to the same points will be unavoidable if the train of my thought is to be followed.

Mr. President, Guyana has requested that this Tribunal establish a single maritime boundary to the 200-mile limit. Suriname agrees.

The single maritime boundary advocated by each of the parties proceeds along a single azimuth from the low-water line to the 200-mile limit. Guyana has, nevertheless, argued that

09:33:26 this should be a two-step process, and Guyana has structured its presentations in these hearings in that way. Accordingly, with a view to facilitating the Tribunal's task at this hearing, I will plan to do the same.

And thus, I propose first to concentrate on the delimitation of the 12-mile territorial sea and related questions concerning the contiguous zone, and following that I would propose, with the Tribunal's permission, to address certain aspects of the law applicable to the establishment of a single maritime boundary with principal reference to the Exclusive Economic Zone and the continental shelf. I should emphasize, however, that it remains Suriname's position that the entire maritime boundary both within and beyond the territorial sea should follow a single azimuth; namely, 10 degrees east of north.

Let me now turn to the positions of the parties with respect to the territorial sea.

Suriname believes that Guyana's territorial sea may not extend east of the 10-degree line. Guyana has put forward a different line. It shares three characteristics with the 10-degree line: It's comprised of a single segment following a fixed azimuth, the azimuth is oriented with reference to the 1936 Point, and the line would divide the entire 12-mile territorial sea as well as the waters beyond.

There are two basic differences between the lines

09:35:17 advocated by the parties. One concerns the direction of the line; the second concerns its starting point, about which we heard a great deal yesterday.

The direction of the two lines is markedly different. The 10-degree direction of Suriname's line in the territorial sea is rooted in the joint work of the colonial powers regarding the identification and establishment of a territorial sea boundary in the 1930s; it is rooted in the logic and continuing relevance of their analysis of the direction of the boundary in light of the Netherlands' and now Suriname's sovereignty extending to both banks of the Corantijn River, and it is rooted in the consistent and concerted behavior of the colonial powers in their dealings with each other over many years regarding the 10-degree boundary in the territorial sea.

By contrast, the direction of Guyana's line was unilaterally selected by Guyana to mark its claims. Suriname wasn't consulted.

At the start of his remarks on the first day of these hearings, my distinguished colleague Professor Sands stated that this case was brought to resolve an outstanding dispute on the maritime boundary and nothing else.

Mr. President, it is important to consider precisely what this means. The function of a maritime boundary is to delimit sovereignty and jurisdiction at sea.

Rivers are not part of the sea. The starting point of

09:37:12 the territorial sea boundary between adjacent states is the point where the frontier separating their land territory, including their rivers, meets the sea. The land frontier can separate two parts of dry land. The land frontier can separate two parts of a river, and we will see examples of this a bit later in my presentation; or, in this case, the land frontier can separate a river on one side and dry land, as it were for want of a better term, on the other side, although I realize not all of Guyana's land is necessarily dry all the time.

Accordingly in this case, the starting point of the territorial sea boundary is the point where the frontier between Suriname's river and Guyana's dry land ends at the low-water line of the sea. Guyana has not established where that point is. The 1936 Point cannot mark the start of the territorial sea boundary because the 1936 Point is located landward of the legally relevant low-water line. As specified in Article 5 of the Law of the Sea Convention, the legally relevant low-water line is the one, and I quote, "marked on large-scale charts officially recognized by the coastal state."

For purposes of identifying the low-water line in these proceedings, I note that Guyana has relied on U.S. charts and that Suriname has relied on the largest scale Dutch and British charts.

It is indisputable that the 1936 Point was selected so as to locate the position of the 10-degree line as the

09:39:18 territorial sea boundary. That was the very reason for changing the direction of the azimuth from 28 degrees to 10 degrees. That was the very reason for building what my distinguished colleague Professor Akhavan accurately called a navigation beacon. It is in that context and only in that context that the point on the low-water line marking the beginning of the 10-degree territorial sea boundary was also the point where the frontier between Suriname's river and Guyana's dry land would terminate.

Guyana's attempt in these proceedings to substitute vague notions of proximity to select first one and then another arbitrary point on the low-water line as the terminus of the land frontier is unprecedented and has no basis in law. This, then, is the dilemma. Guyana's understandable desire to extend its territorial sea east of the 10-degree line has unhinged this case. Its ambitions compelled Guyana to seek to divorce the 10-degree line from the terminus of the land frontier. That provokes a dispute between the parties regarding the extent of the land frontier and its terminus at the sea. That dispute, in turn, creates a fundamental jurisdictional obstacle to proceeding with this case, not to mention a basic substantive problem in deciding precisely where the land frontier reaches the sea.

In this connection, I think it may be useful to recall the question regarding the 1799 agreement that was posed by

09:41:15 Professor Franck earlier in these proceedings. I refer you here to documents at Tab 2 of the core documents.

Pursuant to that agreement and international law, Suriname would be well-founded in the view that the point at which the river bank--and the river bank is the international frontier--the point at which the river bank ends at the seacoast is well to the north and to the west of the river bank's intersection with the 10-degree line measured from the 1936 Point.

With the Tribunal's indulgence I would like to use two illustrations used by my colleagues yesterday. These illustrations will show quite conservative indications of possible terminal points of the international frontier that were illustrated by the Dutch and the British Governments in 1959. One is illustrated by the famous Dutch Chart, 222, provided by the Netherlands to the British Government in 1959 in the context of their negotiations on a continental shelf boundary. The chart is set forth at Tab 3 in the books.

You will see that the Dutch illustrated the effect of a closing line across the river. Taking a very conservative position--they were, after all, Dutch--the Dutch at the time limited the length of the closing line to 10 miles. Even that conservative length reached the opposite side of the river north and west of the 1936 Point.

Another conservative terminus is illustrated by the

official map, British map, of British Guiana published in 1959. This map is at Tab 4 in the books. In its 1959 chart, the Netherlands drew only a 10-mile line. The terminus of the land frontier indicated in the 1959 British map, which would be right there, is about 14 miles in length, approximately 14 miles in length, from the headland on the eastern side. This is illustrated on the overlay on the British map shown at Tab 5. That's about 14 miles.

In fact, the limit under this approach to the closing line is 24 miles under both the 1958 Convention and the Law of the Sea Convention; and, in fact, if we look at state practice, Suriname could reasonably claim an even longer closing line reaching the western shore at a point even further north and west of the 1936 Point. I'm not very good at PowerPoint. It's somewhere up beyond there.

Since the land frontier is the line separating Suriname's river from Guyana's land, and since the question of the precise location of the terminus of the land frontier is not otherwise resolved, I would suggest that the most plausible and, frankly it seems to me, the only plausible basis for proceeding with the delimitation in this case would be rooted in a finding that the Netherlands and the United Kingdom established the territorial sea boundary on the 10-degree line that intersects the 1936 Point. And in this connection, I propose to elaborate on three interrelated questions.

09:45:13 First, why Suriname believes that the 10-degree line is and should be the territorial sea boundary.

Second, why Suriname believes that the 10-degree boundary does and should apply to the entire 12-mile territorial sea.

And third, why Suriname believes that the 10-degree territorial sea boundary does and should extend to the limit of Guyana's territorial sea, and accordingly, that Guyana's territorial sea may not extend east of the 10-degree line.

It's evident that from a legal point of view there is and necessarily would be a certain symmetry between Guyana's contentions that the terminus of the international frontier between Suriname's river and Guyana's dry land is established in law at the low-water mark of the 1936 Point, and Suriname's contention that the 10-degree territorial sea boundary identified by the 1936 Point is established in law. Neither Guyana nor Suriname can assert that the 1939 draft Treaty or any subsequent substantive draft Treaty on the matter is binding on the parties. Both rely on the behavior of the parties and the legal effect of that behavior.

For its part, Suriname relies on the consistent and concerted behavior of the Netherlands and the United Kingdom in their dealings with each other regarding the territorial sea boundary. It's clear that beginning in the 1930s the colonial powers together selected the 10-degree line, together applied

09:47:07 it in practice by notifying the seafaring community of the territorial sea boundary and making it possible for mariners and fishing boats to identify its location at sea, and over many years treated the 10-degree line as the territorial sea boundary in their dealings with each other.

The establishment of a territorial sea boundary at the 10-degree line is the legal consequence of that consistent and concerted behavior. Once established, that territorial sea boundary could not be altered by diplomatic proposals for new treaties that were never adopted or by unilateral action. Guyana, in our view, has not sustained and cannot sustain the burden of proving that the territorial sea boundary, once established, was lawfully changed.

My colleague, Dr. Oude Elferink, has reviewed the history in some detail. Let's consider what that history tells us about the 10-degree line. Several important points emerge.

The most important is the 10-degree line is not a unilateral line. It was jointly identified as the territorial sea boundary by the Mixed Commission established by the Netherlands and the United Kingdom. The report of the Mixed Commission states unequivocally that the Commission decided to indicate the direction of the boundary line in the territorial waters on a true bearing of 10 degrees east, and the purpose was not trivial. The Commission reported that it was essential--essential--that the continuation of the boundary in

09:49:05 the territorial waters should leave the navigation channel in the same territory throughout its length. And the navigation channel is illustrated here. On the left is the 1927 map--the 1927 chart--as it existed. All we have done here is highlighted it to show exactly where the channel is--it's in fact marked there, but it's not very bright--and to show that the 10-degree line is, in fact, parallel to the channel and parallel to the approach line that was on that map. It was on the original map, which was also at a 10-degree angle, so that we have exactly the same angles here.

The colonial powers thereafter treated the 10-degree line as the territorial sea boundary. With the Tribunal's indulgence, I would like to again read what Guyana states on page 20, paragraph 3.18 of its Memorial. This is at Tab 7. And I quote from Guyana's Memorial: "By the time the draft Treaty was delivered to the Netherlands in 1939, both states were treating Point 61 as the land boundary terminus and the north 10 east line as the boundary between British Guiana and Suriname in the territorial sea."

That paragraph of Guyana's Memorial proceeds to quote directly from the Notice to Mariners issued in 1938. That public notice stated, as quoted in Guyana's Memorial, and I quote, "a pyramid-shaped wooden beacon 10 meters in height has been placed on the left bank of the Corantijn." I omit some language here, and quote: "The line drawn 010 degrees from

09:51:19 this beacon gives the limits between the Netherlands and British territorial waters in the mouth of the Corantijn." This was the public notice issued by "Notice to Mariners" that is quoted in Guyana's Memorial.

Thus, the consistent and concerted implementation at sea of the 10-degree boundary began in 1938 with the construction of the 10-meter-high beacon that was located on the 10-degree azimuth identified by markers "A" and "B," marker "A" being the 1936 Point. The sole purpose of building the beacon there on the territory of British Guiana and by the British authorities in Georgetown, the sole purpose of building it there was to enable fishermen and mariners to calculate the position of the 10-degree territorial waters boundary. They were informed of the beacon and the territorial waters boundary by "Notice to Mariners." "Notices to Mariners" are the recognized means for official communication with those who use the sea. The public was thus informed of the establishment of a territorial waters boundary and afforded the practical means for determining its location.

In this connection, on December 9 my distinguished colleague Professor Sands informed this Tribunal that Guyana accepts that for some period of time the 10-degree line was respected by the United Kingdom. The remarks are at Tab 9. Professor Sands indicated that doubts began to emerge only in the late 1950s. Some period of time, indeed. According to

09:53:26 Guyana's own account, for some period of time between two decades and a quarter century, both parties respected the 10-degree line as the territorial sea boundary in their mutual relations.

In fact, this common position continued into the 1960s. The 1961 British draft Treaty continued to use the 10-degree line for the territorial sea. The 10-degree territorial sea boundary extending to 6 miles is referred to in 1966 by Admiral G.S. Ritchie, Hydrographer of the British Royal Navy in his brief for the British Captain who was participating in a joint survey of the area by the Netherlands and the United Kingdom. And it would seem to me that instructions to one's forces that are participating in a survey of a boundary area are rather interesting evidence of what the state believes the legal situation to be. This letter can be found at Tab 10.

This common position regarding the 10-degree boundary in the territorial sea, therefore, survived the realization of the parties in the 1950s that the approach of the 1939 draft Treaty to other matters was unacceptable. In other words, that there was a separation between the two. It's in this context that we should consider the communication of 8 May, 1953, from the Netherlands to the United Nations, and I beg the Tribunal's indulgence, this is probably the fourth time that the matter has been raised. The communication is to be found in the extract from the 1953 Yearbook of the International Law

09:55:21 Commission that appears at Tab 11.

The communication from the Netherlands was in response to a request from the International Law Commission regarding the delimitation of the territorial sea. The Netherlands letter specifically quoted the reference in the 1939 draft Treaty to the territorial waters boundary as the 10-degree line, and it cited and quoted only that reference.

There is no doubt that in 1953, quite apart from this letter, not only the Netherlands, but the United Kingdom had long been treating the 10-degree line as the boundary in the territorial sea. There was no reason to think otherwise. The territorial sea boundary was, in fact, settled by 1953. The Netherlands said so. The United Nations published that statement in a report likely to be closely scrutinized by legal experts in many governments.

Mr. President, neither I nor, I presume, my distinguished colleagues from Guyana are aware of any response from the United Kingdom to this report. If this is so, if this is so, Mr. President, then the real significance of the publication of the communication from the Netherlands is that the United Kingdom, one of the most active and interested contributors to the work of the International Law Commission on the Law of the Sea, the United Kingdom said nothing to contradict the statement in the International Law Commission report that the territorial sea boundary between British Guiana

09:57:18 and Suriname was settled at the 10-degree line. And despite its intimate knowledge that the question of the maximum breadth of the territorial sea was not settled and that an increasing number of states, including the growing ranks of newly independent states, were advocating a six-mile or 12-mile limit, the United Kingdom also said nothing about the fact that the text of the Netherlands communication, published and circulated by the United Nations, referred to territorial waters without any limitation as to its breadth.

While beginning in 1965, the United Kingdom and Guyana made attempts to persuade the Netherlands and Suriname to agree to another line, their efforts were unsuccessful. It is against this background that we now turn, and accept Guyana's invitation to turn, to Article 15 of the Law of the Sea Convention regarding the delimitation of the territorial sea.

Article 15 of the Law of the Sea Convention, as Guyana has pointed out, was substantially drawn from Article 12 of the 1958 Convention on the Territorial Sea and the Contiguous Zone with little--and I have to emphasize little--controversy. The main difference is that while the 1958 text states that the reference to equidistance "shall not apply where there are special circumstances," this text was changed to "does not apply" in the 1976 revised single negotiating text, and remained that way. Mr. President, it is simply not clear whether misgivings about the 1958 text in Caracas, Ankara, or

09:59:30 elsewhere played a role in this very subtle drafting change.

Article 15 of the Law of the Sea Convention provides for the application of equidistance only under certain circumstances. In particular, under Article 15, equidistance does not apply where there is agreement between the parties to the contrary or where it is necessary by reason of historic title or other special circumstances to delimit the territorial seas of the two States in a way which is at variance therewith.

There are, in our view, accordingly, alternative legal bases under Article 15 to support a conclusion that the 10-degree line constitutes the territorial sea boundary.

The first is that the consistent and concerted behavior of the Netherlands and the United Kingdom in their dealings with each other over many years established that boundary, whether by virtue of tacit or de facto agreement or mutual recognition or acquiescence or estoppel.

The second basis is that as recognized by the colonial powers themselves in their negotiations in 1936, and their consistent and concerted behavior in their dealings with each other over many years, the sovereignty of the Netherlands and now Suriname over the entire Corantijn River at its mouth constitutes a special circumstance requiring a boundary that precludes the extension of sovereignty from Guyana over the northerly approaches to the Corantijn River east of the 10-degree line.

10:01:27 With respect to the first of these alternatives, it is noteworthy that Guyana has repeatedly maintained in these proceedings that there was agreement between the colonial powers and their successors on the 1936 Point. If there was agreement on the 1936 Point, then there was necessarily agreement on the 10-degree boundary in the territorial sea. The fundamental rule of interpretation articulated by Article 31 on the Vienna Convention on the Law of Treaties provides that terms are to be interpreted in context and in light of the object and purpose of the agreement. The context in which the 1936 Point was identified and marked includes agreement on the concurrent identification and marking of a second point nearby to establish the position of the 10-degree line running through the two points--this is basic geometry--as well as the construction of a beacon on that 10-degree line whose sole function, sole function, is to be visible at sea. There can be no doubt that establishing the location of the 10-degree boundary in the territorial sea was the object and purpose of identifying the 1936 Point itself.

Following the designation of the 10-degree line as the territorial sea boundary in the late 1930s, the Netherlands and Suriname consistently respected the 10-degree territorial sea boundary in their relations with the United Kingdom and Guyana. So did the United Kingdom in its relations with them for decades thereafter.

10:03:28 In reliance on that consistent and concerted behavior, neither the Netherlands nor Suriname asserted a claim to sovereignty over the Corantijn River beyond the 10-degree line, for example, to the point where they could have asserted sovereignty illustrated on the British map itself. The Netherlands did not make that claim. Suriname did not make that claim. They stopped their claims at the 10-degree line in reliance on the consistent and concerted behavior of the United Kingdom.

That this reliance was detrimental is amply demonstrated by Guyana's pleadings in this very case. Those pleadings ignore the justified expectations of the Netherlands and Suriname that the United Kingdom and Guyana would respect the two inseparable juridical effects of the 10-degree line identified by the 1936 Point, and those two inseparable juridical effects are first that Guyana's sovereignty at sea does not extend east of the line; and second, that Suriname's sovereignty over the river, as well as the sea, does not extend west of the line.

Guyana's attempts to argue changed circumstances with respect to the 10-degree line are rooted neither in fact nor in law. It is clear that the Corantijn River flows in a northerly direction, that Suriname's sovereignty over the mouth of the river extends to both banks of the river, and that the reason for precluding the extension of the British territorial sea

10:05:31 east of the 10-degree line was to protect the interests of the Netherlands in avoiding British control of the northerly approaches to the river east of the 10-degree line. The western channel was the object of discussion in the 1930s, and it continues to exist, and as Suriname demonstrated, continues to be used. The statement of Mr. Fitz Jim, which is at Tab 13, expressly states, and I quote, "Seagoing vessels were mainly using the eastern channel of the Corantijn, but other vessels, including vessels from Suriname and Guyana, were often also using the western channel. These other vessels included fishing trawlers and small freighters with a draft of three to four meters of water. Seagoing vessels were using the eastern channel not so much because of its better natural state, its breadth and depth, but because of its ease of navigation due to its proximity to the Nickerie River."

Clearly, the distinction that Mr. Fitz Jim is drawing in referring to seagoing vessels is a distinction between larger and smaller vessels. Obviously, the vessels using the western channel are going out to sea. That's where the channel leads.

And, of course, it is the smaller vessels--including the small fishing boats, which were indisputably using the western channel and are indisputably still using the western channel--it is the smaller vessels that would have the greatest need to know the location of the boundary between Guyana's and

10:07:18 Suriname's territorial sea. Major maritime traffic out at sea running across would have no particular need to know the precise location of that boundary ordinarily.

The Commission report of 1936, which, again, is at core documents Tab 3, states that the 10-degree boundary line in territorial waters is parallel to the mid-channel line. That is still true today. In your books at Tab 14 are two modern maps, one Dutch and one British, showing the continued existence of the western channel. For purposes of comparison, each of these modern maps is adjacent to a copy of a 1927 Dutch map that was used by the members of the Mixed Commission in the 1930s. For reasons of simplicity, the slide simply shows the British map or chart on the right and the Dutch on the left.

Moreover, even if these facts were otherwise, as a matter of law, changed circumstances may not be invoked with respect to international boundaries. This rule is expressly recognized by the Vienna Convention on the Law of Treaties and was expressly stated to be applicable to maritime boundaries by the International Court of Justice in the Aegean Sea case in paragraph 85 of that case.

With respect to the second of the alternatives under Article 15, namely special circumstances, I think it's useful to recall what Commander Kennedy said.

First, Commander Kennedy of the British Hydrographic Office expressly identified the presence of a navigable channel

10:09:29 as a special circumstance of the 1958 Conference on the Law of the Sea.

Second, writing in 1959, and this is at Tab 15, Commander Kennedy indicated with respect to the boundary involved in this case that, and I quote, "There were strong reasons in 1936 why the line through the territorial sea should have run in a 010-degree direction," and he went on to indicate that, "this line could be justified by special circumstances," under the 1958 Territorial Sea Convention.

In this regard, Commander Kennedy observed, and I quote, "As the Dutch will in any case possess all the waters of the river, it would seem reasonable that they should also own the navigable channels in the approach. They are--there are banks dividing the channels in the approach. At present, the channel on the Suriname side is that more generally used, but in time this may silt, and that on the British Guyana's side deepen."

It's also important to bear in mind that Suriname's future development of bauxite and other natural resources in the western parts of the country's interior may entail increased traffic on the Corantijn River and with it increased need for Suriname to protect and to regulate the maritime approaches to the river. As Commander Kennedy expressly recognized, the seabed is shallow and shifting in this area, and the position or utility of channels can easily change.

10:11:23 For Suriname, control over all of the northerly approaches to the Corantijn River, including the approaches to its western channel, is not an abstraction. That control is integral to its hopes for development of the country in the interests of its people.

Article 15 of the Law of the Sea Convention, which addresses delimitation of the territorial sea, constitutes part of the regime of the territorial sea set forth in Part II of the Law of the Sea Convention. The meaning of Article 15, including its reference to special circumstances, is to be understood in the context of the regime in which it appears. Article 2 of the Law of the Sea Convention provides that the sovereignty of a coastal state extends beyond its land territory to an adjacent belt of sea described as the territorial sea. Accordingly, all activities in the territorial sea are subject to control and regulation by the coastal state, except as expressly provided otherwise.

While navigation is in principle subject to coastal state control by virtue of its sovereignty over the territorial sea, there is an exception according a right of innocent passage to foreign ships. This exception, however, is limited. Activities that are not innocent passage--for example, a deployment of buoys and aids to navigation--activities that are not innocent passage are unaffected by the exception and remain subject to the sovereign control of the coastal state.

10:13:19 Innocent passage is strictly defined by the Convention, and the Convention gives the coastal state the right to prevent passage that is not innocent.

Even with respect to passage that is innocent, the coastal state is accorded very extensive powers, notably the right to prevent any breach of conditions of entry into its ports and internal waters, including its rivers; the right to adopt and enforce unilateral regulations regarding navigation safety and pollution from ships; the right to suspend innocent passage in specified areas.

Closely linked to the regime of the territorial sea is the regime of the contiguous zone. The two regimes were linked in one of the four 1958 Conventions whose very name is the Convention of the Territorial Sea and the Contiguous Zone. The two regimes are similarly linked in Part II of the Law of the Sea Convention, which is entitled, "Territorial Sea and Contiguous Zone."

Article 33 of the Law of the Sea Convention substantially repeats the provisions on the contiguous zone contained in the 1958 Convention. At Tab 16 there is an illustration of the 1958 text and the 1982 text side by side. That shows the following two notable changes.

First, the maximum seaward limit of the contiguous zone is extended from 12 miles to 24 miles. There you notice 12 miles, and there 24.

10:15:12 And second, and particularly significant for the issues in this case, the Law of the Sea Convention does not repeat the provision of paragraph three of the 1958 Convention providing for a median line boundary between contiguous zones in the absence of agreement. This is missing, and it was deliberately omitted.

Commander Kennedy, of the British Hydrographic Office, expressly recognized the importance of the contiguous zone. I refer here to his letter of January 15, 1959, to Mr. Scarlett of the Colonial Office, which is at Tab 15. In that letter, Commander Kennedy proposes adding a reference to the contiguous zone after the reference to the territorial sea in the British draft Treaty that was under consideration. Mr. Scarlett's response of February 11, 1959 is contained at--

PROFESSOR SANDS: Which tab is that?

PROFESSOR OXMAN: Tab 15. I hope that's right. It's what's written here. Mr. Scarlett's response, to which I'm now adverting, is at Tab 17.

Mr. Scarlett concurs in the proposal to add a reference to the contiguous zone, and adds the following observation: "Especially, as we are not in the Treaty"--that is, the draft Treaty that will be presented to the Netherlands--"we are not in the Treaty following the median line in all respects and it would be well to make it clear that what is proposed is an agreement as contemplated in Article

10:16:59 24(3) of the Convention, rather than the pure median line." Article 24, of course, said failing agreement between them to the contrary, there would be a median line, and it is to that Mr. Scarlett is referring.

In other words, even in the contiguous zone beyond the three-mile territorial sea claimed at the time, according to Mr. Scarlett, the boundary would not be a median line.

Control over navigation is unquestionably a major consequence of the limitation of waters subject to the sovereignty of a coastal state. This fact is particularly pertinent to the diplomatic history of the present dispute.

Having agreed that Dutch sovereignty over the mouth of the Corantijn River extends to both banks of the river, it was logical for the parties to conclude that British sovereignty at sea should not be permitted to intrude upon the approaches to the Corantijn River and to agree that the Netherlands should control those approaches. That is precisely what the representatives of the Netherlands and the United Kingdom concluded in 1936. They decided that British sovereignty should terminate at the 10-degree line.

The rationality of this conclusion is well illustrated by the legal consequences of the alternative under the Law of the Sea Convention. Those legal consequences are of two types: First, legal consequences that confer control on the United Kingdom and now Guyana; second, those legal consequences that

10:18:46 deny the Netherlands and now Suriname the control they would otherwise enjoy in their territorial sea and contiguous zone.

Taking them in order, if Guyana were permitted to extend its territorial sea east of the 10-degree line, then in the area so subsumed east of the 10-degree line Guyana would have the right to unilaterally regulate passage to and from the Corantijn River. Guyana would have the right to unilaterally suspend innocent passage. Guyana would have the right to unilaterally authorize fixed uses, including the construction and operation of installations and the establishment of safety zones around them that might interfere with navigation to and from the river.

As to the second consequence, if Guyana were permitted to extend its territorial sea east of the 10-degree line, then in the areas subsumed Suriname would be denied the right to regulate navigation in the approaches to the river. Suriname would be denied the right to deploy buoys and other aids to navigation. Suriname would be denied the right to control threats to navigation. Suriname's enforcement vessels and aircraft would be denied the right to conduct patrol and enforcement activities. Suriname would be denied the right to prevent breaches of the conditions of entry into the river; and this is a very important enforcement tool necessary to ensure effective control over the use of the river itself before the offending vessel enters the river. And finally, Suriname would

10:20:39 be denied the right to establish a contiguous zone to prevent and punish smuggling and other illegal activity in the river.

The last of these effects is not necessarily limited to Guyana's territorial sea. If the single maritime boundary beyond Guyana's territorial sea were to extend east of the 10-degree line and if that boundary were understood to apply to the contiguous zone, then Suriname's rights to control smuggling, illegal immigration, and similar criminal threats in the northern approaches to the Corantijn River east of that line would be cut off there as well.

We might bear in mind that given the shallow depths and shifting sands in the in-shore areas (no offense intended), cross-wise traffic is to be located well seaward of this area. The practical question we are involved with here in terms of navigation is traffic to and from the Corantijn River. In this connection, we need to take account of the natural conditions of the area that affect navigation. The 2004 edition of the "South American Pilot" published by the United Kingdom Hydrographic Office, which is at Tab 19, has this to say about tidal streams, and I quote, "In the mouth of the Corantijn River, the ingoing tidal stream sets southwest, whilst the outgoing stream sets north. In the rainy season, the outgoing stream attains rates of three to three-and-a-half knots, and its influence is felt 10 to 12 miles offshore."

In other words, in the rainy season we have a

10:22:34 significant outgoing tidal stream that runs 10 or 12 miles north. Our experts have prepared an illustration of this tidal effect. That's the incoming in the southwest direction, and then the outgoing tidal stream in the northerly direction. If the purpose of the 10-degree line is to ensure unity of regulation and protection of shipping in the northerly approaches and exits, I might add, then it is readily apparent that this control should extend at least to the 12-mile limit of Guyana's territorial sea.

The rationale for the 10-degree line is independent of any particular limit of the territorial sea. The object and purpose of the 10-degree line was to limit the extension of the territorial sea from Guyana's side so as to protect the Netherlands and now Suriname's control over the northerly approaches to the Corantijn River east of that line. That object and purpose would be furthered if the 10-degree line were applied to limit the entire 12-mile territorial sea of Guyana.

Conversely, that object and purpose would be frustrated if Guyana were permitted to claim a territorial sea in any area east of the 10-degree line. This could happen in two ways. First, if the 10-degree line were applied to the territorial sea, but, say, only to the 3 miles claimed by the colonial powers in the 1930s; the effect is illustrated by Tab 20 in your folder.

10:24:42 As you can see, if the 10-degree line stops at 3 miles, as Guyana intimated in these proceedings, then its territorial sea would wrap around the northern limit of Suriname's territorial sea. This effect would apply from the 10-degree line up to whatever boundary line is used at the end of the 10-degree line, and, of course, that we don't know. That is the line that the Tribunal would have to determine, but the wrap around effect would extend up to whatever line other than the 10-degree line were used, and Guyana, of course, has made its own suggestions as to what that might be. In fact, it would start down here.

A second way, a second way in which the object and purpose could be frustrated would be if a 10-degree line were applied only where the 12-mile territorial seas of the parties overlap and the remainder of Guyana's territorial sea then extended east of the line. This effect is illustrated in Tab 21 of your folders. As you can see, if this is the point where Suriname's 12-mile territorial sea meets Guyana's and the 10-degree line is stopped there, then the Guyana territorial sea would wrap around Suriname, the top of Suriname's territorial sea, and again, we don't know how extensive that effect would be because we don't know, if that point were chosen, what the direction of the line would be thereafter. That is the Tribunal's decision.

This problem--this problem--was expressly recognized

10:26:37 by Commander Kennedy in his work on what would become the 1961 British draft Treaty. In this connection, Guyana's explanation of the reference to drawing the 10-degree line to 6 miles in the 1961 British draft Treaty is, and I quote--I'm quoting from Guyana's explanation of what Commander Kennedy did: "The point located 6 miles seaward from Point 61 at an angle of north 10 east lay approximately 3 miles from the nearest point on that," meaning British Guiana's, "coastline and thus represented the limit of British Guiana's territorial sea." That statement appears in Guyana's Memorial at page 30, paragraph 3.38.

This statement acknowledges that the purpose of the 10-degree line was to limit the extent of Guyana's territorial sea, and thus prevent it from extending east of the 10 degrees and wrapping around Suriname's territorial sea--of course, at that time addressing a territorial sea of 3 miles.

The map at Tab 22 of your folder illustrates the way in which Commander Kennedy's solution to the wraparound problem with respect to the three-mile territorial sea, as explained in Guyana's Memorial, would solve the problem at the 12-mile limit of the territorial sea. The solution is to ensure that Guyana's territorial sea does not extend east of the 10-degree line.

Even in the 1920s, it was already understood that the northern approaches to the western channel of the Corantijn River extended beyond 3 miles from the low-water line off

10:28:49 Guyana's coast. The map on the screen dating to 1927 and used by the British and Dutch Commissioners in the 1930s, which you have seen before, shows the line on a 10-degree inclination extending into the Corantijn River as the area of approach at sea. The line designating the approach route extends beyond 3 miles from the nearest point on the low-water line. And here we have simply enhanced that map for visibility. This is the approach line which is shown by the line on that map. Here is the three-mile line off Guyana's coast. It is quite clear that even in 1927, they understood that the approach line extended well beyond--well beyond--the three-mile limit.

Needless to say, at that time the area beyond the 3 miles into which this approach line extends would have been regarded as high seas by the two colonial powers. But the important point is that even at that time, the northern approach to the western channel was understood to extend further out to sea than 3 miles on an angle of 10 degrees. The 10-degree territorial sea boundary that intersects the 1936 Point is parallel to and to the west of the approach line. There they are. This graphically illustrates the purpose of the 10-degree boundary in the territorial sea; namely, to preclude the extension of British control over the northern approach to the Corantijn River.

For a long time, a fair number of maritime countries, including Great Britain and the Netherlands, in order to

10:30:50 advance their interests in maximum freedom to use the seas off foreign coasts, supported the minimum plausible limit for the territorial sea. That minimum plausible limit was one marine league, which corresponds to 3 nautical miles.

In 1927 in his famous study of the law of territorial water, Professor Phillip Jessup, who was fresh from his service in the U.S. Department of State, identified the United Kingdom and the United States as the mainstays on which the three-mile maximum position rested. It's well-known, of course, to all of us that each of these pillars had its cracks even then, especially the second.

Let me take one example; let us turn to Tab 24. In 1848, Mexico and the United States agreed on a nine-mile territorial sea boundary off the mouth of the Rio Grande. Article 5 of the 1848 Treaty of Guadalupe Hidalgo provides that the boundary line between the two republics shall commence in the Gulf of Mexico 3 leagues from land opposite the mouth of the Rio Grande. Three leagues is, of course, 9 nautical miles.

The Supreme Court of the United States later dismissed--dismissed the U.S. Department of State's attempts to explain away the evident inconsistency between this nine-mile boundary and the traditional three-mile position. The U.S. Supreme Court expressly rejected, and I quote, "after-the-fact attempts to limit the effect of a provision which patently purported to establish a three-league territorial boundary,"

10:32:44 and the Supreme Court concluded that the boundary, "was intended to separate the territory of the two countries." The citation is United States versus Louisiana, 363 U.S. Reports 1. The specific discussion is at pages 61 to 64.

There's an additional interesting aspect of this Treaty text. The Tribunal will note that according to this text, the boundary continues between the United States and Mexico up the middle of the Rio Grande River until New Mexico, using the deepest channel if you can identify it.

It then goes on to say that if you can identify the deepest channel at the mouth of the Rio Grande River, then the end point of the nine-mile territorial sea boundary faces the mouth of the deepest channel.

Now, if we use the same logic with respect to the river involved in this case, we don't have a boundary running up the middle of the river, we have a boundary running up the western bank of the river. And the logic, the same logic as in that Treaty, would place the territorial sea boundary opposite the end of the boundary of the river where it meets the sea, and that's exactly what was done with the 10-degree line in 1936.

Let's return to the question of the breadth of the territorial sea. In 1934, when the representatives of the Netherlands and the United Kingdom were working to establish the territorial sea boundary between British Guiana and

10:34:32 Suriname, Professor Gilbert Gidel published the third volume of his monumental treatise on the Law of the Sea, which is very well-known, "Le Droit International Publique de la Mer." That volume contains an exhaustive, and I think to students exhausting, analysis of state practice and opinio juris regarding the breadth of the territorial sea. Professor Gidel expressed substantial doubt about any prohibition on territorial sea claims beyond 3 miles. Gidel concluded, and there it is, "La règle des trois milles n'est aujourd'hui qu'une idole renversée." Today--that is in 1934--today, the three-mile rule is but a fallen idol.

For a long time, multilateral diplomacy was to no avail in establishing agreement on the maximum permissible breadth of the territorial sea. Agreement on this question eluded the 1930 Hague Codification Conference. This failure to achieve agreement on the maximum breadth of the territorial sea would have been fresh in the minds of the lawyers advising the Netherlands and the United Kingdom in the 1930s.

In the 1950s, the International Law Commission and the 1958 Geneva Conference also failed to agree on a maximum breadth. In 1960 another conference was called, and there a proposal for a six-mile territorial sea, plus a six-mile additional fishing zone, which was supported by the maritime powers, failed by a hair's breadth to achieve the necessary two-thirds majority.

10:36:23 Following the 1960 conference, Canada and the United Kingdom explored with other governments the possibility of a multilateral treaty among like-minded states that would adopt the six-plus-six position, but the reactions they got were mixed.

Adoption and widespread ratification of the Law of the Sea Convention under which we are conducting this arbitration marks the first time in the history of modern international law that consensus has been achieved on the maximum permissible breadth of the territorial sea. There are now over 150 parties to the Law of the Sea Convention, including Guyana and Suriname, as well as the Netherlands and the United Kingdom. Article 3 of that Convention provides that every state may establish the breadth of its territorial sea up to a limit not exceeding 12 nautical miles, and both parties in this case have done so.

It may be constructive to compare these developments in multilateral diplomacy with the diplomatic history in this given case. One point is particularly striking. Only following the 1960 Law of the Sea Conference was a specific mileage limit included in a negotiating proposal regarding the 10-degree line, and that's the six-mile provision in the 1961 British draft Treaty. The main object of the 1961 British proposal was not the territorial sea boundary as such, but rather to shift as much of the continental shelf boundary as

10:38:11 possible to an equidistance line in conformity with the preferred positions articulated by both powers at the 1958 Law of the Sea Conference and in their dealings with the European neighbors.

The important thing about the 1961 British proposal in context is not that it sought to limit the seaward extent of the 10-degree line to 6 miles. The important thing about the 1961 proposal is that the United Kingdom, notwithstanding efforts to establish a rule of equidistance in international law, notwithstanding those efforts, felt obliged to acknowledge the 10-degree boundary in the territorial sea.

If we step back to the period following the failure of the 1930 Hague Codification Conference to limit the breadth of the territorial sea, we find that communications between the Netherlands and the United Kingdom that are contemporaneous with the identification of the 10-degree line do not--I repeat, do not--specify that the 10-degree territorial sea boundary extends only to the three-mile limit claimed by the parties. The Aide Memoire from the Netherlands in 1931 at Tab 26 refers to the outer limit of territorial waters without specifying any miles limit for the proposed boundary line, which later emerged as the 10-degree line.

The 1935 preliminary British sketch refers to the earlier 28-degree line as the boundary of the territorial waters of Suriname and British Guiana without specifying any

10:40:00 mileage limit. The 1939 British draft Treaty refers to the 10-degree line as the boundary between the territorial waters of Suriname and British Guiana, without specifying any mileage limit. This practice continued following World War II as well in the 1949 British draft Treaty, which used the same kind of language without specifying a mileage limit.

The ordinary understanding of a text that specifies the location and direction of the territorial sea boundary without specifying any geographic limit is that it means what it says. The boundary applies to the entire territorial sea up to the limits claimed by the parties at any given time in accordance with international law. There is nothing in the history of the development of international law regarding the breadth of the territorial sea to indicate otherwise. The British and the Dutch were unquestionably aware already by 1936 and thereafter that there was no uniformity of practice, preference, or scholarly opinion on this question.

This is made absolutely clear by the text of Article 7 of the United Kingdom's 1961 draft Treaty, which is core document Tab 5. That text refers to the boundary between the territorial sea--between the territorial seas and contiguous zone so far as they respectively extend. By 1961, the United Kingdom and the Netherlands had, of course, supported international agreement on a six-mile territorial sea.

The Law of the Sea Convention contains absolutely no

10:41:56 distinction as to mileage within the territorial sea. There is no distinction in the regime at three, at six, at nine, or at 12 miles. Guyana could have made a declaration explaining the application of the Convention in the particular situations of this boundary under Article 310 of the Law of the Sea Convention. That was its function; to allow states to make statements as to how different regimes would be harmonized. Guyana made no such statement.

In the Aegean Sea Continental Shelf Case, decided in 1978, Greece relied on the 1928 General Act for the Specific Settlement of Disputes as the basis for jurisdiction. Greece acceded to the General Act in 1931. At that time, it had a reservation regarding, and I quote, "disputes relating to the territorial status of Greece."

Greece argued that the reference to the territorial status of Greece could not apply to the continental shelf because the very idea of the continental shelf was wholly unknown in 1928 and 1931. The International Court of Justice rejected that position. The International Court of Justice said that the expression, and I quote, "must be interpreted in accordance with the rules of international law as they exist today, not as they existed in 1931."

And I should note that the Court was faced with a much harder question. It was faced with an entire institution in international law, the continental shelf, that didn't even

10:43:41 exist in 1931. Here we are talking about an institution that did exist, territorial waters; it was not a new concept. And we are talking about a much smaller area between three and 12 miles than the huge areas of the continental shelf.

Mr. President, I have a few more pages on the territorial sea, and I leave it to you whether you would wish to stop at this point or would like me to complete my discussion of the territorial sea.

PRESIDENT NELSON: I think you had better complete.

PROFESSOR OXMAN: Thank you. I will try and speed it up.

Needless to say, every expression needs to be interpreted in the light of its object and purpose. In the instant case I think I've demonstrated the object and purpose of limiting their territorial waters to 10 degrees was to make sure the British did not interfere with the approaches to the Corantijn.

What can be said in support of the three-mile position is that's what the parties thought in 1936, and there is no dispute as to that. But if that's the only reason, then we are faced--the Tribunal is clearly faced with the question of intertemporal law. And the implications of that question of intertemporal law are by no means limited to this Treaty. The real question is the integration of other regimes with the global regime for the oceans established by the 1982

10:45:16 Convention, a Convention that Guyana has quite rightly reminded us has constitutional status.

For example, the same term, territorial waters, that is involved in this case is used in Article 2 of one of the most widely ratified regulatory treaties in the world, the 1944 Chicago Convention on International Civil Aviation. The legal consequences of that term are quite extraordinary. The territory of the state is defined in Article 2 to include its territorial waters. That triggers the legal rule that every state has complete and exclusive sovereignty above its territory. It triggers the rule that no state aircraft, which includes military aircraft, may fly over the territory of another state without authorization. These are major questions of international law that turn on the question of whether we will understand the words "territorial waters" as used in 1944 to mean what the Law of the Sea Convention says they mean, and that is 12 miles.

That is the general understanding, but a different conclusion by this Tribunal on the question of intertemporal law risks upsetting the smooth process of integration of other Treaty regimes with that of the Law of the Sea Convention. Where as with the 10-degree line in this case, the location and direction of a territorial sea boundary is specified and its seaward boundary is not specified, the question of whether the territorial sea boundary established by the parties applies to

10:47:06 all or only part of the territorial sea depends on its object and purpose. Here it is our contention that the object and purpose was clearly to limit the extent of Guyana's territorial sea.

It is our view that that is precisely the effect of the 1989 arbitral award between Guinea Bissau and Senegal that has been the object of discussion in these proceedings. And I'm afraid in this regard that my distinguished colleague, Professor Sands, misspoke when he said on December 9th that in that case, Guinea Bissau-Senegal, we weren't concerned with the delimitation of the territorial sea. The Tribunal there was, indeed, concerned. There was a separate sentence in the 1960 agreement they were interpreting regarding the territorial sea. There can be no doubt that Professor Sands's remark was inadvertent. The dispositif in the award in the Guinea Bissau-Senegal case expressly refers to the territorial sea.

Mr. President, that concludes my remarks on the territorial sea. Suriname believes that the 10-degree is and should be the boundary of the territorial sea; that the 10-degree boundary does and should extend to the 12-mile limit of Guyana's territorial sea, and that this does and should constitute the point of departure for delimitation of the single maritime boundary beyond the territorial sea. Suriname also believes that because of the close link between the territorial sea and the contiguous zone, in order to protect

10:48:43 the object and purpose of the 10-degree line in the territorial sea, the 10-degree boundary should be regarded as extending to the 24-mile limit of the contiguous zone.

Mr. President, that concludes my prepared remarks on the territorial sea, and I leave it to you as to how you would like to proceed at this point.

PRESIDENT NELSON: Thank you very much, Professor Oxman.

Any questions? I give the floor to Professor Shearer.

ARBITRATOR SHEARER: Just very briefly. Professor Oxman, you said that the legal bases for your argument for the view that the 10-degree line extends throughout the entire extent of the territorial sea and maybe the modern territorial sea and contiguous zone depends on consistency of practice, acquiescence, and the special aspects of the sovereignty over the approaches to the Corantijn River.

What ran through my mind was, is there any relevance of the international law doctrine of uti possidetis here? Does that play any role in your argument that states inherit what the territorial dispositions were under previous regimes? Does that help assist your argument or is it against your argument or is it irrelevant?

PROFESSOR OXMAN: Professor Shearer, I don't want to enter into the debate as to whether the doctrine uti possidetis applies only with respect to former Colonies of the same state

10:50:21 or also applies with respect to former Colonies of different states. This is a difficult question. Our friends from Africa frequently regarded European colonialism as a unity, and therefore took a broader view of uti possidetis. But you are absolutely correct that the agreement reached by the Netherlands and the United Kingdom that the territorial sea boundary, the territorial sea boundary was the 10-degree line intersecting the 1936 Point was, in our view, inherited by Guyana and Suriname, and Suriname consistently respected it.

PRESIDENT NELSON: I should ask a question here. Are you suggesting that the Netherlands and the U.K. envisaged an evolutive approach to the meaning of territorial waters, intending that that term should extend to whatever limit was universally accepted as it is now?

PROFESSOR OXMAN: I believe that the Netherlands and the United Kingdom had superb lawyers, some of whom are identified, working on this problem. They knew the difference between what is claimed and what international law prohibits. They knew the difference between a text that specifies a limit and doesn't. What they were working on was an agreement to establish the boundary of the territorial sea. They knew that that could change. They fought that change. I'm not denying that. Neither government wanted that to happen, but they already knew. Gidel told them in 1934 it was happening, and he didn't need to tell them. They knew that the game was over

10:52:17 when The Hague Codification Conference failed. That was the beginning of the end. And they knew that once decolonization started, it would be all over. Developing countries wanted nothing of the three-mile limit. And, therefore, I think they agreed on territorial waters. They hoped that would remain 3 miles, but they never specified it would, and I think they would have regarded it as covering a broader territorial sea if one of them claimed it.

PRESIDENT NELSON: Thank you very much, Professor Oxman.

If there are no more questions...

ARBITRATOR SMIT: Yes.

Professor Oxman, if they knew at the time that the breadth of the territorial sea was in flux, why didn't they address this situation and said, not the 10-degree limit should extend to the limits of the territorial sea as it may be at the appropriate time?

PROFESSOR OXMAN: Professor Smit, I think that's what they meant. It is also exactly what the British text in 1961 says. It refers to the limits as they may be. They were, of course, trying to protect their three-mile positions, so that there is a difficult question of strategy here, but they did not put a three-mile limit in. I think what you're suggesting is exactly what they did say.

PRESIDENT NELSON: A question.

10:53:53 ARBITRATOR FRANCK: I'm interested in your interpretation, Professor Oxman, of Article 7 from which you--of the '61 draft, British draft, from which you extract the words 10 degrees to a distance, but the words 10 degrees and the words so far as they respectively extend, but in reading further in that Article I see that it refers to the 10-degree line to a distance of 6 miles from the more seaward of the concrete marks referred to, and thence on a bearing of 33 degrees for a distance of 35 miles, thence on a bearing of 38 degrees for a distance of 28 miles, then, and so on, 28 degrees to the point of intersection.

Doesn't that somewhat affect your analysis of Article 7? They seemed to have in mind that extension, not so far as they respectively extend beyond the three-mile limit, but perhaps to a distance of 6 miles, and then designated what the line would be after that?

PROFESSOR OXMAN: Indeed. As I indicated, the objective of the United Kingdom with this draft was to give effect to its overall policy, which was a global policy of attempting to entrench the equidistance line in international law. It was not just to achieve one here. There was consistent U.K. behavior on this question.

And the interesting thing is that they conceded a 10-degree line at all.

Now, with respect to the 6 miles, there are frankly

10:55:41 two interpretations, and I really do think Guyana's is the better. One interpretation of 6 miles is that they actually were breaching the three-mile limit of the territorial sea. Guyana's interpretation, which I read to you, which I think in light of what Commander Kennedy did is probably what they meant to do, was that they used 6 miles so as to make sure they were stopping Guyana's territorial sea from extending east of the 10-degree line because the end of the six-mile line from the 1936 Point would be, as Guyana points out, 3 miles from Guyana's coast.

At the same time it seems to me from the documents that the British were themselves confused because we have the memorandum from the Colonial Office to Commander Kennedy, saying that the contiguous zone line would not be a median line. So, it's entirely unclear what they thought exactly was happening. They were, of course, bargaining on a whole bunch of issues at the time, but you are absolutely correct, Professor Franck, and I do not disagree that the British after the six-mile point were shifting the line in the direction of a median line. That was their objective, yes, sir.

PRESIDENT NELSON: Thank you very much, Professor Oxman.

We shall take a break now and return at 11:15. Thank you very much.

(Brief recess.)

11:18:35 PRESIDENT NELSON: Professor Oxman.

PROFESSOR OXMAN: Thank you, Mr. President.

Mr. President, I would propose to proceed with some observations on the law of maritime delimitation with particular reference to the Exclusive Economic Zone and the continental shelf. Mr. President, we have all seen this [speaker holds up UNCLOS book] before. The United Nations Convention on the Law of the Sea is both the source of jurisdiction and the source of law in this case. Articles 15, 74, and 83 expressly regulate the delimitation of the maritime boundary. The meaning of the reference to international law in Articles 74 and 83 is to be determined by this Tribunal by interpretation of those Articles in light of their context and history.

That context and history includes a new regime for the Exclusive Economic Zone that was introduced in Part V of the Law of the Sea Convention. The regime embraces both the waters and seabed and subsoil from the outer limit of the territorial sea to a maximum limit of 200 miles from the coastal baselines. That regime was unknown to the 1958 Conventions. It dramatically changed the Law of the Sea.

On the other hand, much of the 1958 Convention on the continental shelf was retained in Part VI of the Law of the Sea Convention and elaborated on, including the addition of precise outer limits, which we know are the continental margin

11:21:13 throughout the natural prolongation of the land territory of the coastal state, but if the continental margin doesn't go to 200 miles, then the continental shelf goes to 200 miles anyway.

And thus, while the continental shelf may extend beyond 200 miles--and may, indeed, with respect to both states here, which is not a matter before the Tribunal--both the continental shelf and Exclusive Economic Zone regimes do apply up to 200 miles. For that reason the text of the Law of the Sea Convention closely coordinates the two regimes in Part V and VI, and the International Court of Justice noted this in the Libya-Malta case. It said that the 1982 Convention demonstrates that the two institutions, continental shelf and Exclusive Economic Zone, are linked in modern law.

In 1958, of course, there was no Exclusive Economic Zone, so there was no Exclusive Economic Zone to delimit. With respect to the continental shelf, there was, of course, the famous Article 6 of the Continental Shelf Convention, which contained the so-called equidistance/special circumstances rule. According to that rule, and I quote from part of it, "In the absence of agreement and unless another boundary is justified by special circumstances, the boundary shall be determined by application of the principle of equidistance." That was Article 6 of the '58 Convention.

The United Kingdom as well as the Netherlands in their relations with their European neighbors, pressed for an

11:22:47 interpretation of Article 6 that afforded substantive primacy to equidistance. Both ultimately failed. That position was subject to scrutiny by International Tribunals in 1969 in the North Sea Continental Shelf Cases, and 1977 in the Anglo-French arbitration. The rigidity of that position caused the International Court of Justice to decide that Article 6 was not declaratory of customary international law.

The Anglo-French Arbitral Tribunal didn't have that luxury because both states were party to the Continental Shelf Convention. What that Tribunal did is to decline to accord priority to equidistance under Article 6 itself; the line drawn by the Arbitral Tribunal in the Anglo-French arbitration in the areas seriously at issue was not an equidistance line.

Unlike the situation with respect to the territorial sea, which we just talked about, Article 6 of the 1958 Convention dealing with the delimitation of the continental shelf was not retained in the Law of the Sea Convention. New provisions are utilized in the Law of the Sea Convention for the Exclusive Economic Zone in Article 74, and for the continental shelf in Article 83.

The full implications of Articles 74 and 83 of the Law of the Sea Convention have yet to be explored in the jurisprudence. The legal setting in most earlier delimitation cases was different from what it is here. Many tribunals have mentioned Articles 74 and 83. Most of them were adjudicating

11:24:47 under customary international law, not the Convention. From that perspective, they generally noted the reference to international law in Articles 74 and 83 and looked no further, and there is nothing wrong with that.

This Tribunal, however, is adjudicating under the Law of the Sea Convention. And the reality is that there is more to Articles 74 and 83, their context and their history, than a cross-reference to international law.

Perhaps the most important illustration of the relationship between the Convention text and customary law relates to the question of whether substantive priority is to be accorded to equidistance. In reading and listening to the arguments of learned counsel for Guyana, I sometimes had the impression that the view of the law they set forth really means that there is nothing left for a tribunal to do than draw an equidistance line and fiddle at the margins. The International Court of Justice, of course, decisively rejected that view in the North Sea cases, and for that reason held that Article 6 was not declaratory of customary law.

Since the text of Article 6 of the '58 Convention specifies no priority for equidistance, in fact the International Court could have, in the North Sea cases, interpreted the equidistance/special circumstances rule in the Convention in a manner consistent with its view of international law. It could have said that coastal state

11:26:26 jurisdiction is rooted in frontal seaward projection from the coast. It could have said there is no substantive priority for equidistance, and it could have said that equidistance is especially problematic with respect to lateral boundaries between adjacent states.

And, in fact, that's exactly what the 1977 Arbitral Tribunal in the Anglo-French continental shelf delimitation case did. They made an effort at synthesis by denying substantive priority to equidistance and giving broad scope to the role of special circumstances, and they sought to interpret the equidistance/special circumstances rule within the more flexible framework of the general norm of equitable principles articulated in the North Sea cases.

And it's interesting to see what they said. This is about the equidistance/special circumstances rule. They said, "even under Article 6 the question whether the use of the equidistance principle or some other method is appropriate for achieving an equitable delimitation is very much a matter of appreciation in light of the geographical and other circumstances. In other words, even under Article 6"--this is the Tribunal speaking--"it is the geographical and other circumstances of any given case which indicate and justify the use of the equidistance method as a means of achieving an equitable solution rather than the inherent quality of the method as a legal norm of delimitation."

11:28:06 Now, this opinion was well-known to the negotiators at the Law of the Sea Conference, but interestingly, it was not--the opinion was not cited with approval until 1993 by the International Court of Justice in the Jan Mayen case.

In fact, what happened at the Law of the Sea Conference is that there was a great divide between those who wanted priority for equidistance, and they embraced Article 6 of the Continental Shelf Convention, and those who opposed any reference to equidistance. They preferred more general language, frequently the language of equitable principles/relevant circumstances.

As we all know, the Law of the Sea Conference divided into two camps precisely along those lines. Around the world states paired off against their neighbors. It was not a pretty spectacle. The issue was whether delimitation provisions regarding the continental shelf and the Exclusive Economic Zone would refer to equidistance.

Now, interestingly, in addition to attempting negotiation of a definitive delimitation regime, delegations also focussed on an interim regime pending definitive delimitation. Naturally enough, the proponents of equidistance proffered their position as an interim role. In other words, the interim role is equidistance until you agree on something else. My distinguished colleague, Professor Akhavan, seemed to imply much the same thing on December 11 in his comments

11:29:41 regarding the interim regime. If so, he regrettably overlooked the fact that the proponents of equidistance were unsuccessful.

Article 74 on delimitation of the EEZ and 83 on delimitation of the continental shelf shared three characteristics from the time of the very first single negotiating text in 1975. First, the two texts were substantively identical. Second, the texts did not repeat the equidistance/special circumstances rule of the Article 6 of the 1958 Convention on the Continental Shelf. Third, the texts contained separate provisions on definitive delimitation in paragraph one and on the interim period pending definitive delimitation in paragraph three.

At Tab 29 and on your screens, Mr. President, there is a schematic account of the evolution of paragraphs one and three of Article 74 of the Law of the Sea Convention. Article 83 evolved in exactly the same way.

Let us start with definitive delimitation, which is addressed in paragraph one. The first text in 1975 did something very interesting. It represented an effort to combine references to equitable principles and equidistance in a single text, and the text referred to "agreement in accordance with equitable principles, employing, where appropriate, the median or equidistance line, and taking account of all relevant circumstances." This effort at synthesis in some sense anticipated the Anglo-French Arbitral

11:31:35 Tribunal decision two years later.

The 1975 text triggered efforts by both camps, as we would expect, to shift it in their direction. Partisans of equidistance were annoyed at the reference to equidistance--were annoyed that the reference to equidistance was subordinated to equitable principles. The other camp didn't like any reference to equidistance at all. Agreement couldn't be reached. The texts stayed the way it was for years.

In 1980, as a result of intensive negotiating efforts, a change was introduced in the second revision of the informal composite negotiating text. The text was divided into two sentences, the first specifying that delimitation "shall be effected by agreement in conformity with international law."

The next sentence repeated the prior text except that they changed "all relevant circumstances" to "all circumstances prevailing in the area concerned." I devoutly hope that no member of the Tribunal asks me what the difference is because frankly, it beats me.

This, too, did not work. If anything, the clash between the two camps became more severe as it became clear that the conference was entering its final stages.

For its part, the leadership of the Law of the Sea Conference was determined to find a text that would not be an obstacle to achieving consensus on the Law of the Sea

11:33:06 Convention as a whole, and it recognized that consensus would not be possible if reference to equidistance was retained. With this in mind, the text of what is now paragraph one of Articles 74 and 83 was substituted in the Draft Convention in 1981. The reference to international law was retained, interestingly elaborated upon by a cross-reference to Article 38 of the Statute of the International Court of Justice. The reference to equidistance was removed. The references to equitable principles and circumstances prevailing in the area were replaced by a reference to an equitable solution.

The negotiation of an interim regime, pending agreement on definitive delimitation, followed a similar pattern. The question of a default or residual rule was posed at the outset of the negotiation of an interim regime. The first text of paragraph three of the informal single negotiating text in 1975 stated quite simply, "Pending agreement, no state is entitled to extend its Exclusive Economic Zone beyond the median line or the equidistance line."

This evoked a storm of protest. It was removed the very next year.

The new text of paragraph three introduced by the revised single negotiating text in 1976 abandoned any reference to median or equidistance lines. Instead, the focus shifted to procedure. The new text required the states concerned to make provisional arrangements taking into account the provisions of

paragraph one. To the extent that any normative standards at all were expected to influence the interim regime, they were the same as those set forth in paragraph one with respect to agreement on definitive delimitation.

There matters remained until the second revision of the informal composite negotiating text in 1980, when paragraph one, we will recall, was changed to introduce the reference to international law. At the same time, a new interim regime was introduced in paragraph three. While paragraph one was still to undergo a further change the next year, the text of paragraph three remained substantively the same thereafter and is to be found in the Convention.

This new interim regime in paragraph three is far more elaborate. Like its immediate predecessor, it prescribes no default or residual delimitation rule. Unlike its predecessor, this interim regime is explicitly dissociated from any substantive links to, or implications for, definitive delimitation. Those implications are expressly precluded. The interim regime focuses entirely on rules that can be expected to promote self-restraint and to contain disputes.

The ultimate decision on the Law of the Sea Conference not to refer to equidistance anywhere in Articles 74 and 83 was accordingly quite deliberate. The references were removed from both paragraph one and paragraph three. Consensus required a different approach.

11:36:46 The result is that Articles 74 and 83 don't mention equidistance, and they don't mention any other method of delimitation. The Article requires agreement on the basis of international law in order to achieve an equitable solution. The requirement of an equitable solution in Articles 74 and 83 is substantive. It expressly qualifies the reference to international law. It cannot be subordinated to equidistance or to any other method of delimitation.

The requirement of an equitable solution as well as the reference to international law must be understood in the light of the context and history of Articles 74 and 83. This suggests very considerable caution in evaluating arguments, such as those advanced by my distinguished colleagues from Guyana, that the references to international law, and even to an equitable result, accord substantive priority to equidistance.

It is difficult to agree with my friends from Guyana that a treaty means what its drafters refused to say. It is sometimes argued that, with the advent of the 200-mile zone, proximity has become the basis of title and, accordingly, that a preference for equidistance necessarily follows from this. The International Court of Justice has never accepted the argument. In paragraph 43 of the Libya-Malta case, the Court explains why it never accepted the argument.

The argument was not accepted in the Convention

11:38:38 itself. There is no equidistance rule with respect to the economic zone and the continental shelf. And in addition to that, the last paragraph of Article 76 on the definition of the continental shelf expressly negates any attempt to prejudice the issue of delimitation between opposite or adjacent states. It's a flat statement that the definition of the basis of title does not prejudice the issue.

We might also look at the origins of the Exclusive Economic Zone concept, the new concept. In the North Sea cases, as we all know, the International Court of Justice in attempting to decide whether an equidistance rule was inherent in the concept of the continental shelf went back to the origin of the concept in the 1945 Truman proclamation, and there it found a reference to equitable principles, but no reference to equidistance.

What if we were to perform a similar inquiry with respect to the origin of the 200-mile zone? The origin of that zone can be traced to the 200-mile claims of South American states.

On June 23rd, 1947, less than two years after the Truman proclamation, Chile proclaimed protection and control over all of the sea contained within the perimeter formed by the coast, the Chilean continental coast, which is very long, and the mathematical parallel projected into the sea at a distance of 200 nautical miles from the coasts of Chilean

11:40:23 territory. A similar claim was made all directions from Chilean islands. The text of the Chilean law may be found in Tab 30 in translation. Thus, in the very first claim, we already find the idea of frontal projection of the continental coast into the sea with the idea of radial projections addressed only in connection with islands.

On August 1st, 1947, Peru made a virtually identical 200-mile claim. Peru's law specified that the direction of the seaward projection of the coasts to 200 miles would be along geographic parallels of latitude. That text may be found at Tab 31.

The Santiago Declaration of August 18, 1952, confirmed and coordinated the claims of Chile, Peru, and Ecuador to a maritime zone, in Spanish, zona marítima, of at least 200 miles embracing the waters and seabed and subsoil. The text of that declaration may be found at Tab 32. The declaration specifies that the maritime zone of an island located less than 200 miles from the maritime zone of another party may not extend beyond the parallel of latitude of the point when the land boundary between the respective parties reaches the sea.

A supplemental fisheries agreement of December 4, 1954, between Chile, Peru, and Ecuador refers to the parallel of latitude extending from the terminus of the land frontier as the maritime boundary. That text is at Tab 33, in translation.

These seminal texts have three significant

11:42:21 1 characteristics pertinent to delimitation. First, there is not
2 even a hint of equidistance in these harbingers of the 200-mile
3 Exclusive Economic Zone.
4 Second, the texts conceive of the 200-mile zone as a
5 frontal westward projection of the entire Pacific coast of
6 South America. Thus, at the dawn of the entry of the 200-mile
7 zone into international law, these instruments conceptually
8 adumbrate, albeit on a continental level, precisely what is now
9 understood by the analysis of lateral boundaries by the
10 International Court of Justice in the North Sea cases, as
11 developed in the Tunisia-Libya and Gulf of Maine cases; namely,
12 that zones of adjacent continental states basically constitute
13 a frontal projection of the coast into the sea.
14 Third, when faced with a conflict between frontal
15 projection from the continental coast and radial projection
16 from an island, the Santiago Declaration expressly gave
17 priority to the frontal projection.
18 There is accordingly no basis in the history of the
19 introduction of the 200-mile zone in international law for the
20 criticism leveled at the idea of frontal projection by Guyana
21 and the geographic expert. Quite to the contrary, that history
22 confirms the appurtenance of frontal projections from
23 continental coasts as between adjacent states, addresses radial
24 projections only in connection with islands, and accords
25 priority to frontal projections from continental coasts over

11:44:07 radial projections from islands. Precisely the same logic, applied, certainly, in different ways, informs the decisions of the International Court of Justice in the Tunisia-Libya case and the Libya-Malta case and in the Gulf of Maine case. It also informs the decisions of Arbitral Tribunals in the Anglo-French case, and in the Canada-France case.

The South American states that claimed 200-mile zones prior to the Third U.N. Conference on the Law of the Sea played a major and a successful role in the adoption of the 200-mile Exclusive Economic Zone, and the alternative 200-mile limit for the continental shelf. It is, therefore, of particular interest that equidistance lines remain the exception, not the rule, with respect to lateral maritime boundaries of South American states that claimed 200-mile zones prior to the Third U.N. Conference on the Law of the Sea.

This is clearly evident in the series of South American maritime boundary reports prepared by Judge Eduardo Jiménez de Aréchaga for what has now become the standard reference on the subject, the volumes on International Maritime Boundaries originally edited by Professors Jonathan Charney and Lewis Alexander under the auspices of the American Society of International Law. A compilation of extracts from these reports regarding lateral boundaries between South American states can be found at Tab 34.

Let me go through what Judge Aréchaga said on each of

11:45:46 those. Let's just start at the Southwest. Chile-Peru. Judge Aréchaga says in his report: "The method used to delimit the boundary line was to fix that line along the parallel of latitude drawn from the point where the land frontier between the two countries reaches the sea. The line is not based on equidistance."

Mr. President, for the record, I note that Peru has since transmitted a statement to the Secretary-General of the United Nations on January 9, 2009, that to date, Peru and Chile have not concluded a specific maritime delimitation treaty. 2001, excuse me. I'm sorry, I'm trying to read too fast. The date in my text--I hope it's right--is January 9, 2001. But I did feel that the record should show that Peru has made that communication. That was, of course, subsequent to Judge Aréchaga's report.

Ecuador-Peru. Judge Aréchaga again: Boundary lines along the parallel of latitude. "The boundary is not based on the equidistance method."

Colombia-Ecuador. "The maritime boundary extends a land frontier along the parallel latitude." "The boundary is not based on the equidistance method."

Let's turn to the Atlantic. Let's start in the south. Argentina-Chile: This, of course, has a very important history, role in the history of international law and arbitration. What we see here, and I won't trouble you,

11:47:29 because it's evident that we do not have an equidistance line. Once we get beyond these opposite areas very close to the coast, where there were channels as well, what we have is a series of arbitrary lines described by Judge Aréchaga. We go out at an angle and another angle, then we go due south, then we go due west, then we follow the meridian from Cape Horn due south. There can be no doubt that that had all sorts of implications regarding the juridical positions of the parties, including those with respect to Antarctica. But these are completely arbitrary lines. They bear no resemblance to equidistance.

I should note that this Treaty also contains elaborate provisions regarding navigation and about not extending beyond certain lines with respect to the territorial sea. One could spend an entire day on this matter.

Argentina and Uruguay. Judge Aréchaga: "The maritime boundary is defined as an equidistance line determined by adjacent coasts." But then he goes on: "The configuration of Argentina's coast causes the true equidistance boundary to be diverted toward Uruguay." And we see what he meant, and that is that the true equidistance boundary, the dotted line, would be closer to the Uruguayan coast. The actual agreed boundary moves off the equidistance line in a direction closer to the Argentine coast.

I should note that this is also an interesting

11:49:04 illustration. Argentina and Uruguay regarded this as the mouth of the river, and, of course, we see that for a very, very long distance it is the mouth of the river, the sovereignty over the river, that determines maritime jurisdiction at sea.

Brazil-Uruguay. Judge Aréchaga: "The method used was to establish a rhumb line nearly perpendicular to the general direction of the coast."

Now, this is also not terribly far from an equidistance line, and Judge Aréchaga explains why. He says, "The establishment of the maritime boundary was facilitated by the geographical fact that the delimitation involved states with adjacent coasts which run in a fairly straight northeast-southwest direction in the vicinity of the land frontier. As already indicated, a prerequisite for the maritime delimitation was the agreed location of the point where the land boundary reaches the ocean"--which they also had to establish in the Treaty.

This is a very important point. Where you have a highly regular single direction of the coast, the perpendicular and the equidistance line are going to be very similar. Here, this is nearly a perpendicular.

Brazil-French Guiana. Judge Aréchaga: "The boundary is perpendicular to the general direction of the coasts of Brazil and French Guiana. It coincides roughly with the line of equidistance because of the straight-baseline and the

11:50:46 absence of promontories or other special circumstances on the coasts of either party that would markedly effect an equidistant line." Again we have a perpendicular, and again the perpendicular will not be all that far from an equidistance line in those geographic circumstances.

Turning from these boundaries, we could quickly consult two important seminal documents regarding the evolution of the Exclusive Economic Zone. One is that on June 9, 1972, in Santo Domingo. The Ministers of countries in the Caribbean region adopted a declaration setting forth a proposal for a 200-mile zone that they styled a patrimonial sea, the declaration contained no reference to equidistance. It specified only that delimitation was to be carried out in the accordance with the peaceful procedures stipulated in the United Nations Charter. That declaration is at Tab 35.

The same approach is to be found in another of the seminal documents, and that is the report of the Regional Seminar of African States held in Yaounde later in 1972 from June 20th to 30th. That report proposed an economic zone beyond the territorial sea whose limit is measured by distance from the coast. The report contained no reference to equidistance and specified only that the limits between two or more states shall be fixed in conformity with the U.N. and OAU Charters. That report can be found at Tab 36.

To sum up at this point, the argument that fixing a

11:52:28 maximum mileage limit for a zone implies the use of equidistance in delimitation is supported neither by logic, nor by text, nor by history.

Now, Articles 74 and 83 do, of course, refer to international law. While bearing in mind that that Tribunal is not bound by any rule of stare decisis, and that the unusual express reference to Article 38 of the ICJ Statute implies that judicial decisions are not the only evidence of international law to be consulted, review of the decisions of the International Court of Justice and Arbitral Tribunals is, of course, instructive in informing the content of the reference to international law in Articles 74 and 83. Chapter four of Suriname's Memorial does this at pages 38 to 62. I would like to thank my colleagues on the Guyana team for complimenting the scholarly quality of that, on behalf of those who wrote it.

Chapter 3 of Suriname's Rejoinder continues that review at pages 50 to 68, and sets forth Suriname's response to Guyana's legal arguments in its Reply. I can't in the time available rehearse that review.

It is important, however, to bear in mind that what is at issue here, what Guyana has asked the Tribunal to do, and we agree, is to draw a single maritime boundary delimiting different zones of jurisdiction, including both the Exclusive Economic Zone and the continental shelf. The first Tribunal that was asked to do that was the chamber of the International

11:54:24 Court of Justice in the Gulf of Maine case. That was the first time that adjudication involved a single maritime boundary--when the United States and Canada asked for a single maritime boundary embracing their continental shelves and fishery zones which, of course, were part of the Exclusive Economic Zone.

And the chamber in that case, therefore, decided that it was necessary, and I quote, "to rule out the application of any criterion found to be typically and exclusively bound up with the particular characteristics of one alone of the two natural realities that have to be delimited in conjunction." The chamber went on to observe, and I quote, "Preference will henceforth inevitably be given to criteria that, because of their more neutral character, are best suited for use in a multipurpose delimitation." And the Tribunal then concluded that for that reason it is towards an application of criteria more especially derived from geography that the chamber feels bound to turn, and the chamber pointed out that what is here understood by geography is, of course, mainly geography of the coasts.

This emphasis on coastal geography has characterized all subsequent single maritime boundary cases before the International Court of Justice, as well as Arbitral Tribunals. Indeed, the Gulf of Maine decision has been cited 44 times in seven maritime delimitation cases. I assume that Members of

11:56:09 the Tribunal and my distinguished colleagues from Guyana would simply prefer the list which is contained at Tab 37.

It is now common for a tribunal to draw a provisional equidistance line and then decide whether that line or some other would best reflect the geography of the coast. This analytical procedure has three main virtues. It makes explicit what many lawyers and judges do anyway; it disciplines the analytical process; and it focuses attention on coastal geography as the central determinant in a maritime delimitation.

This analytical process does not, however, mean that equidistance enjoys substantive priority over any other method of delimitation. Quite to the contrary. It is well established in the jurisprudence that equidistance enjoys no substantive priority. The Arbitral Tribunal in the Barbados-Trinidad and Tobago case expressly stated that, and I quote, "No method of delimitation can be considered of and by itself compulsory, and no Court or Tribunal has so held." The Barbados-Trinidad and Tobago Tribunal described the provisional equidistance line as a hypothesis, an hypothesis that, and I quote, "will in many circumstances"--many circumstances--"not ensure an equitable result in the light of peculiarities of each specific case."

I must confess that I am at a loss to understand how my distinguished colleague, Professor Schrijver, could deduce

11:58:02 from this that equity means equidistance. The basic rule of delimitation, as the International Court of Justice has repeatedly made clear, most recently in the Cameroon and Nigeria case, remains what is commonly called the equitable principles/relevant circumstances rule that was first articulated in the North Sea cases. Since the North Sea cases, both the International Court of Justice and the Arbitral Tribunals have consistently found that the use of equidistance is not mandatory. I don't wish to presume on the patience of the Tribunal or my colleagues from Guyana by going through the litany of cases to make this point. Instead, we have assembled at Tab 38 the pertinent extracts from the decisions of the International Court of Justice and Arbitral Tribunals since the seminal decision in the North Sea cases.

In this connection, where my distinguished colleague Professor Schrijver finds discontinuity, I find substantial continuity and cross-fertilization among and between not only the decided cases, but among and between those cases and the emergence of the Law of the Sea Convention. I find it particularly surprising that one would identify the Jan Mayen case as some halcyon transfiguration from which emerged a lucid mathematical determinacy. To begin with, the parties to the case were bound by the 1958 Convention on the continental shelf, but not by the Law of the Sea Convention. But even in that arguably more restrictive context, let us listen to what

11:59:51 Judge Schwebel had to say about that decision in his separate opinion in the case. And I quote Judge Schwebel: "What is clear is the Court leavens its Judgment with a large infusion of equitable ferment, importing as it does a search for "relevant circumstances" and so concocts a conclusion which does not lend itself to dissection or, for that matter, dissent. Based on large and loose approaches, such as its gross impression of the effects of differing lengths of coasts, its desire to afford equitable access to fishing resources, and the attractions of the symmetrical conjoinder of indicated lines of delimitation, the Court comes up with a line which, given the criteria employed, may be as reasonable as another."

Now, obviously, Judge Schwebel was not very happy with the Court's articulation of its understanding of the law and its application in that case. But that does not mean that Judge Schwebel misperceived what the International Court of Justice in a 14-to-one decision understood the law and its proper application to be.

As to Professor Schrijver's reference to President Guillaume's characterization of the case law of the International Court of Justice, I would simply note that President Guillaume did not presume to speak for the Court. Indeed, in the same discourse Judge Guillaume stated his very strong views on what he terms "proliferation" of international tribunals in that very same discourse, and those positions have

12:01:36 not characterized the positions expressed by President Higgins in her scholarly writings and elsewhere, including her address at the tenth anniversary of the International Tribunal for the Law of the Sea, to which Guyana made reference during these oral proceedings.

We have learned from the decided cases that there can be problems with an equidistance line in delimitations between both opposite and adjacent coasts, and that there are special problems that arise with particular severity with delimitations between adjacent coasts.

The main problem with the equidistance line derives from its definition. An equidistance line is a line every point of which is equidistant from the nearest points on the respective coastal baselines. It is those nearest points that control the location of an equidistance line, not the coast as a whole. Indeed, the rest of the coast could be entirely absent, and those points would still produce the same equidistance line.

Mr. President, I was tempted to present a slide here showing how the coasts of Guyana and Suriname disappear except for the relevant points, but I didn't want to be misunderstood.

The problem may be self-correcting in the case of opposite coasts. As the median line advances the nearest points on the baselines change. But even as between opposite coasts, a median line may be entirely inequitable. That's what

12:03:20 the International Court of Justice found in the Libya-Malta case.

With respect to coasts that do not face the area to be delimited from opposite directions, the fundamental problem with equidistance is that it can cut off the frontal projection of the coast of one of the parties.

For example, what happens if there is a small island off a larger coast and the delimitation question concerns the areas seaward of the small island and the larger coast? As we may recall from our geometry lessons in high school, an equidistance line in this situation may well look like a parabola whose focus is the small island. The equidistance line will gradually cut off more and more of the frontal projection of the continental coast.

That was exactly the kind of problem faced in the 1992 arbitration between Canada and France with respect to the small French islands of St. Pierre and Miquelon off the Canadian coast. The map at Tab 39 and on the screen illustrates the French claims based on those small islands. Those claims, as is evident, cut off significant parts of the seaward projection of the Canadian continental coast. The Arbitral Tribunal endeavored to solve the cut-off problem by limiting the seaward projection of the islands to a narrow corridor. A map of the outcome of that case can be found at Tab 40.

A similar problem, by the way, was faced by the

12:05:06 Anglo-French arbitration panel with respect to the United Kingdom's Channel Islands, Guernsey and Jersey, off the French coast, and it came up with a solution of cutting off their seaward projection to the north.

State practice suggests that as between islands, small islands especially, equidistance will frequently produce a satisfactory result. But even in that situation, the frontal projection from the coast can be cut off.

The first slide here shows the effect of an equidistance line in this situation as between Barbados and Trinidad and Tobago. To solve the problem of cut-off of the frontal projection of the coasts of Trinidad and Tobago, another line was substituted for the eastern segment of the boundary in order to avoid a cut-off of the seaward projection of the eastern coastal front of Trinidad and Tobago, and the direction was changed. The second slide indicates how this was done. Copies of these slides are at Tab 42.

The result in the recent Barbados-Trinidad and Tobago arbitration is an illustration of the continuity of jurisprudence in the law of maritime delimitation. In many respects, this latest in the series of arbitrations evokes the reasoning as well as the outcome in the first of this series of arbitrations, the 1977 Anglo-French arbitration. In that case, a median line was used for much of the boundary between the opposite coasts in the channel, but where the channel opened

12:07:01 out into the Atlantic to the west, the Arbitral Tribunal deviated from equidistance by according half effect to the Scilly Isles. Its reasoning in support of that conclusion was evidently based on considerations of the cut-off of the projection of the coastal front of the French coast. The Tribunal expressed the concern that the United Kingdom's, and I quote, "coastal frontage projects further into the Atlantic than that of the French Republic."

It went on to explain, and I quote, "The greater projection of the United Kingdom coast into the Atlantic region is due in part to the fact that the most westerly point of its mainland is situated almost one degree further to the westward than that of the French mainland. But it is also due to the greater extension westwards of the Scilly Isles beyond the United Kingdom mainland than that of Ushant beyond the French mainland.

"As a result, the further extension southwards of the United Kingdom's coast has a tendency to make it obtrude upon the continental shelf situated to seawards of the more westerly facing coast of the French Republic in that region."

In the case of lateral boundaries between adjacent states, the cut-off problems were amply described in the North Sea cases; a coastal feature, whether a convexity or concavity or small island, may distort the direction of an equidistance line throughout its length. The effect is to swing the line

12:08:55 1 across the projection of the coastal front of one of the
2 parties.
3 Let's consider a simple example of two adjacent states
4 whose coasts run in the same direction. We have state A and
5 state B. As will be seen from the slide, the perpendicular to
6 the direction of the coasts and the equidistance line coincide,
7 leaving each coastal state with its own seaward frontal
8 projection.
9 Now, let's consider what happens when there is a
10 convexity on the left side of the terminus of the international
11 frontier and a concavity on the right side. The equidistance
12 line is pushed to the right by the convexity and pulled to the
13 right by the concavity. This cut-off of the frontal projection
14 of the coast of the state not only continues for the full
15 length of the line, it can get worse as the line moves out to
16 sea.
17 Mr. President, the law of maritime delimitation
18 requires us to consider an alternative line to avoid this
19 problem. That is what the Court said in the North Sea cases
20 and that remains the law. Coastal geography is the basis for
21 delimitation. Distortions created by particular coastal
22 configurations, especially in the case of lateral boundaries,
23 are a relevant circumstance, and avoidance of those distortions
24 is necessary in order to achieve an equitable result.
25 The question of how to achieve this is a different

12:10:43 matter. In this regard, there is no doubt that a tribunal has considerable latitude as to the method or technique used to resolve the problem based on its appreciation of what will work best in the particular circumstances of the case.

There are three basic techniques that are used by International Tribunals to avoid the encroachment or cut-off problem. All three are rooted exclusively in coastal geography.

One technique is to modify the equidistance line so as to ignore or reduce the effect of small islands. We saw that in the Anglo-French case. That technique would not appear to be particularly relevant to the circumstances of this case because there are no island problems in this case.

Now, in the absence of islands, we can get into squabbles constantly over what constitutes a coastal feature that should be ignored, what is a convexity, what is a concavity; the problem with this is that these squabbles can divert or distract a tribunal from the central legal objective. That objective is to avoid, to the maximum feasible extent, any cut-off of the frontal projection of each party's coast by determining precisely where each frontal projection is, and by selecting a line that equitably divides the area of unavoidable overlap between those frontal projections.

Now, we believe that the angle bisector technique that was used in the Gulf of Maine case responds directly to these

12:12:26 underlying objectives. Pursuant to this technique, the Tribunal--not Suriname, not Guyana--the Tribunal draws two lines to represent the general direction of the respective coasts of the parties. Each line, in the Tribunal's judgment, fairly represents the general direction of the relevant coast of the party in question. The Tribunal then constructs a line that bisects the angle formed by these two lines. That angle bisector establishes the direction of the maritime boundary in the areas where the frontal projections of the respective coasts of the parties overlap.

In the Gulf of Maine case, the chamber employed an angle bisector for the first segment of the boundary in that case. There, as you can see, as the chamber can see in the general direction, the coasts of the parties met at an angle. The international frontier was here. This represented the United States coast. This represented the Canadian coast.

I do want to note that the fact that a longer line was drawn for the United States coast than for the Canadian doesn't affect the angle bisector. The angle was the determining factor in determining the direction of the bisector. The bisector angle was then moved in that case to point A because that was the point that the parties agreed was to constitute the starting point of the maritime boundary. So, bisector direction is determined by reference to the general direction of the two coasts, and then that direction, which exactly

12:14:18 divides as two angles, was moved to the starting point agreed by the parties for the maritime boundary. The parties in that case had agreed on an arbitrary point because there was a sovereignty dispute over an island which was unresolved.

A special case of the angle bisector arises where the general direction of the coasts of the parties are the same. We saw this in the maps from South America. In that event, the angle bisector is a line perpendicular to the general direction of the coast of both parties as determined by a single line. That's normally used when the two coasts move in the same general direction. And it has been used several times. It has a very old pedigree. In fact, it was used in the 1909 Grisbadarna arbitration between Norway and Sweden. This was the perpendicular, and then it was applied. There it was then moved slightly by the Court, so as not to intersect one of the banks--that was to move it between the two banks.

A perpendicular was used for the first segment in the Tunisia-Libya case--[after no slide appears] all right, well, take my word for it. A perpendicular was used in the Tunisia-Libya case.

PROFESSOR SANDS: Tab 48?

PROFESSOR OXMAN: Yes. Tab 48, and a perpendicular was used for the seaward segment in the Gulf of Maine case at Tab 49.

Like the equidistance line, the angle bisector and the

12:16:21 perpendicular to the general direction of the coasts are rooted in coastal geography, and this is very important. These are not subjective methods. But because they avoid the effects of coastal irregularities, the angle bisector and the perpendicular have the virtues of an equidistance line, but not its defects.

Every point on the angle bisector and every point on the perpendicular is equidistant not only from the nearest points on the lines representing the general direction of the respective coasts, it's equidistant from all points on those lines that are themselves equidistant from the starting point of the angle bisector. And thus one of the effects of these methods is that the entire coast influences the direction of the line, not just isolated points that happened to be nearest to the line of delimitation.

The use of an angle bisector eliminates distorting effects of coastal irregularities, including convexities and concavities. It ensures that the delimitation reflects the frontal projection from all of the relevant coasts of both parties. It minimizes the area of overlap, thereby leaving to each party as much frontal projection of its coast as possible. It divides equally between the parties the area where the frontal projections of the respective coasts of the parties overlap. And it produces a single line whose position and direction is relative easy for fishing boats and law

12:18:11 enforcement vessels to ascertain.

Needless to say, Mr. President, any line that emerges from any geographic method, including this one, needs to be tested to ensure that the result is equitable. A most common question in this regard concerns reasonable proportionality in light of the length of the respective coasts, and we will be hearing more about that from my colleagues later.

There are, however, other geographic circumstances, and one such circumstance concerns navigation. In this case, the purpose of the 10-degree line was to prevent British control over navigation in the northern approaches to the Corantijn River east of the 10-degree line and to secure Dutch control. That purpose is primarily relevant to delimitation in the territorial sea and the contiguous zone, and to that extent we are not in disagreement with our colleagues from Guyana. But it can also be relevant beyond the territorial sea. Indeed, even in the arbitration with respect to only the continental shelf, the French raised serious navigation and security concerns regarding the area of the Channel Islands, and this was described mainly in paragraphs 161 to 163 of the opinion.

Now, France also observed there, and this was interesting given the date, that it was worried about what would happen with the eventual emergence of an Exclusive Economic Zone. But, of course, at that point they couldn't

12:19:59 tell what the contours were. Today, it is clear the French were right to worry. There is no doubt that navigation interests are affected by the regime of the Exclusive Economic Zone to a far greater extent than France suggested in 1977.

I think we have to start by recalling, especially in this region, that the Exclusive Economic Zone represents an historic compromise between a relatively narrow Territorial sea and the claims to full territorial seas out to 200 miles of a number of Latin American states, most notably in this region, Brazil.

Thus, while the regime of the Exclusive Economic Zone recognizes freedom of navigation for all states, there are important qualifications that we believe the Tribunal needs to bear in mind. If Guyana's Exclusive Economic Zone were extended to areas east of the 10-degree line, then the consequences would be as follows: Guyana could authorize the construction of offshore oil rigs and other installations and create broad safety zones around them that could interfere with navigation to and from the Corantijn River. Guyana could board and arrest ships traveling to and from the Corantijn River for alleged pollution violations. Guyana could impose additional controls over navigation with the approval of the International Maritime Organization. Finally, if historic trends favoring increased coastal state authority continue, including those now suggested by the Commission of the European Union, Guyana could

12:21:48 exercise increased control over navigation to and from the Corantijn River in the future.

Another pertinent geographic circumstance is direction of the land frontier, which in this case corresponds to the direction of the Corantijn River which, of course, is north-south or roughly north-south. In the Tunisia-Libya case concerning continental shelf delimitation, the International Court of Justice recalled that in addition to equidistance, the methods of delimitation examined by the committee of experts of the International Law Commission in 1953, and I quote, "were the continuation in the seaward direction of the land frontier, the drawing of a perpendicular to the coast at the point of its intersection with the land frontier, and the drawing of a line perpendicular to the line of the general direction of the coast."

The International Court of Justice then stated that, and I quote, "The factor of perpendicularity to the coast and the concept of prolongation of the general direction of the land boundary are, in the view of the Court, relevant criteria to be taken into account in selecting a line of delimitation calculated to ensure an equitable solution."

The Court went on in that case to select a line that reflected both criteria. I would only note that where a river forms an international boundary, as it does in this case, there may be additional practical reasons for projecting the river

12:23:27 boundary seaward so as to protect the access and control of navigation established by the river boundary itself.

Perhaps the most frequently invoked nongeographic circumstance in maritime cases is conduct, and it has been invoked by Guyana in this case. Guyana's legal pronouncements regarding conduct are in tension not only with the established jurisprudence, but with the Law of the Sea Convention itself.

In approaching the question of conduct, it is useful to recall that the fundamental principle regarding delimitation is agreement. As the International Court of Justice stated in the Tunisia-Libya case, and I quote, and this was quite emphatic, "An attempt by a unilateral act to establish international maritime boundary lines regardless of the legal position of other States is contrary to recognized principles of international law."

The case law with respect to conduct is clear. The parties invoke conduct to support their maritime boundary positions, and the Tribunals reject those positions. It is quite consistent.

The International Court of Justice's most recent articulation of the relevant standard is found in the Cameroon-Nigeria case, where the Court once again refused to consider boundary positions based on conduct. The International Court of Justice said that concessions and oil wells are not in themselves to be considered as relevant

12:25:15 circumstances. That was in paragraph 304. Only if they are based on express or tacit agreement between the parties may they be taken into account. Paragraph 304. But even that is not dispositive. The question then is whether such express or tacit agreement indicates a consensus on the maritime areas to which the parties are entitled. Paragraph 304.

The Tunisia-Libya case on which Guyana relies is the exception that proves the rule. In that case, the International Court of Justice rejected all of the arguments of both parties rooted in conduct alone, and the key word there is "alone." It attached significance to conduct only as a factor confirming the suitability of using a line rooted in coastal geography; namely, a line that was a perpendicular to the coast and followed the general direction of the land frontier. This is evident from paragraph 119 of the decision. And in that case, the relevant conduct included a modus vivendi regarding fishing between the colonial powers based on the perpendicular to the general direction of the coast--that's at paragraph 119--as well as a conscious use of the same approach in oil concessions of both parties. Paragraph 86.

The lesson of the Tunisia-Libya case is that long-standing conduct not amounting to express or tacit agreement may reinforce the suitability of an equitable line rooted in coastal geography, but it may not displace it.

Guyana's open-ended approach to the role of conduct in

12:27:18 delimitation has the inevitable effect of inviting states to seek to establish indicia of effective control and of inviting Tribunals to look for such indicia. This turns the Law of the Sea on its head. One of the key juridical characteristics that distinguishes the sea from the land is that effective occupation is not supposed to yield sovereignty at sea. There is no room under the Law of the Sea Convention for attempts to create "éffectivités" that qualify or compromise the sovereign rights or jurisdiction of coastal states over their exclusive economic zones and continental shelves.

Guyana's arguments regarding conduct relate to conduct in the period pending agreement on a maritime boundary, and necessarily so. In other contexts, Guyana has made reference to the interim regime established by paragraph 3 of Articles 74 and 83 of the Law of the Sea Convention. But when we come to its assertion that conduct establishes a maritime boundary in this case, then Guyana clearly prefers to avoid the implications of the same interim regime.

That interim regime requires the parties not to jeopardize or hamper the reaching of final agreement. It specifies that efforts to sustain what it calls provisional arrangements for this purpose shall be without prejudice to the final delimitation. The use of the word "arrangements," rather than "agreement," in paragraph three is clearly deliberate. The same Article uses the word "agreement" where it means

12:29:16 agreement. The provisional arrangements need not be agreed, they need not be binding, and they need not be reciprocal.

Guyana's invitation to give legal effect to its oil concessions in disputed areas is in tension with an interim regime whose manifest purpose is to encourage restraint. The unquestionable meaning of paragraph 3 of Articles 74 and 83 is that the ultimate delimitation should neither penalize restraint, nor reward attempts to create a fait accompli by proceeding with exploration or exploitation of nonrenewable resources in disputed areas.

Mr. President, distinguished Members of the Tribunal, from the perspective of the impact of the Award in this case on international public order, this is a particularly troubling aspect of Guyana's case. There remain many unresolved maritime boundary disputes in the world. Some are very contentious and difficult to control. To accept Guyana's open-ended propositions regarding the legal effect of unilateral conduct on maritime boundaries in disputed areas, to accept those propositions risks throwing coals on the very fires that the Law of the Sea Convention seeks to contain.

Mr. President, that concludes my remarks. I thank the Tribunal for its attention, for its indulgence on my voice which seems to be fading, and I can only express the hope that I have in some small way assisted the Tribunal in its work.

Thank you, sir.

12:31:10 PRESIDENT NELSON: Thank you very much, Professor Oxman.

And we are now 15 minutes away from lunchtime. I presume we will break now and start 15 minutes earlier, so we'll start at 2:15; is that right? 2:15. Thank you very much.

(Whereupon, at 12:32 p.m., the hearing was adjourned until 2:15 p.m., the same day.)

12:31:53 1 AFTERNOON SESSION

2 PRESIDENT NELSON: I will now give the floor to
3 Professor McRae.
4 PROFESSOR McRAE: Thank you, Mr. President.
5 Mr. President, Members of the Tribunal, it is a great
6 honor and privilege for me to represent the government of the
7 Republic of Suriname before this Tribunal, and just by way of
8 opening, I might say I'm not sure if it's a consequence
9 affecting all of our team members, but I may have the Oxman
10 throat, and therefore my voice may change as time goes on. The
11 substance, hopefully, will not.
12 In President, I'm going to address two broad questions
13 that are central to this case, and they can be described simply
14 as geography and method. And by geography, I mean the way the
15 geographical features in this case are to be understood and how
16 they're to be taken into account as a matter of law. And by
17 method, I mean the method of delimitation that is appropriate
18 in the circumstances of this case.
19 Now, the claim that the other party has attempted to
20 refashion geography is the stock in trade of the maritime
21 boundary advocate, so to speak, part of the genre, and we
22 certainly heard it in Guyana's written pleadings, and my
23 learned friend, Mr. Reichler, could not resist the refashioning
24 charge in the course of his oral argument last week.
25 But although Mr. Reichler said he was going to talk

14:20:06 about geography, in fact, he talked mainly about delimitation method, and particularly about the equidistance method. The question of geography was, to a large extent, glossed over, and his discussion of method was frequently based on assumptions about the geography. And we will show that, in fact, Guyana's position rests both on mischaracterizing the geography and then confusing the geography and the method of delimitation. Much of Guyana's geographical argument is derived from or reflected in the report and testimony of their expert, Dr. Robert Smith. And we will show that Dr. Smith's appreciation of the geography has been rather selective; that Guyana has either tried to take advantage of that selectivity or sought to characterize the geography in a way that is not even supported by Dr. Smith.

And furthermore, as their presentation last week so vividly emphasized, counsel for Guyana have allowed their preferred method of delimitation to become the basis for their analysis of the geography. Instead of showing how the geography leads to the choice of a particular method, they have analyzed the geography as if there was only one method. So, it's little surprise that if at the end of the day they feel that the method is supported by the geography, but as we will show it clearly is not.

Now, in the light of what we have heard, it is our view that we have to go carefully through the geographical elements in this case once more. And although geography is, as

14:21:49 it were, constant and neutral, geography is what it is. The way in which it is relevant to delimitation is a matter that must be considered carefully. The real question is whether the geographical elements that have been properly appreciated and understood and given the appropriate weight in determining the method of delimitation. And so, in this presentation, I shall take the Tribunal through the basic concepts of geography that are relevant to maritime delimitation and explain how they're to be applied in the circumstances of this case. We believe that a full appreciation of the geography is essential in order to ensure the proper selection of the method of delimitation.

Now, a common statement in maritime boundary delimitation is the phrase: A glance at the map will show. Well, we want to ensure that a glance at the map reveals what is actually there rather than what the glancer pretends is there. And so we hope, Mr. President, that you will persevere with us as we study rather than glance at the map.

So in setting out this geographical framework, I'm going to explain the basic concepts that are essential to the delimitation process: Relevant coasts, coastal fronts, concavities and convexities, coastal projection, and relevant area. And at each stage I shall point out why the perception of geography that we have heard from Guyana in both its written and oral pleadings is incorrect.

I will then turn to the methods of delimitation

14:23:30 considering both the equidistance method so favored by Guyana and the bisector method that we have set forth in our written pleadings. And I will explain why the appropriate method for delimitation in this case involves the use of an angle bisector.

Now, the essence of the argument that I shall be presenting is that although the coasts of the two parties are, as counsel for Guyana reiterated last week relatively unremarkable, there are certain features on those coasts that have an impact on a provisional equidistance line and distort its course. As a result, the provisional equidistance line is drawn inequitably across the coast of Suriname, but this inequity can be avoided if the boundary is drawn on the basis of coastal fronts; that is to say, a boundary that bisects the angle formed by the intersection of coastal fronts, or to put it another way, a line that is equidistant from generalized coastal fronts, coastal fronts that have smoothed out the distorting features. Now, I shall explain this in more detail as my argument proceeds.

Now, before moving to a detailed analysis of the geography of the area, since much of Guyana's appreciation of the geography is based on the report of Dr. Smith, I would like to make some preliminary remarks about that report. Dr. Smith is, without doubt, highly regarded as a geographer, and he has had considerable experience on maritime boundary issues working

14:25:05 for the United States Government, and he's made an important contribution to the published information about maritime boundary matters around the world. But as Professor Greenwood pointed out, a somewhat higher standard of accuracy and transparency is expected from an expert than Dr. Smith showed in the figures he produced, and the cross-examination on Monday showed that all of his numbers are completely unreliable, and there was a troubling lack of transparency in his explanations.

Now, as for the other aspects of his report, there is much in what Dr. Smith has said that is unexceptional. When Dr. Smith as a geographer stays in his role as geographer, we have less concern, but we do have problems when Dr. Smith strays from that role and tries his hand at being a lawyer and an advocate for the position of Guyana. Being an expert is one thing, being an advocate is another, and we would suggest that the Tribunal look with considerable caution when Dr. Smith, the expert geographer, becomes Dr. Smith, the advocate.

We also suggest that caution should be exercised when Dr. Smith as Guyana's expert appears to forget what Dr. Smith, the expert geographer, wrote in a scholarly publication some 15 years ago.

And we further suggest that the Tribunal should be even more cautious when it considers what Guyana has taken from Dr. Smith's report and how it is trying to use it in support of its case.

14:26:41 Now, I should say that in taking on the role of advocate was not a matter entirely Dr. Smith's fault. Although Dr. Smith seemed somewhat confused in cross-examination about the task he'd been set in his report, if we look at the question posed to him as set out in paragraph one of his report, he starts at a disadvantage. He says specifically the question is posed as to whether or not the coastlines of either Guyana or Suriname give an unfair advantage in the calculation of a boundary based on the equidistance methodology, an unfair advantage.

We are somewhat puzzled by the question that Guyana apparently put to Dr. Smith because it's not one that he's really qualified to answer. Fairness and unfairness are not geographical considerations. Geography is neither fair nor unfair. Coastal features are neither fair nor unfair. I seem to recall my colleague Mr. Reichler emphasizing that point just last week. Conclusions about fairness or equitable solutions or equitable results are reached by the application of legal principles. The question of whether there is an unfair advantage in the drawing of the equidistant line is a legal question, not a factual question. Indeed, in many respects it's the very question that this Tribunal has to determine. It is not a question on which it's even appropriate for expert evidence to be provided.

And so on that basis, one might even suggest that

14:28:15 Dr. Smith's report should be regarded as inadmissible. If you rely on the question posed at the beginning of Dr. Smith's report, it's not an expert report at all. Rather, it is a submission on the law.

But, perhaps Dr. Smith realized there was a danger in straying into legal analysis because he does seem to talk about unfairness as if it were a geographical concept and not a legal concept. So, in paragraph four of his report he talks about seeing whether features that influence the course of an equidistance line cause a geographic imbalance in the boundary area. In paragraph nine he talks about a geographic anomaly occurring on the Suriname coastline. And in paragraph 18, he says in the North Sea cases the ICJ found the geographical situation to be unfair.

Now, this treatment of geography in value-laden terms puzzles us. You only have to go to the decision of the chamber of the Gulf of Maine case to find a rejection of the idea that value should be placed on geography. In discussing the United States distinction between primary and secondary coasts in that case, I think this is part of the kitchen sink that Dr. Smith was talking about that was thrown into that case. The chamber said, "Geographical facts are not in themselves primary or secondary. The distinction in question is the expression not of any inherent property in the facts in nature, but of a human value judgment."

14:29:48 And the chamber said, "Again, the same may be said as regards the idea put forward in the course of the proceedings that certain geographical features are to be deemed aberrant by reference to the presumed dominant characteristics of an area coast or even a continent." That was all from paragraph 36 of the judgment.

Well, such a consideration was obviously not in Dr. Smith's mind when he discovered a geographical anomaly along the Suriname coastline. But in our view, the conclusion that fairness or unfairness can exist results only from applying a particular geographical--a particular method of delimitation to a geographical area. Unfairness does not exist in the abstract. On its own, geography is neither unfair nor anomalous. It just is. What is unfair, inequitable, or equitable is the consequence of the application of a method, and that is a legal and not a geographical conclusion.

And so, we feel that Dr. Smith in his report overstepped the mark where he sought to stand in the shoes of the Tribunal and determine whether the provisional equidistance line produces a result that is equitable, and he does this quite directly in paragraph 32, where he says that the first section of the provisional equidistance line looks to be dividing in a pretty fair manner the maritime jurisdiction that is projecting from both coastlines.

And I take him to be saying essentially the same thing

14:31:20 when he says in paragraph 39 that Suriname makes out quite nicely when equidistant lines are used in the maritime boundaries.

So, as I mentioned, an opinion or a conclusion about the fairness of the result and the application of matter is not in the application of equidistance, is not a matter on which expert opinion can be adduced. We believe that on this point Dr. Smith's opinion can have neither relevance nor weight.

Let me turn to a few remarks, again as a preliminary matter, to reiterate what my colleague, Professor Oxman, has said. And this is about the relevance of geography to maritime boundary delimitation. And geography has obviously become the primary and in many instances the sole relevant circumstance for maritime boundary delimitation. And listening to my colleague, Mr. Reichler, the other day, it appeared that the parties were in agreement on this, but although Mr. Reichler seemed to be saying that geography was important, and we both agree on that, we believe that what he was really saying is that geography is not important. We believe geography is important because it was said it was from an appreciation of the geography that the appropriate method is determined. But if you have only one method, as Guyana does, equidistance that may be modified, then the geography does not matter. You simply go to equidistance, no matter the geography. So, notwithstanding Mr. Reichler's claims that we are together, I

14:32:58 1 believe that we are probably quite far apart.
2 Now, there is an underlying and quite fundamental
3 reason for the focus on geography in maritime delimitation, and
4 as courts and tribunals have emphasized, title to ocean space
5 derives from the coast, and that title justifies the
6 jurisdictional extension from the coast to the distance of 200
7 nautical miles. The centrality of geography to the basis of
8 title and delimitation should not, however, be interpreted as
9 giving any priority to equidistance as a method of
10 delimitation. From the Gulf of Maine case onwards, courts and
11 tribunals have rejected the determinism of the distance leads
12 to equidistance theory. Nevertheless, we believe that that
13 notion is implicit in Guyana's position on geography and
14 method.
15 Indeed, Professor Schrijver went much further. He
16 abandoned the subtlety that has marked the discussions of the
17 use of equidistance as a preliminary step and said that
18 essentially the law now requires equidistance, though perhaps
19 modified from time to time. And as my colleague Professor
20 Oxman has demonstrated, this is wrong as a matter of history,
21 it is a wrong as a matter of policy, and it is wrong as a
22 matter of law.
23 There is little doubt, then, if we're going to search
24 for the appropriate method of delimitation, we have to start
25 with the geography, and it's this that I will now return to. I

14:34:30 should mention that in this presentation I'm going to be using a large number of slides. They are in your binder for the day. All the maps and graphics are numbered consecutively, and they're there for your future reference, but I would suggest, if you watch the screen, you will be able to see dynamically what can be only presented in your book in static form. We can point to things on the screen that simply can't be pointed to you in the book, so I suggest that you will find following my presentation on the screen will be much more useful than trying to follow it in the book.

As has already been mentioned, geography in the context of maritime delimitation means coastal geography, and so it's the coastal geography of Suriname and Guyana that we must consider. The coasts of the two countries can be considered on a macrogeographical scale. From Venezuela to Brazil, the northeastern coast of South America.

Now, while such a perspective may be interesting, it is not particularly helpful when the objective is maritime boundary delimitation. In fact, Guyana's expert, Dr. Smith, said as much in his report when he noted, "It is difficult, however, when reviewing the entire South American east coast to appreciate what impact the coastlines of Guyana and Suriname may have on the boundary in question." That was from paragraph 13 of his report. Unfortunately, as we will see, Dr. Smith didn't always follow his own admonition, but I think that there

14:36:07 is one thing that is quite clear from this macrogeographical perspective. That is, there is a change of coastal direction where the coasts of Guyana and Suriname meet, and this becomes even more obvious when a closer view is taken of the coasts, when it is seen that the change in direction occurs at the mouth of the Corantijn River.

Now, it may not be a change in the direction of the coastline of South America as Dr. Smith chided us in his report, but it is a change in the orientation of the coasts of Suriname and Guyana in relation to each other; and this is simply a reflection of the fact that the coast of Suriname generally runs in an east-west direction, and the coast of Guyana runs generally in a northwest-southeast direction. The coast of Suriname generally faces north, and the coast of Guyana generally faces northeast.

Now, there are, of course, particular local deviations from these general directions and I will come back to them shortly, but the identification of a change in direction of the coasts of the Corantijn River is simply a statement of geographic fact.

And in broad and general terms, there is nothing particularly remarkable or complicated about the coasts on either side of the Corantijn River. This is not the Norwegian skjærgård with its fiords and offshore islands. It is not the Gulf of Maine with a deep coastal indentation. Nevertheless,

14:37:45 there are a number of features which have been noted in the pleadings and form an important part of the way that the parties view the case.

Now, a noticeable general feature of the geography in this area is that on both sides of the boundary the coast is broken by the mouths of a series of rivers. We can start with the Corantijn River itself, where the land boundary is located, proceeding east along the Suriname coast there is the Coppename River and then the Suriname River on which the capital of Suriname, Paramaribo, is located.

And then turning to the Guyana side proceeding from northwest from the Corantijn River, there is the Berbice River, and the larger Essequibo River, and there are smaller rivers on the coast, but they play no role in this case. I'm sure all of this is commonplace by now to the Tribunal, but I mention these rivers because they are, in a sense, markers for the coastal figures that have figured in the arguments of the parties. Between the Corantijn and Coppename Rivers, the Suriname coast starts at Turtle Bank and then recedes or falls away. Now, this recessed coast is a relatively minor feature and does not alter the broad east-west general direction of the coast, but it does have some significance to this case as I will point out later.

Beyond the Coppename River, the coast and the mud bank associated with it bulges in the opposite direction from the

14:39:16 preceding coast, and this, of course, is Hermina Bank. Beyond the Hermina Bank there is a further mud bank accretion known as Vissers Bank. Of course, both of these features have exercised counsel for Guyana considerably in their written pleadings and oral argument, and I will be coming back to talk about both features later in the course of my presentation.

Beyond the Suriname River there is a feature similar to Hermina Bank, this is Warappa Bank which continues the easterly trend of the Suriname coast, but after the Warappa Bank, the coast tends to lose its easterly direction and starts heading in a southeasterly direction towards the land boundary with French Guiana.

And if we turn to the Guyana side, between the Corantijn and Berbice Rivers, the coast is more rounded, and initially moves somewhat north from the river and then it settles into a northwesterly trend. The coastal protrusion that is there immediately, although unnamed, is a distinct and noticeable feature, and it is--it has featured prominently in the proceedings, and you will hear something of it, in fact, quite a lot about it from me. And for ease of reference I will refer to it by the name of the Colony it once was, Berbice, so I will call that feature the Berbice Headland.

At the Essequibo River, there is a further change in direction as the coast again heads north briefly towards Devonshire Castle Flats, when it turns northwesterly again and

14:40:53 then continues on in that general direction towards Guyana's boundary with Venezuela.

Now, after describing the physical geography of the area, it's important to mention the key factor of the political geography, and that is the location of the land boundary terminus. And as Professor Oxman has pointed out, the only possible location for the land boundary terminus is at the intersection of the 10-degree line with the coast on the edge, as it were, of the Berbice Headland. And the location of the land boundary terminus is an important factor in determining the coastal relationships of the parties. In the Gulf of Maine case, for example, the chamber noted the existence of the land boundary terminus in the corner of the rectangle that formed the Gulf of Maine and then it criticized Canada for having failed to take account of the change in the coastal relationships the further away the coasts were from the land boundary terminus. And I will be pointing out later that in our view, failure to take account of the significance of the fact that the land boundary terminus is located beside the Berbice Headland has led Guyana into error both in its appreciation of the geography and in its assessment of the effect of the provisional equidistance line.

Now, we would have thought that our description of the coastal directions of the two States was fairly unexceptional; and on our initial reading of Dr. Smith's report, we thought he

14:42:26 agreed with us. But then on closer examination, we found that there was a certain amount of sleight of hand in Dr. Smith's report. Dr. Smith starts with the macrogeographical perspective, arguing from Venezuela through French Guiana, the general trend of the coastline is southwest. That was at paragraph nine of his report. Later, he said Guyana's coastline generally faces northeastward. That was at paragraph 15. And then he said, on Guyana's side of the Corantijn River, the coastline clearly faces to the northeast. Paragraph 32. Well, so far so good. One could hardly disagree that Guyana's coasts generally face northeast. Both the macro and micro perspectives coalesce.

But when it comes to Suriname's coastal direction, Dr. Smith is much more reticent. In fact, in his report he does not identify a direction for Suriname's coasts taken on their own. In his conclusion, he talks about a provisional equidistance line that would best reflect the northeastward-facing coastlines in this region of South America. In other words, based on a macrogeographical perspective of the northeast coast of South America, Dr. Smith links the coasts of Guyana and Suriname and treats them both as having a common northeastward-facing direction. And just as Dr. Smith failed to note the fact that the coast of Suriname faces north, so did my colleague, Mr. Reichler, the other day. He mentioned that the coastline runs southeast along Guyana's

14:44:09 and then along Suriname's coastline, and then continues further to the southeast past Suriname's boundary with French Guiana. But he did not say, he could not bring himself to say, I suppose, that between the Corantijn River and Warappa Bank, Suriname's coast faces north.

And the inconsistency--this with reality--is patent. You only have to look at the coastal front lines that Dr. Smith draws in his report. While the Guyana coastal front line faces in a northeasterly direction, the coastal front line for Suriname faces north. And if you look at the images Mr. Reichler showed of coastal base points, Guyana's coast faces northeast and Suriname's coast faces north. Suriname's coast viewed in the context of the South American continent may be part of a northwest-southeast trend, but Suriname's coast in the boundary area faces north, not northeast.

Now, in maritime boundary delimitation cases coasts have been defined as opposite or adjacent. Sometimes it has been suggested that the relationship is mixed. Well, in this case, there is no dispute over the matter. Suriname and Guyana coexist side by side on the northeast coast of South America. They're adjacent states, and the coasts form a relationship of adjacency. Again, too, this is not a matter in dispute between the parties. What is in dispute is the implications that this adjacent relationship has for delimitation.

Well, having identified the coasts of Suriname and

14:45:57 Guyana in general terms, I now turn to the question of which coasts. Which of the coasts of the two States are relevant to the task of delimitation before the Tribunal?

Now, identifying the coasts that are relevant is a common and necessary practice in maritime delimitation. It's necessary because not all of the coasts of the parties are relevant. Only those coasts that are related in some way to the problem of delimitation that the Tribunal has to resolve can be of any help for the purposes of delimitation. And here the distinction between opposite and adjacent coasts becomes important. The solution to the problem of identifying the relevant coasts is easier in the case of opposite coasts. Since opposite costs at the same time both face each other and face into the area to be delimited, then prima facie those facing coasts are the relevant coasts.

In the case of adjacent coasts, identifying facing coasts is somewhat more complicated. Adjacent coasts do not face each other in the same sense that opposite coasts do. But depending upon their orientation, they will at least, in part, both face into the same area of the ocean. In the case of adjacent states, this common area which they face will be the area to be delimited.

Now, in deciding how to determine the relevant coasts in this case, that is, the coasts that face into the area to be delimited, we have to look to see what has been said and how

14:47:42 the relevant coasts have been determined or identified in other cases involving adjacent states. And broadly speaking, two things have emerged from the jurisprudence: First, the determination of the relevant coasts is a matter of judgment. It is not a scientific or technical exercise. So, in the Newfoundland-Nova Scotia arbitration, the Tribunal pointed out that the process of determining the relevant coasts was not something that could be done with scientific exactitude. What one looked for, the Tribunal said, were coasts that contributed to the delimitation in a general sense.

Second, the relevant coasts have to be determined independently of any delimitation method. In Cameroon-Nigeria, the Court said that the relevant coasts were not to be determined by reference to the base points for the drawing of the equidistance line, and the same point was made by the Arbitral Tribunal in the Barbados-Trinidad and Tobago which rejected the use of base points as the basis for determining the relevant coasts. Relevant coasts, the Tribunal said, are not strictly a function of the location of base points, and that was at para 369 of the Tribunal's decision.

So, how do we go about defining the relevant coasts? The Barbados-Trinidad and Tobago Tribunal spoke of the coasts abutting on the areas to be delimited, and that's another way, I think, of putting the point already mentioned that relevant coasts are those that contribute to the delimitation in a very

14:49:18 general sense.

Now, in the Gulf of Maine case, the chamber identified the relevant coasts by reference to the coasts that frame the delimitation area. So, it identified the coasts around the Gulf of Maine as the framing of the delimitation area, but it treated as irrelevant coasts that were outside, even though those coasts had been identified by the parties as framing the broader Gulf of Maine area, so the coasts going northeast from Cape Sable up to the coast of Canada, of Nova Scotia and the coasts going southwest from Cape Cod were argued by the parties to be part of the Gulf of Maine area, but they were rejected by the Tribunal as irrelevant to the delimitation. In short, there was a close relationship between the coasts and the area to be delimited, and any suggestion that coasts outside that area should be taken into account was rejected.

Now, as we have pointed out in our written pleadings, and the jurisprudence shows, the relevant coasts are coasts that face onto or abut the area to be delimited. And this means that the relevant coasts are those that extend to a point where the coasts face away from the area to be delimited. On Suriname side, the relevant coast extend from the Corantijn River to the Warappa Bank. From there on, the coasts turn southeasterly, and since it no longer faces or abuts onto the area to be delimited, it is no longer relevant.

On the Guyana side, the relevant coast extends from

14:50:56 the Corantijn River to the Essequibo River, and as I mentioned earlier, after a short turn northwards, the coast returns to northwesterly trend, but from Devonshire Castle Flats on, it no longer faces or abuts into the area to be delimited.

Now, Guyana's response to our identification of the relevant coasts has evoked metaphors from the field of surgery. In the case of their coasts, we were accused of amputation. In the case of our coasts, I think the metaphor moves to cosmetic surgery, and we were accused of enhancement. My colleague Mr. Reichler saved some of his choice rhetoric, I think, for our determination of the relevant coast, and I think he said circular, subjective, and arbitrary, but he was silent on the jurisprudence on which our determination of the relevant coasts was based, and pretending that the jurisprudence does not exist does not make it go away.

Guyana's principal objection to the relevant coasts identified by Suriname is that they're not determined by reference to its own delimitation method. It wants the relevant coasts to extend to the outer base points for the drawing of an equidistant line. So, it takes the view that on the Guyana's side, the relevant coasts identified by Suriname is too short because it does not extend to cover all of the base points from which an equidistance line would be drawn, and on the Suriname side, the coasts identified by Suriname or the coast identified by Suriname is too long because it extends

14:52:33 beyond the equidistance base points.

And the simple response to this is that it is just wrong, as a matter of law. The determination of the relevant coasts is not an operation that is linked to any particular delimitation method. As my colleague, Professor Greenwood, said in his opening address yesterday, it is the geography that dictates the method, not the method the geography, and that's why the Court in the Nigeria-Cameroon case said that it must define the relevant coasts of the parties by reference to which the location of the base points to be used in the construction of the line will be determined. In other words, it's the relevant coasts that are used for defining the base points, not the other way around.

Now, Guyana also claims support from Dr. Smith for defining the relevant coasts by reference to equidistant base points, but we already pointed out, I think, in the Rejoinder, that that was not what Dr. Smith said. He said simply that since the question was whether the provisional equidistance line was appropriate, one could look at the coasts extending to the equidistance base points, and that's quite a different point.

And Dr. Smith admitted in cross-examination that you might have different relevant coasts if you were looking at different delimitation methods.

Now, a question related to the identification of

14:53:54 relevant coasts is the question of how these coasts are to be represented. And Suriname has done so by the use of straight-line coastal fronts. Now, Guyana's objection to Suriname's coastal fronts to the way they are drawn, to their length, to the direction they take, but in our view Guyana can really have no objection in principle to the use of coastal fronts as an aid to maritime delimitation. Indeed, Guyana's expert, Dr. Smith, recognizes that using a single-line coastal front is one method to calculate a state's relevant coastline, although he suggests others as well. And as we shall point out, Guyana's own relevant coastlines are, in fact, based on a coastal front methodology.

Now, the idea of coastal fronts is really quite simple. The relevant coasts could be represented, as they actually are, following the low-water mark, along the sinuosities of the coast, or they can be generalized and viewed as simple straight coastal fronts. And for the purpose of drawing coastal fronts, a simple straight line could be used instead of following all sinuosities, or a series of straight lines could be used. Courts and tribunals have frequently used a coastal front method for determining coastal direction and projection, as well as for measuring coastal lengths. That was done in the Gulf of Maine case. It was done in the Canada-France arbitration over St. Pierre and Miquelon.

Now, with respect to the coastal front on the Suriname

14:55:35 side, the coast runs in general east-west direction, and so does the coastal front. In respect of Guyana's coast, it runs northwesterly and southeasterly, and the coastal front line drawn by Suriname reflects this.

Now, admittedly the Guyana coast is somewhat more complicated. In a sense, it consists of three segments. The first segment from the Corantijn River to the Essequibo River, which we have just drawn, there is a short segment north to Devonshire Castle Flats, and then there is the Devonshire Castle Flats northwesterly to the border of Venezuela, the area that I said is clearly outside the relevant coasts.

Now, the Guyana coast is so--as a result, the Guyana coast is what one might say stepped out at the Essequibo River. Now, Suriname's coastal front line for the coast of Guyana reflects the fact that only the first segment faces into the area to be delimited, although arguably the short second segment could be said to do so as well. Beyond Devonshire Castle Flats, as we pointed out, the coast no longer faces into the area to be delimited, and it's simply not relevant. So, it should not be included in Guyana's coastal front.

Now, Guyana's substantive disagreement with the coastal front lines drawn by Suriname is that they purport to represent coasts that face the area to be delimited, and Guyana claims that Suriname's approach lacks legal or logical foundation and that it is subjective. Well, we already pointed

14:57:12 out the legal foundation for drawing coastal front lines in order to reflect coasts that face the area to be delimited, and we have not seen any contradiction of that point by Guyana, but let us look at the alternative that Guyana proposes. A so-called mathematical way of determining the relevant coastal fronts which presumably solves the problems of logic and subjectivity which ours apparently have fallen into, and I want to refer to the study here found at Annex 3 of the Guyana's Reply, the Johns Hopkins report, and Guyana presented this report to the Tribunal as an independent report from the John Hopkins Applied Physics Laboratory which determined mathematically which parts of Guyana's and Suriname's coastlines actually face the maritime boundary and the lengths of those facing coasts.

And that was from paragraph 3.26 of the Reply.

The Johns Hopkins report produced, we were told, something called area balance lines, lines that had the same amount of water on the land side of the line as land on the water side of the line.

Now, we were intrigued by the fact that counsel for Guyana did not refer to the Johns Hopkins area balance lines in argument last week, and we wondered whether Guyana had abandoned reliance on this study. Perhaps they realized after the Reply had been filed that they had forgotten to apply the Gertrude Stein test to it.

14:58:48 In any event, while we have no doubt the report was independent, and we accept without qualification that the process of the Johns Hopkins experts were engaged in was mathematical, we cannot see how the result does what Guyana claims for it. The lines that the study produces simply do not represent coastlines that actually face the maritime boundary.

Now, let me look closely at what the Johns Hopkins experts have done, and if you'll forgive me, I will not use the technical language of geodecists, but a language that as a simple lawyer I can understand.

Essentially what the Johns Hopkins experts purported to do was to take a series of low tide points along the coast of Guyana and then of Suriname and run a linear regression line through those points. Now, a linear regression simply provides a balance between all of the points, and it's a perfectly acceptable method in order to find a line of best fit for those points. And if the low tide points actually reflect the contours of the coast, including coastline protrusions and indentations, such a line could balance the distance between the low tide points on either side of the line. This will balance those protrusions and indentations, land, and water on either side of the line.

Well, so far so good, but that's not quite what the Johns Hopkins experts did. Their linear regression line, their line of best fit, has a predetermined starting point at point

15:00:42 GL 001, which is practically on top of the 1936 Point or Point 61. But if you're line of best fit has a predetermined starting point, then it's no longer a line of best fit. It's no longer a real regression through the low tide points. It's a line of best fit altered to coincide with a particular starting points. Let me illustrate this.

A linear regression line through the points on the graph runs like this. And that line balances the distance to the points on either side of the line. But if you require that the line start at a defined point, then it runs on a graph like this. It is no longer a true line of best fit for the points on the graph.

So, if you predetermined that the linear regression line must run through any particular low tide point, it's no longer a line of best fit for all of those points. And that is the first problem with the Johns Hopkins area balance lines. By predetermining the starting point, you are, in a sense, predetermining the line. But there is a further sense in which the area balance lines are predetermined. The Johns Hopkins experts list low tide points through which the line of regression runs along practically the whole of the coast of Guyana and practically the whole of the coast of Suriname. And they're quite frank about this. They were trying to get the longest line possible. So, a built-in assumption was that the whole of the coastlines of Guyana and Suriname potentially face

15:02:37 the area to be delimited. In short, the very point that Guyana says the Johns Hopkins experts were determining mathematically--that is, which parts of the coasts actually face the maritime boundary--was assumed right from the outset.

And if the Johns Hopkins experts had not been constrained to start the line at a predetermined point and to end it on the coast, their area balance line on the Guyana side would have continued all the way to the Venezuela border, and on the Suriname side it would have continued all the way to the French Guiana border, so that all of the coasts of both of the parties would have faced the maritime boundary.

So that the predetermined--the constraint of a predetermined starting point imposed a constraint of an ending point. The land that was gained as the line started out could not be fully compensated for, if the line continued right to the Venezuela border, so it had to be stopped short. So, in a sense the constraint at the start of the line forced a constraint at the end of the line.

And my point is simply that if the assumption is that all of the coasts of Guyana or of Suriname potentially face the area to be limited, then a linear regression through the low tide points along the whole coast can produce a line that will run the whole length of that coast. But if you start at a predetermined point, it may not.

Now, if the Johns Hopkins experts had been asked to

15:04:24 start with the assumption that the relevant coasts are the coasts that face into the area of convergence or overlap of the coastal projections of the two States, an assumption that we would say is based in the jurisprudence, then a linear regression line would have been run for the low tide points on those particular lengths of the coasts, and we've applied the Johns Hopkins methods to the coasts we identify as relevant from the Corantijn River to the Essequibo River on the Guyana side, and from the Corantijn River to the Warappa Bank on the Suriname side. Those are the area balance lines applying the Johns Hopkins method for the relevant coasts identified by Suriname. And what is interesting to note is that the coastal direction line for Suriname is essentially in the same azimuth as the coastal front line identified by Suriname, and the area balance line for Guyana runs practically the same as the coastal front line identified by Suriname. Suriname identified a coastal front line of 304 degrees, azimuth of 304 degrees. That area balance line is 307 degrees.

Now, we are casting no aspersions on the work of the Johns Hopkins experts. They were no doubt asked to start the line at a predetermined point, and they were no doubt asked to produce the longest line possible, the very things that we say have predetermined the result. But if you start with assumptions about the outcome, or if you start with assumptions that predetermine the outcome, you cannot claim the method you

15:06:02 used proves what you predetermined, and you certainly do not need the mathematical expertise of Johns Hopkins University to prove something if you have already predetermined it.

But even if the result was not preordained, there is still a problem with the Johns Hopkins lines. And it's inherent in the notion on which the whole approach is founded. What is the relationship between balancing land and water on either side of the line and the orientation of the coast towards the delimitation area? So, if Guyana had put forward the Johns Hopkins lines as lines that reflected the general direction of the coasts they lay along, we might have thought that that made some sense. We might have found it easier to understand what they were trying to say. The claim would have still been irrelevant because the lines include coasts that have nothing to do with the delimitation, but they claim more than that. They claim that these lines actually face the maritime boundary. Well, they certainly face the ocean. Coasts do have a tendency to do that, and lines drawn along the coasts will do the same thing. But facing the maritime boundary or facing the area to be delimited is quite a different and a much more restricted notion.

If we look at some other boundary areas, we will see why Guyana's claim that the Johns Hopkins lines face the maritime boundary is simply not credible. Look at the Tunisia-Libya case. There the Court treated the coast as far

15:07:40 as Ras Tajoura as relevant because beyond that point the coasts did not face into the area to be delimited. But if the Johns Hopkins method had been applied to the Libyan coast, and we have done this taking a limited number, not as many as Johns Hopkins experts took, but enough representative low tide points. If the Johns Hopkins method had been applied to the Libyan coast, that is if the linear regression line is drawn through the low-tide points on the coast starting from the land boundary terminus, the line would extend well beyond Ras Tajoura. Does that mean the ICJ was wrong in its perception of the coasts that faced into the area to be delimited?

And by the same token, the Johns Hopkins approach could be applied to the coast of the United States in the Gulf of Maine area, which starting from the land boundary terminus would produce an area balance line that ran the full length of the East Coast of the United States all the way down to Tampa, Florida. So, according to the Guyana's approach, the coast of the Carolinas apparently faced into the Gulf of Maine delimitation area.

Now, attempting to find a way of determining coasts that face the maritime boundary or face the area to be delimited is an objective that is worthy and is logical and it's to be commended, but there is no logic to a method that includes as coasts facing the boundary area coasts that patently do not do so. We would suggest, therefore, that the

15:09:15 Johns Hopkins report deserves to be put into the category of research that is interesting, technically accurate, but of no practical use, at least for the purpose that Guyana claims to use it.

So, Guyana's mathematical rebuttal of Suriname's coastal front lines really comes to nothing. So what then does Dr. Smith say about coastal front lines? Well, Dr. Smith does not seem to agree with my colleague Mr. Reichler's attack on coastal fronts because for Dr. Smith, coastal fronts seem to be quite benign. He says that there is simply one method that can be used in maritime delimitation to represent coasts, and he shows how this can be done for Suriname and Guyana. And that was Figure 10 of his report.

But when it comes to discussing the coastal front lines drawn by Suriname, what Dr. Smith has to say is somewhat perplexing. He states somewhat guardedly, I would say, in paragraph 42 of his report that Suriname's approach to creating coastal fronts may be subject to criticism. And I think the guardedness was obviously deliberate because his criticism of Suriname's coastal fronts does not, in fact, amount to anything of any real consequence.

His principal criticism seems to be that the coastal front lines identified by Suriname do not have a common terminal point, something he thinks would seem appropriate and reasonable to do so, and, of course, we agree. We pointed out

15:10:52 in our Rejoinder, unless they are parallel lines representing coastal fronts, will, in fact, meet at some point, but where lines representing coastal fronts meet in fact will depend upon the particular coastal configuration, and the relationship of the coasts in question. Whether they meet at the land boundary terminus will depend upon how the coasts are aligned and where the land boundary terminus is located.

Now, not wanting to accept the geography as it is, Dr. Smith's solution is to bring the Guyana coastal front landwards. He suggests both coastal fronts meet at Guyana's Point 61, which he described as the land boundary terminus. But the result as far as Guyana's coastal front is concerned is somewhat bizarre. It produces a coastal front line that is, in fact, diagonal to a good part of the coast. Starting inland at Point 61, the line crosses the coast once and then heads out over the water to the next coastal point. We would say that the only thing that can be said for such a line is that it clearly highlights the convexity of the Berbice Headland.

And after all of this, what does Guyana do? They do not follow the sinuosities of the coasts for determining the relevant coasts which is the real alternative to coastal fronts. They adopt what Dr. Smith calls controlling point coastal fronts, which consists of joining the base points for the equidistant line. Now, there is no explanation either in Dr. Smith's report or as far as we can see in Guyana's written

15:12:34 or oral pleadings to show how this approach is justified in law or whether it has ever been used by a court or a tribunal in maritime delimitation, but it seems to be the preferred approach because as we saw in the Reply--we saw Guyana use it in the Reply, and we saw it again last week when Mr. Reichler showed us his tests of proportionality.

So, at the end of the day, the coastal front issue seems to come down to this: Both Guyana and Suriname use coastal fronts to represent the actual coasts. Suriname uses straight-line coastal fronts. Guyana uses base point to base point coastal fronts. Coastal fronts are bad it seems unless they're drawn by Guyana and in accordance with Guyana's preferred method, which means it must be derived from equidistance.

Again, the method drives the geography. It's no surprise then we never heard a word from Guyana last week to show any legal justification for its own coastal fronts.

Let me turn briefly to coastal length. Suriname's identification of the relevant coasts and the coastal front lines to represent them does have consequences for the lengths of those coasts. Now, the determination of lengths of relevant coasts can have important implications for delimitation. A significant disproportion in the lengths of relevant coasts can be the basis for an adjustment of the line. That was done in the Gulf of Maine case, Libya and Malta, by the Arbitral

15:14:11 Tribunal in Newfoundland and Nova Scotia, by the Tribunal in Barbados-Trinidad and Tobago. The length of the coasts may also be relevant when considering proportionality in terms of the relationship between coastal lengths in the areas of maritime space allocated as a result of the delimitation, the idea contemplated in the North Sea cases that we saw in proportionality models produced by Guyana last week.

Now, in respect of length of coasts, Guyana has simply measured the length of the coast that faces the area--I'm sorry, the length in respect of coastal lengths, Suriname has measured the coastal front lines. Guyana does not consider that measuring the length of the coasts that face the maritime area to be an appropriate way to determine length of coasts because it says it lacks any legal or logical foundation, as I've said. But doing what Suriname has done is what the law requires. The relevant coasts are the coasts that face the area to be delimited, and it is those coasts which must be measured.

The result, as we have shown, is that the lengths of the coasts of Suriname are 140 nautical miles, and the lengths of Guyana's coast is 90 nautical miles. Even if one was to add to this the eastward-facing coast along the Essequibo River to Devonshire Castle Flats, the length of the relevant coasts of Guyana would be 120 nautical miles. Still significantly shorter than Suriname's relevant coasts.

15:15:43 Now, I will say no more about coastal length at this stage because I'm going to come back to it in a subsequent presentation when I talk about the question of proportionality.

In fact, the differences between the parties on coastal lengths are really a reflection of their differences about coastal fronts. Once you solve the question about coastal fronts and relevant coasts, I think the question of length loses its contentiousness.

What I would like to turn to now, Mr. President, is the question of concavities and convexities. That is the question of the actual configuration of the coasts. In the present case, there has been much disagreement focused around the issue of concavities and convexities, although I would suggest a good deal of this discussion has been overblown. Concavities and convexities along coasts of the parties are relevant because of their potential to have an impact on the delimitation method. In our Counter-Memorial, we pointed out that the Guyana coast is characterized by a series of three minor but significant convexities between the Corantijn River and Berbice Rivers, the Berbice Headland, between Berbice and Essequibo, and then a further and more pronounced convexity of the coast at the western extremity of the Essequibo River at Devonshire Castle Flats.

On the Suriname side, while both the Hermina Bank and Warappa Bank have are rounded features and characteristics,

15:17:14 there is also more prominently concavity between the eastern bank of the Corantijn River and the Coppename River.

Now, I mention these concavities and convexities at this stage simply as matters of fact. The consequences that flow from the effect of these convexities will become clear when we look at their effect on a provisional equidistance line. I should mention, nevertheless, that Guyana's colorful portrayal in its Reply of Suriname seeking to morph its coasts into a Germany-type concavity simply misses the point that Suriname is making. It's not that the coast of the Suriname resembles the coast Germany in the North Sea cases, rather it is that the principle of the North Sea cases is relevant. This means that depending upon its location and its impact on delimitation, the existence of a concavity or of a convexity may make a particular method of delimitation inappropriate for achieving the required equitable solution. I'm going to come back to that point when I come to the delimitation methods.

Now, here it is appropriate to turn again to Guyana's argument because they have quite a different perception of the geography when it comes to the question of concavity and convexity. And this position is based partly on what Dr. Smith said in his report and partly on what they take Dr. Smith to say, even though he did not say it. What Dr. Smith did say in this area is based, in our view, on a perception of geography that has no basis in the law of maritime delimitation.

15:19:00 Now, the beginning of Dr. Smith's error is his view that guidance for maritime delimitation can be provided by viewing the geography of the area as if there were no political boundaries. In paragraph 15 of his report, he said, "To define geographic realities with political borders often leads to incorrect descriptions of an area. One should ignore political boundaries when describing the geography of an area and only use political names for reference." And as a statement in opening a geography 101 class, this makes evident good sense, but as a statement about how geography is to be described for the purposes of maritime boundary delimitation, it's simply wrong.

What is being sought in looking at the geography of an area for the purposes of maritime boundary delimitation is an understanding of the geography of the coasts of each of the two states involved, and this is done in order to understand the relationship of the coasts of the two States to each other and the impact the coasts of each party may have on particular methods of delimitation.

Now, there is no doubt that there may be some descriptive value in identifying features across boundaries, such as the description by the chamber in the Gulf of Maine case that the Gulf of Maine is a rectangle, and that's how the chamber described the area. But the description had no implications for delimitation, and no importance for selecting

15:20:30 a method of delimitation.

The danger is that if the geography is described as if there was no land boundary between the parties, the geographical analysis of the coasts of the two parties may become disconnected from any context that is relevant to delimitation. And that, we would submit, Mr. President, is precisely what has happened here, because the erasure of the land boundary between Suriname and Guyana is really at the heart of Dr. Smith's analysis and Guyana's claims about the geography are built on it. It is the basis for what Dr. Smith describes as a long and shallow concavity that extends from the Essequibo River through the Coppename River. A concavity which, as Dr. Smith says, is formed by both coastlines.

And this long, shallow concavity idea becomes central to much of Guyana's approach. It's essentially the semi-circle drawn in Guyana's Plate 3 and reproduced here.

If you erase the boundaries or the boundary and the coast of Guyana and Suriname form a common long, shallow concavity, then the coasts do not change direction at Corantijn River, as Suriname claims. The Berbice Headland is suppressed. Hermina Bank becomes the convex feature. Then in an even greater act of prestidigitation, Dr. Smith says that all of the base points for the provisional equidistance line on the Guyana side lie within or at the beginning of the concavity. Not only has it erased the Berbice Headland, but he's shown there's no

15:22:18 convexity at the Devonshire Castle Flats. This, Mr. President, is hardly dispassionate geographic description or analysis.

The consequences that Guyana seeks to draw from the long, shallow concavity shows clearly why for the purposes of the maritime boundary delimitation you cannot ignore the political geography or the land boundary terminus as Dr. Smith appears to advocate. If you put the boundary back and look at the coasts not combined, but the coasts on either side of the boundary, then a different perspective emerges. The coasts do change direction at the mouth of the Corantijn River. The Berbice Headland is obviously convex, and so is the coast of Devonshire Castle Flats. And if one looks at Guyana's coast alone, the long, shallow concavity disappears. If you look at Suriname's coast alone, you see concavity and convexity. You need to combine Guyana's coast with Suriname's coast to create any concavity that involves Guyana's coast.

And to be fair to Dr. Smith, he does not say in this is report that Guyana's coast is concave in relation to the coast of Suriname, but Guyana is not so reticent. Indeed, it is quite explicit. It claims that the convexity of Suriname's coast, coupled with the concavity of Guyana's coast--and that's in the Reply at paragraph 315--makes the provisional equidistance line prejudicial to Guyana. In short, Guyana has taken something Dr. Smith said that the coasts of Suriname and Guyana combined form a concavity and turned it into something

15:24:09 Dr. Smith did not say--that Guyana's coast, on its own, is concave.

One can compare what Guyana is seeking to do again with the geographical configuration in the Gulf of Maine. There is no denying, as the chamber pointed out, that the Gulf of Maine is in the shape of a rectangle, but that rectangle is formed by the coasts of Canada and the United States. If you take away the coast of Canada, you cannot say that the coasts of the United States form a rectangle. So the fact that you can identify a concave area combining the coasts of Suriname and Guyana does not mean that when you remove the coasts of Suriname from the equation, the coasts of Guyana remain concave.

So that the semi-circle so boldly depicted by Guyana to represent a concavity essentially shows nothing that is relevant to this case. One just as well might have drawn a semicircle running through the Berbice Headland to Hermina Bank. That would equally tell us nothing that is useful for this case. The configuration of the combined coasts of the party tell us nothing about whether there are concavities or convexities on one side or another. Once the political boundary is inserted, the Guyana coast is seen for what it is: Generally facing northeastwards, as Dr. Smith said, but with a notable convexity, Berbice Headland and another convexity at Devonshire Castle Flats.

15:25:42 Moreover, the concavity on the Suriname side between the Corantijn River and the Coppename River remains. And there is no need to draw a semi-circle on a map to show this.

Mr. President, I'm not sure when you wish to take a break. I am at a point where I would be going on a little longer in the next section, so if you felt it appropriate to take the coffee break now, we could do it, or I can continue, as you wish.

PRESIDENT NELSON: Thank you, Professor McRae.

Possibly we can take a break now and resume at quarter to four. Thank you.

(Brief recess.)

PRESIDENT NELSON: Professor McRae, you may continue.

PROFESSOR McRAE: Thank you, Mr. President.

Mr. President and Members of the Tribunal, I would now like to turn to the issue of coastal projection, and looking at the approaches of Suriname and Guyana in this respect, it seems to me we are talking about two different things. When Suriname speaks of "coastal projection," it is referring to the way in which the coasts of the two States face into the area to be delimited. I pointed out earlier the concept is easy to understand in the case of opposite States since their coasts both face each other and face or project into the area to be delimited, and Suriname and Guyana, of course, are adjacent States, and thus the way in which the opposite--the way in

15:47:18 which these States face the area to be delimited is much more complicated.

Where the coasts of the State meet at an angle, as they do here, certain portions of the coasts of both states face into the area to be delimited, and hence can be understood as projecting into that area, and this is what the courts and tribunals commonly refer to when they talk about the coasts of adjacent states facing into the area to be delimited. By contrast, in our view, Guyana seems to be talking about something else. While we talk about coastal projection in the relevant areas, Guyana speaks of appurtenant and relevant maritime areas, based on the idea that the area in dispute is within 200 miles of the coast of both parties.

Guyana rejects what it describes as Suriname's projecting coastal facades in only one direction. In its views, coasts should project in all seaward directions to encompass all of the appurtenant maritime space within 200 miles of the coastline, and we saw this discussed in the detail in the discussion of proportionality last week.

Guyana puts the issue in terms of a difference between radial and frontal or directional projection. Now, the debate between the advocates of radial projection and frontal projection have been played out in the cases at least since the Gulf of Maine case, but in many respects it's a somewhat sterile debate and, as articulated by Guyana, creates more

15:48:52 opposition, or creates an opposition that, in our view, is more imaginary than real. There is no doubt that for the purpose of entitlement, coasts can be understood as projecting in a radial fashion. The depiction of the outer limit on the 200-mile zones by arcs and circles is simply evidence of this, and an island is an obvious case, as Professor Oxman mentioned this morning, where the entitlement of the State radiates out in all directions.

But entitlement to a zone and delimitation with a neighboring State are quite different operations. In delimitation between an island State facing a mainland State--Malta and Libya, for example--some element of radial projection is involved in depicting the projection of the coasts of both states. But in the case of adjacent states, the idea of radial projection is at best just not helpful, or at worst it's simply a covert way of reinforcing equidistance as an obligatory delimitation method, and it was with this objective--that is, promoting equidistance--that radial projection was at the forefront of the Canadian case in the Gulf of Maine case. Canada demonstrated in its oral pleadings with not, I might say, a great deal of subtlety, that the intersection of the competing radial projections from the coast of Canada and the United States formed, lo and behold, an equidistant line, and the Chamber, to no one's surprise, was not taken in by this. It saw that radial projection was linked

15:50:37 to distance from the coast, and that's all that was being said, was that distance implied equidistance as a solution. It was just another attempt to make equidistance a binding rule of law which is what we heard being advocated last week.

But viewing the coasts as projecting radially simply gives no guidance on how to seek an equitable solution, and that leads to the central point about radial projection in the context of maritime delimitation certainly between adjacent states. It simply is not helpful. The objective in delimitation is not to identify all of the areas that both parties can potentially claim either in the abstract or given the presence of the other. That's the issue of entitlement. Rather, the objective is to identify the area that is in dispute between the parties because the projections of their coastlines converge into the same maritime area and overlap; or to put it another way, where the coastlines abut into the same maritime area.

Now, focusing on the area in front of the coasts where the coastal projections converge and overlap, and where the claimed boundaries are located, allows Tribunals to assess the impact of proposed boundaries, to determine the areas that are allocated and consider questions of proportionality. Adding areas on either side of the coastal projection, which is really what radial projection does, does nothing to facilitate deciding the consequences of delimitation, and that's why

15:52:10 tribunals have invariably dealt with coastal projection in frontal or directional terms.

Now, let me be clear: Directional or frontal projection is not a denial of radial projection. It's simply a way of confining coastal projection to the area that has to be delimited so that it becomes a useful way of looking at the delimitation process. So, in the Gulf of Maine case, the Chamber spoke of the division of areas of convergence and overlapping into the maritime projections of the coastline, the areas of convergence and overlap of the maritime projections of the coastline. It ignored the Atlantic-facing coastlines of Canada and the United States because their projections did not converge and overlap. Under a radial projection theory, the coastlines on either side of Canada and the United States, as we saw in that radial projection diagram, would have converged and overlapped, but the Chamber was clearly thinking about frontal or projectional projection.

And perhaps the clearest indication of directional or frontal projection is found in the decision of the Arbitral Tribunal in Canada and France; that's the St. Pierre/Miquelon arbitration, and this was the illustration we saw before during Professor Oxman's address. The boundary accorded to the islands of St. Pierre and Miquelon was based directly on the notion that both Newfoundland and the islands of St. Pierre/Miquelon projected southwards, and that was the reason

15:53:43 for that long, thin strip of maritime projection that resulted in the boundary area. The coasts to the east of Newfoundland out into the Atlantic, although they might project radially into the area is simply not relevant.

The same idea is found in other cases as well. In Nigeria and Cameroon, the coastline beyond the Debundsha Point was regarded by the court as facing the Island of Bioko and not facing Nigeria; hence, it would be regarded as irrelevant to the area of delimitation. Once again, the perception of coastal projection is frontal, not radial.

Now, as I have said, radial projection is simply not helpful. It does not provide any guidance, and it simply distracts tribunals by including areas that are a long way away from the area of delimitation. In short, the relevant coasts is identified by Suriname project towards the area to be delimited, and this has significance for the finding the relevant area to which I'm going to return, and it will also become important when we look later on at the question of proportionality.

Let me turn, then, to the relevant area, which is the final thing I'm going to deal with in the context of geography before I move on to method. The identification of a relevant area is really the final process after analyzing relevant coasts and seeing how the coasts that we represented and how they project, and the purpose of defining a relevant area is to

15:55:12 define an area in which the effects of any particular delimitation method and the line that results from the application of the method can all be assessed. Now, like defining a relevant coast, defining a relevant area is not a matter on which there needs to be scientific exactitude. It's neither necessary nor useful.

And in Tunisia-Libya, the Court rejected the idea that the whole of the continental shelf appertaining to the parties could be considered relevant to the delimitation. In paragraph 74 of the judgment, it said: "The only areas which can be relevant for the determination of the claims of Libya and Tunisia to the continental shelf in front of their respective coasts are those that can be considered lying either off the Tunisian or off the Libyan coasts. These areas formed together the area which is relevant to the decision of the dispute."

What the Court was saying was that it was the area of overlap between the coastal projections of the two States that constituted the relevant area, and it's for this reason that the areas identified by Guyana as the appurtenant and relevant maritime areas have no basis in law, and they really do not offer any guidance to the Tribunal in the task of delimitation.

Now, counsel for Guyana spent some considerable time on Saturday morning explaining the appurtenant and relevant maritime areas, and it was a careful explanation of what seemed a fairly complicated process. Although the complication was

15:56:41 probably unnecessary, because, in essence, what Guyana has done is draw 200-nautical mile arcs from the 1936 Point. The area enclosed is 200 miles from the coasts of both states and, according to Guyana, it is the area that each State could claim in the absence of the other. This is the area that Guyana regards as relevant to this delimitation, and it was the area for testing proportionality.

But in our view, Guyana's concept of relevance seems dislocated from any reality. It would appear that the approach is based on the reference to potential overlapping entitlements in the Jan Mayen case, where they talked about the potential overlapping entitlements to 200-mile zones of Norway and Denmark, but there the overlap was between opposite coasts. The areas were in front of the relevant coasts of the two States. On the other hand, here, Guyana's area relevant to delimitation has no relationship to the relevant coasts.

Guyana does claim there's a relationship between its appurtenant relevant maritime areas in its relevant coasts because it refers to the projections seaward to 200 nautical miles by means of an envelope of arcs, so it does sound as if you are using a radial theory, it sounds like it's related to the relevant coastline. But as I have mentioned, essentially what it has done is draw a 200-mile arc from the 1936 Point which has no relationship to the relevant coastlines or place of intersection.

15:58:20 In a sense what is happening here is a reverse engineering of a relationship between relevant coasts and appurtenant and relevant maritime areas by invoking a radial projection theory. That area is seen to be related to those relevant coasts if you have a radial theory that every point in the coast radiates out in every direction, but that simply demonstrates that radial projection is not very helpful. How can the maritime area in front of Georgetown, Guyana, be usefully perceived as being within the coastal projection of Suriname? Well, that's what the radial projection theory suggests.

We would suggest that this lack of any coherent intellectual connection between the Guyana's area relevant to the delimitation in their relevant coasts simply provides no guidance for the purposes of delimitation. It's simply of no help to the process of delimiting the maritime boundary. It encourages the kind of argument that we have heard comparing absolute areas, treating delimitation as if it was a parceling up of the offshore areas and deciding who gets more or less. But as the Court said in the North Sea case, delimitation is not allocation.

In our view, Mr. President, Guyana's attempt to broaden the relevant area has to be rejected. It really is simply an attempt to broaden the area to support the proportionality claims, and in the later presentation I will

15:59:44 point out how the proportionality claims of Guyana cannot be supported. In our view, the relevant area in this case is the area that lies in front of the relevant coasts of the parties, and within that relevant area the claims of the parties are to be found. The area of overlapping claims is within that relevant area, although it's not necessarily co-extensive with it. Relevant area is somewhat broader concept.

On the eastern side, Guyana's 34-degree line lies towards the outer limits of the relevant area, and on the western side the relevant area extends to the 0 degree north line. I will point out in subsequent presentation this is going to have some importance when we turn to questions of proportionality.

Mr. President, with your permission, I would like to now turn to the question of the method of delimitation. I would look first to the two methods that have been discussed by the parties in this case--the equidistance method and the angle bisector method--and then I will consider the provisional equidistant line in this case and show why such a line does not produce an equitable solution. I will then show why the appropriate method in this case, in our view, is an angle bisector. And if I don't go through all of that, I will deal with the latter part of that in my next presentation, but let's see.

At the outset, I would like to emphasize what

16:01:14 Professor Oxman said this morning about delimitation methods. One thing on which the law of delimitation is clear is that there is no obligation to choose any particular method. The choice of the appropriate method is to be made in the light of the relevant circumstances, and those circumstances generally are geographical circumstances.

The equidistance method, let me deal with that first. Now, there is no doubt the equidistance method has a long pedigree in maritime delimitation. Its attraction is its simplicity. You can always draw an equidistance line by identifying the base points along the coasts of the parties and then constructing a line that every point is equidistance from the closest base points on the coasts of each party. And where the coasts are opposite, the equidistant or median line seems to have an inherent logic. A median line will track the actual configurations of the opposing coasts.

But it was recognized at the outset, as Professor Oxman mentioned this morning, that particular coastal features may have an effect on the line, and that effect may be considerable. Islands lying off the coast, peninsulas, promontories have always been seen as features that potentially have an effect on a line based on equidistance, but undermines the basic notion of equal division that equidistance in its purest form espouses.

But it was also recognized from the North Sea cases

16:02:54 onwards that the disadvantages of equidistance were potentially greater in the case of adjacent States than in the case of opposite States. And the reason for the distinction between opposite and adjacent States was articulated by the Court in Libya-Malta, and it said in the case of adjacent States--and this is paragraph 70 of the judgment, the Court said: "Any distorting adjacent coast--any distorting effect might well extend and increase throughout the entire course of the boundary." In the case of opposite States, the Court said, "the influence of one feature is normally quickly succeeded and corrected by the influence of another as the course of the line proceeds.

Now, what the Court in both the North Sea cases and in the Tunisia-Libya case was saying is that while an equidistance line can be self-correcting in the case of opposite States, it cannot be self-correcting in the case of adjacent States.

Now, let me illustrate this point. If there are opposite coasts, a promontory on one coast will alter the course of the line, but after passing the promontory, the line resumes its median or equidistant character. If, however, the same coasts were in relation to adjacency rather than oppositeness, the impact of the promontory would continue throughout the full course of the line.

What is clear from this illustration is that the precise impact of a particular feature on an equidistant line

16:04:42 will depend upon its location, if I may borrow that phrase from my colleague, Mr. Reichler, and orientation. In the case of adjacent States, the further the feature is away from the land boundary terminus, the less the impact will be. What it also shows in the case of adjacent States, the feature that affects the course of the line first has the lasting effect on the line. Subsequent features have an effect, but it is an effect on a line already determined by the first feature. The result is akin to what economists sometimes refer to as "path dependency."

So, coastal features that are adjacent to the land boundary terminus will have the greatest potential for affecting equidistance line drawn between adjacent States, and that proposition was made clear by counsel for Germany, Professor Jaenicke, in his oral argument to the Court in the North Sea cases. He produced a diagram for the Court which has now probably become famous, which we produce here. Professor Jaenicke was showing what he called the "diversion effect;" that is to say, if the headland close to the boundary extended one kilometer from the coast, the impact at a hundred kilometers was a distance of more than 10 kilometers. And if the headland protruded five kilometers, then the distance of the equidistance line that was deflected was 30 kilometers. This illustrated the basic point that Professor Jaenicke was making. The further you go into the sea, he said, the more the

16:06:36 boundary is diverted from the coast and the more important the more area is included in this diversion effect.

Now, this diversion effect, or the Jaenicke effect, is well-known. Indeed, it was taken up and endorsed by Guyana's expert, Dr. Smith, in an article he wrote in 1989, and we reproduced that article in our Annex, the Rejoinder Volume II, S.R. 32. And Dr. Smith said, "As the headland of one State protrudes further seaward, the equidistant line diverts towards or encroaches upon the neighboring State. This diversion or encroachment decreases the further the line extends."

Professor Jaenicke showed the diversion effect when coasts were adjacent in a straight line, but the same consequence occurs when coasts are aligned at an angle. A headland near the coast of one party will still push the line across the coast of the other party.

Now, diversion is a fact. What is the problem with it? Well, this is something on which Dr. Smith did not make a mistake. Diversion, he says, is encroachment. The problem with alignment is diverted. He says it encroaches or cuts off the coastal projection of the neighboring State, and Professor Oxman illustrated that cut-off effect in his presentation this morning.

Right from the North Sea cases where the terminology of cut-off was adopted, courts and tribunals have seen encroachment or cut-off as a fact that indicates a particular

16:08:14 method produces an inequitable result. I'm going to come back to the Jaenicke effect and show how it is to be applied in the context of this case, and I also show how at that time how Mr. Reichler's very ingenious attempt, I must say, to turn the Jaenicke effect on its head, like the emperor can be readily seen to have no clothes.

But let me turn to the provisional equidistant line and the construction of that line. As has been mentioned several times, the common practice we recognize in our pleadings, the common practice emerging among courts and tribunals is to draw a provisional equidistant line in order to provide a basis for assessing the equities of a particular delimitation; but in doing this, it must be clear that no particular weight is to be attached to equidistance as a method. The fact that an equidistant line can be drawn--and you can always draw an equidistant line--simply says nothing about what method ultimately is appropriate. There is no presumption in favor of equidistance, nor any obligation to show there were special circumstances as some used to argue existed under Article 6 of the 1958 Convention on the Continental Shelf.

It's for this reason that the repeated emphasis of counsel for Guyana on the fact that the provisional equidistant lines drawn by the parties were, in many respects, the same was surprising. Unless there is some contention over particular

16:09:44 base points, skilled hydrographers will always draw an equidistant line in the same way, but nothing follows from this. At times it seemed as if counsel for Guyana was suggesting that since the parties had drawn almost the same or almost identical provisional equidistance lines, they had somehow agreed upon equidistance as the appropriate line for the boundary, as if the fact that one can draw an equidistant line means that they must use equidistance to draw their boundary. As every first-year student of philosophy learns, the is does not imply the ought. The fact that you can draw an equidistant line does not imply that you must adopt this equidistant method.

What also seems to be overlooked in the arguments of counsel for Guyana last week is that the drawing of a provisional equidistant line is a notional exercise. It simply, as was said in Barbados and Trinidad and Tobago, provides a hypothesis. It commits no one to the use of the equidistance method. The fact that Suriname has drawn a provisional equidistant line in this case does not commit Suriname to the use of the equidistant method, nor is there anything untoward in Suriname concluding that, in the light of the particular geographical circumstances, a different method is warranted. There was simply no foundation for Guyana's view that having drawn a provisional equidistant line Suriname somehow has become entrapped by equidistance and cannot propose

16:11:20 some alternative method.

Now, let me turn to the actual construction of the provisional equidistant line, which as I said is relatively uncontested between the parties, and my colleague, Mr. Reichler, spent considerable amount of time on the detail of the base points, and I won't go over that again. I would emphasize that the equidistant line as constructed by Suriname is composed of 32 segments all derived from the relationship of particular coastal features that have affected the course of the line. Those segments can be grouped into three broad sections: The first section runs roughly on a bearing of 28 degrees and is 112 nautical miles long; the second segment, which has an overall bearing of about 13 degrees, is 82 miles long, again nautical miles; and the third segment which runs on a bearing of 270 degrees is 24 nautical miles long.

Now, there are nevertheless two matters on which there is disagreement between the parties. First, there is the question of the starting point. We made it clear in our written pleadings, and Professor Oxman pointed out this morning, the correct starting point for the maritime boundary is the intersection of the 10-degree line with the low watermark. By contrast, Guyana has located a point on the coast east of 1936 Point, point G1, which we say is a line that has no basis in law, conduct or anything else. It just happens to be nearby. And we would suggest that the fact that this is

16:13:04 a contrived point is evident by the way Guyana then goes about constructing its provisional equidistance line because G1 to the first equidistant point is simply a straight line, not an equidistant line.

But at this point I would like to comment on my colleague Mr. Reichler's lengthy statement about the use by Suriname of S1 as a base point for the drawing of a provisional equidistant line. S1, he said, is on Guyana's territory, and thus it cannot be used as a base point by Suriname. If Suriname has sovereignty over the river water only, then his argument is since Suriname has not drawn a closing line across the river, it is not entitled to a base point at S1.

Mr. President, once again, in our view, Guyana has confused the hypothetical exercise of drawing a provisional equidistant line with the real exercise of delimitation of a boundary under the equidistance method. If Suriname had planned to adopt the equidistance method for drawing its boundary with Guyana, it would have drawn a closing line across the mouth of the river and drawn its base points for an equidistance line accordingly. But Suriname takes the view that the boundaries should be drawn on a different basis, one for which there is no need to draw a closing line across the river, and so it has not done so.

But this in no way prevents Suriname from drawing a provisional equidistant line on the basis on which a real line

16:14:40 would be drawn if we were out of the hypothesis of drawing provisional equidistance lines and into the reality of drawing a real equidistant line. In any event, as we pointed out in our Counter-Memorial, once the land boundary terminus has been established, Suriname will draw a closing line across the mouth of the Corantijn River, so Guyana's objections to the Suriname base point at S1 is simply irrelevant.

The second difference between the parties in the drawing of a provisional equidistant line is the use of Vissers Bank as a base point. Now, Guyana objects to the use of Vissers Bank as a base point on the ground that it appears on a chart that was published in June 2005, Updated Chart NL2218, after the proceedings were commenced, and that it did not appear on an earlier version of that chart. Indeed, in order to disprove the alleged unreliability, or in order to prove the alleged unreliability of chart 2218, Guyana enlisted the support of one Dr. Thomas D. Rabenhorst who states in his report in Annex 2 of Guyana's Reply that relevant nautical charting and satellite imagery did not support the location of the base point on Vissers Bank.

Now, Guyana's strenuous efforts to disprove a base point on Vissers Bank are misplaced and ultimately without any point. The base points for the measurement for the provisional equidistant line are to be found along the baseline for the measurement of the territorial sea. Article 6 of the 1982

16:16:29 Convention provides that the normal baseline for measuring the breadth of the territorial sea is the low-water line along the coast as marked on large-scale charts officially recognized by the coastal state.

In our view, Article 5 is clear. The base line for the territorial sea of Suriname is the low-water line along the coast of Suriname as marked on large-scale charts recognized by the coastal state, which is Suriname. Updated chart 2218 is a large-scale chart recognized by Suriname, and thus the low-water line identified in that chart is the baseline for measuring the territorial sea, and that includes the low-water line on Vissers Bank.

But for some reason, Guyana seems to think that it is the coastal state in respect of Suriname's territorial sea, and it is Guyana that must recognize the charts on which the low-water line along the Suriname coast is marked. In its Reply, it says that it prefers U.S. NIMA charts, gives the number, as if somehow Guyana has the right to veto the large-scale charts recognized by Suriname. Nothing in Article 5 supports that interpretation. Guyana is perfectly entitled to the large-scale charts for the choice of determining the low-water mark for its own territorial sea. It has chosen U.S. NIMA charts, and Suriname has no objection to this; but equally, Suriname is entitled to choose the larger scale charts for determining its own territorial sea, and Guyana has no

16:18:12 basis for complaint.

As for Guyana's claims that updated chart 2218 was somehow manufactured for the purposes of this case, we pointed out in our Rejoinder that such a claim is simply preposterous. Nautical charts are not produced instantly. As a memorandum from Captain de Hahn of the Hydrographic Office to the Royal Netherlands Navy points out--and it's found the Annex to our Rejoinder SR43--the origins of the chart date back to 2001, and the cartographic work was based on Hydrographic surveys undertaken in 2002, 2003, and 2004. The conditions under which the charts were produced is set out in Captain de Hahn's memorandum, and they lay to rest the allegations of Guyana of any impropriety.

Here I would like to point out a small error that crept into the presentation by Mr. Reichler last week, when he referred to and quoted from someone he referred to as the hydrographer at the Suriname Ministry of Defense. The quotation was, in fact, from the memorandum of Captain de Hahn who was with the Hydrographic Office of the Royal Netherlands Navy. I am sure the error was inadvertent, but I thought it was appropriate to set the record straight.

As for the claim of Thomas Rabenhorst that he could not find the low-water line on Vissers Bank when he looked at satellite imagery, this really has no relevance. Article 5 refers to charts officially recognized by the coastal State for

16:19:44 a very good reason: Charts provide certainty and stability. They locate low-water lines without each time having to choose between the competing views of cartographers. It would undermine the stability and certainty that Article 5 provides, if officially recognized charts could be challenged by those who claim that they have more recent satellite imagery or better resolution or some preferred satellite imagery. So, until a new chart is prepared, and recognized by Suriname as the coastal State, updated chart 2218 remains the basis for determining the low-water line in the area of Vissers Bank.

But in any event, this whole Vissers Bank issue is a tempest in a teapot. Guyana itself claims that it makes no material difference to the construction of the provisional equidistance line, or as we pointed out it was a small difference as noted in the presentation last week. The last kilometer of the provisional equidistance line is effective for the location of the base point on Vissers Bank. Guyana's main concern of the Vissers Bank base point arose out of its mistaken viewpoint that equidistant base points provide the basis for determining the relevant coasts, but as we pointed out, on that they are simply wrong in law.

Let me turn now, Mr. President, to an assessment of the provisional equidistance line. Now, if we turn to the provisional equidistance line as constructed by Suriname, one thing becomes obvious: It is not a straight line. The

16:21:22 provisional equidistance line consists of a series of segments adjusting and changing in response to the base points on the coast. And if we look at the features, the coastal features that principally influence the course of the provisional equidistance line, we see that on the Guyana side the Berbice Headland and Devonshire Castle Flats. The former, the Berbice Headland controls the line out to a distance of 172 nautical miles, or 82 percent of its length. The base points on Devonshire Castle Flats have an impact on approximately the last 24 nautical miles.

On the Suriname side, the features having the greatest influence on the provisional equidistance line are first Turtle Bank, and then the coast further to the east of Corantijn River, and then further on Hermina Bank. The base points on Hermina Bank control the line for distance of about 90 nautical miles. And if we look at the provisional equidistance line more closely, we see what is happening in each segment. The first section of the line is governed by the Berbice Headland on Guyana's side while on the Suriname's side the coast starts to recede, and the combination of the protruding coast of Guyana and the receding coast of Suriname is to pull the line back towards Suriname. The line runs at an angle of about 28 degrees which is roughly perpendicular to Guyana's coastal front.

As a result of being pulled across Suriname, the line

16:23:14 cuts across the coastal front, or cuts in front of the coast of Suriname, and that's what we have called "cut-off" or "encroachment" by the provisional equidistant line.

Now, as the provisional equidistant line extends across in front of the Suriname coast, it brings into effect Hermina Bank, so for a distance of 58 nautical miles, the line is governed by the protrusion on the east headland on the Guyana side and Hermina Bank on the Suriname side. But eventually the convexity of Devonshire Castle Flats comes into play and pushes the provisional equidistant line back towards Suriname's side, as I mentioned, for the last 24 nautical miles out to the 200-mile limit.

Now, what this shows is that a provisional equidistant line is pushed and pulled by particular coastal features. Primarily, the Berbice Headland, but also Hermina Bank, and then latterly Devonshire Castle Flats. And this illustrates in a very fundamental way the properties of equidistance, just as Professor Jaenicke did back in 1969. The Berbice Headland is a classic example of the Jaenicke effect. It is a headland close in besides the terminus of the land boundary at the intersection of the 10-degree line with the low-water mark.

And so its influence, because of that location right beside the land boundary terminus, its influence on the drawing of a provisional equidistance line is greater than the influence of any other feature. Hermina Bank is much further

16:25:18 away from the land boundary terminus, and so its influence is less. Indeed, the influence of Hermina Bank is in large part the consequence of the Berbice Headland pushing the line towards it. And finally, Devonshire Castle Flats is the furthest away from the land boundary terminus, and so its influence on the line is the least.

Now, my colleague Mr. Reichler tried to rebut much of what I have been saying last week, and he sought to show that there was no Jaenicke effect at Berbice, but that there was a Jaenicke effect at Hermina Bank. Now, I want to come to that, but before doing so, I want to look at what Guyana's expert Dr. Smith said about the Berbice Headland.

Well, when we return to Dr. Smith's report, we find that what Dr. Smith does not say resonates much more than what he says. He brushes off the Suriname claim that the first section of an equidistance line cuts off its coastal front with the terse statement "the real geography present does not justify these assertions." That was in his report at paragraph 34. But he also says in a somewhat breezy manner, almost as an aside, in paragraph 32 that the line looks to be dividing in a pretty fair manner the maritime jurisdiction that is projecting from both coastlines.

But Dr. Smith's perception of fairness seems to stop when it comes to Hermina Bank, and he gives close attention in his report to Hermina Bank. He points out that three coastal

16:27:07 points closely situated to each other on the convex Hermina Bank influence about 91 miles at the line. He says that the effect is to skew the equidistance line in Suriname's favor, and his overall conclusion is that this is a disadvantage to Guyana.

Now, the Hermina Bank is convex in relation to the recessed Suriname coast to its west is not in dispute. That it has an impact on the provisional equidistant line is common ground between the parties. Now, whether that results in a disadvantage to Guyana is a matter to be decided on the applicable law, and it's not a matter on which Dr. Smith is either competent nor entitled to express an opinion.

But although a good part of what Dr. Smith says about Hermina Bank is actually unexceptional, what is puzzling is that he is so silent about the Berbice Headland. Nowhere in his report is there any serious analysis of the impact of the Berbice Headland on a provisional equidistant line. Yet, the maps that are attached to Dr. Smith's report show unequivocally that the Berbice Headland is convex and that the coast to the east of Turtle Bank on the Suriname side is recessed. As a result of complex convexity on the Suriname side, there is a pronounced effect on the course of the equidistance line. As I said, it is drawn across the coastal front of Suriname.

So, how can Dr. Smith say, as he did in his examination-in-chief on Monday, that there was geographic

16:29:02 parity here? That's in the transcript of 11th of December, page 481. Now, this lends a new and quite unprecedented meaning to the term "parity."

Now, in order to diminish the effect of the Berbice Headland, counsel for Guyana claimed last week that a cluster of base points do not matter, and I think Dr. Smith said something similar on Monday, but clusters do matter. A cluster of base points on a coastal feature indicates that the feature is having a greater effect on an equidistant line than the adjacent coast where there is no base point. And while a single base point can have the same effect, the fact that it is a cluster does not diminish its effect. A cluster actually shows more of the shape of the feature. It shows that it's rounded, but it does not diminish its effect on the provisional equidistant line. And when you have as here a cluster of 16 of the 19 base points for Guyana for the drawing of a provisional equidistant line, 16 of the 19 base points are at the Berbice Headland, that is certainly telling you that this feature is having much more effect on the equidistant line than any other feature on the Guyana coast.

And Dr. Smith made much of the fact in his report that the base points on Hermina Bank influence over 90 miles--I think he said 91 miles--of the provisional equidistance line. But the base points on the Berbice Headland dictate the direction of 172 miles of the provisional equidistance line.

16:31:00 No mention of that in Dr. Smith's report. He could have calculated that himself, although we are not quite sure of that now in the light of earlier in the week, but the distances on the right-hand column of his report gave the information to calculate that 172 miles.

Nevertheless, according to Dr. Smith, the shorter portion of the provisional equidistance line that is influenced by Hermina Bank is skewed in Suriname's favor and disadvantages Guyana, but the longer portion of the equidistant line that is influenced by the convex Berbice Headland is not skewed at all, and there is no disadvantages to Suriname. In Dr. Smith's own words, it's pretty fair. Well, we are not exactly sure what Dr. Smith means by "pretty fair," but we suspect it's not the same as what others might mean.

What he said was that the first segment divides the maritime jurisdiction as projecting from both coastlines in a pretty fair manner. He rejected the idea there was any cut-off. But if you look at what the line does, it clearly runs across in front of the coast of Suriname in a way that it simply does not do in the case of the coast of Guyana.

So, how could Dr. Smith say there is no cut-off there? How could he say it was pretty fair? We would suggest that the ignoring of the obvious in relation to the Berbice Headland makes Dr. Smith's analysis of the Hermina Bank in the second and third section of the line even more suspect. And his

16:32:45 failure to discuss the Berbice Headland is even more perplexing when it is remembered that in his other writings he has discussed the very problem with an equidistant line that the Berbice Headland displays. As I have mentioned, it was Professor Jaenicke who as counsel for Germany pointed out the impact of a headland in the boundary, the impact on the coast of one State on the direction of the equidistance line. Professor Jaenicke was talking about the impact of headland out as far as a hundred kilometers, or 60 miles, from the coast.

It was Dr. Smith who, writing in 1989, took this further. In commenting on the Jaenicke graph, the Tribunal will recall he said in his report, as the headland--sorry, in his article--and I quoted this earlier--"As the headland of one State protrudes further seaward, the equidistant line diverts towards or encroaches upon the neighboring State." And he illustrated this, the extent of this effect he quoted from the U.S. Memorial in the Gulf of Maine, that a deviation of only five kilometers in the line at a distance of five kilometers from the coast turns into a deviation of 81 kilometers, or 44 nautical miles, at a distance of 200 nautical miles from the coast.

He adapted in his article the diagram of the United States pleadings. What we are showing is the diagram that was used in the United States pleadings, but he adapted that article from the diagram from the United States pleadings that

16:34:27 demonstrates this. In short, what Dr. Smith did in the graph in his article was demonstrate the Jaenicke effect not just to 60 miles, but out to 200 miles.

So, what are to make of all of this? Dr. Smith as a scholar finds that if a provisional equidistant line is drawn in circumstance where is there is a headland near the land boundary terminus between two States, the result is encroachment or cut-off. Some 15 years later, Dr. Smith as expert for Guyana facing the same geographical configuration, ignores the impact of the headland on the Guyana coast and the provisional equidistant line and says there is no cut-off. At the same time, he finds the feature Hermina Bank, which is much further from the land boundary terminus and whose impact on the equidistant line is not as extensive as the Berbice Headland, but this time he finds that the effect is that the equidistant line is skewed to the disadvantage of Guyana. This time he finds encroachment or cut-off. Mr. President, the contradiction is patent, and it speaks for itself.

Mr. President, let me turn to Mr. Reichler's claim last week that there is, in fact, no Jaenicke effect at the Berbice Headland.

Professor Jaenicke's diagram, he said, proves conclusively that there is no headland or other feature on the Guyana coast that distorts the provisional equidistant line. That's an impressive claim. And how did he prove this? Look

16:36:03 closely at what Mr. Reichler did. Like every piece of magic, if you are not careful, the hand moves faster than the eye. Mr. Reichler tilted the map so that he said the coastline runs from west to east. Well, it does not do that quite, in fact. The Suriname coastline ran west to east before the tilt, so if you tilt the coast, it still cannot run west-east.

What Mr. Reichler did, in fact, was tilt the coastline until the first segment of the provisional equidistant line faced due north. The result is that the coastline of Guyana runs in a south, southwesterly--south southeasterly, north northwesterly, there are too many directions in that to say that clearly. The coast of Suriname runs in a south southwesterly, north, northeasterly direction. But for the moment let's forgive Mr. Reichler this element of cartographic license. What Mr. Reichler then did was to place the "X" axis of the Jaenicke diagram along the west-east line so that the "X" axis runs across the top of the Berbice Headland. He then ran the "Y" axis from the intersection of the "X" axis with the equidistant line.

Now, why if he was testing the relationship of true equidistant to the Jaenicke diagram did he not start the "Y" axis from the land boundary terminus? Because that's what Professor Jaenicke did. Well, we don't know that. It certainly would have made the effect of the diagram less dramatic, but again we will excuse this cartographical, perhaps

16:37:44 1 theoretical license.
2 What does it all show? Mr. Reichler says that since
3 the equidistant line tracks the "Y" axis of a Jaenicke diagram,
4 it proves that the coastal geography produces no distorting
5 effects on the line in question. And he put the Jaenicke
6 headland line on the map to move his point. That's the image
7 you have there.
8 I will say it is impressive, but we do have a couple
9 of queries. If you place the "X" axis of the Jaenicke diagram
10 at right angles to the equidistant line, then surely the
11 Jaenicke effect would always disappear. That's like saying if
12 you assume no headland with your placement of the "X" axis,
13 then you have assumed the Jaenicke effect away. So, the
14 placement of the "X" axis here was critical to the result that
15 was achieved. In short, the coastlines were tilted just to the
16 point that the diversion effect will disappear.
17 Now, if Mr. Reichler had run the "X" axis along a real
18 west-east coastal direction, the actual direction of the
19 Suriname coast, then the Jaenicke effect produced by the
20 Berbice Headland would have been obvious. But by tilting the
21 coastlines until the line resulting from the Jaenicke effect,
22 the provisional equidistant line lay along the "Y" axis, he
23 managed to tilt the Jaenicke effect away.
24 Now, we thought that we would double-check all of this
25 by applying the Reichler tilt to the Jaenicke diagram itself,

16:39:41 and just to make the parallel clear, we have superimposed the first segment of the equidistant line on the Jaenicke diagram. So, we tilted the coastline on the Jaenicke diagram, and just as Mr. Reichler did with the Guyana and Suriname coastlines, it turns out once that first segment of the equidistant line reaches the "Y" axis, the Jaenicke diversion effect has essentially disappeared.

So what does all of this show? It suggests to us that the Reichler tilt is a very powerful weapon; not only does it prove that there is no Jaenicke effect of the Berbice Headland, it also proves there is no Jaenicke effect on the Jaenicke effect diagram. But, in fact, all that was shown is that if you assumed that there is no Berbice Headland, then there is no diversion. But if you do have a headland, then there is a diversion, and there is a diversionary effect. If you are prepared to admit there is a headland there, there is a diversionary effect, and that is exactly what Professor Jaenicke showed.

And assuming there was no headland is exactly the fallacy in Dr. Smith's report. He just assumed without even discussing the issue that there was no Berbice Headland, even though he was ready to find a headland at Hermina Bank, a feature which we have shown has much less impact on the provisional equidistant line than the Berbice Headland does.

And all of this relates back to what I described

16:41:22 earlier as Dr. Smith's fundamental error: Assuming you can get rid of the Berbice Headland by combining the coasts of Suriname and Guyana and claiming that they produce a long, shallow concavity.

Now, Mr. Reichler also claimed that his tilt technique proved that Hermina Bank does produce a diversionary effect, but as we have seen, it all depends on the tilt. The real point from all of this is that notwithstanding this attempt at refashioning the coastal orientation by Guyana, the Berbice Headland does create a diversion effect by virtue of its location near the land boundary terminus, and although the effect is mitigated somewhat by Hermina Bank, the path set by Berbice affects the course of the provisional equidistant line throughout. The path results in encroachment or cut-off of the coastal projection of Suriname.

Guyana wants to turn this on its head. It wants to claim that the feature that is further away from the land boundary terminus has a greater impact than the feature that is closer. But even Dr. Smith acknowledged in cross-examination that the headland closer to the land boundary terminus would have a greater impact than the headland that is further away, and of course he had to do that because it was a matter of simple geometry. The closer headland must have a greater effect.

Mr. President, the responsiveness of a provisional

16:43:05 equidistant line to particular coastal features is certainly a strength of the equidistant method where coasts are regular, particularly in the case of opposite States. But at the same time it is a weakness of the equidistance method when particular features push the line one way or another in circumstances where the coasts are otherwise overall roughly comparable. This propensity of equidistance to respond to micro features and thus cause disadvantage to one or another side has resulted in courts and tribunals looking at alternative methods of delimitation. And that leads to us the bisector method.

Now, Professor Oxman already this morning set out the nature of bisector and the advantages of such an approach, and I will try not to repeat what he said, but just let me highlight a few points. An angle bisector is a line that bisects the angle formed by the intersection of straight lines representing those coastal fronts, representing coastal fronts, and a precondition to using that angle bisector method is to establish coastal fronts that could then be bisected at their point of intersection.

Now, as Professor Oxman mentioned, a perpendicular is just an angle bisector applied to an angle of 180 degrees. So, if the coasts of two States are aligned in a single line, a maritime boundary based on the perpendicular would be a straight line at right angles to the coast. If these coasts

16:44:51 were aligned at an angle of 90 degrees, then the bisector applied to the 90-degree angle would run at 45 degrees. The same principle of bisecting is applied whether one speaks of a perpendicular or an angle bisector. It is just that the alignment of the coasts produced a different line of orientation for the boundary.

And if we think about coasts that are aligned in a straight line, we realize that in such a coastal configuration, a perpendicular and an equidistant line are identical. That was the point made by Professor Oxman this morning. But if coasts do not form a constant line, then equidistant lines would produce a different result. So, if there was a small bump on coasts that are otherwise regular, an equidistant line would veer off. A perpendicular line would stay at the same line of constant direction and the same applies if you move from a perpendicular to a bisector of angled coasts.

So, what this means, as Professor Oxman mentioned this morning, is that a perpendicular or angled bisector is simply an equidistant line drawn on the basis of straight coastal front lines. The attraction of a perpendicular or an angle bisector is its property of not being diverted one way or another by relatively minor coastal features. And I think that the fact that a perpendicular angle bisector and an equidistant line are fundamentally the same in concept and in certain circumstances would be identical in application has led to some

16:46:44 confusion. Claims that boundaries are based on the equidistant method have to be looked at closely because the boundary may be equally regarded as an application of the perpendicular or angle bisector method.

On Monday, in cross-examination by my colleague, Mr. Saunders, Dr. Smith was referred to a contradiction between what he had said in the limits and seas series relating to the Brazil-Uruguay boundary, which he described as a perpendicular boundary, and the fact he had included the Brazil-Uruguay boundary in his report amongst the delimitations of which he said equidistance has been--clearly been the method of choice by these countries. Now, when he was questioned about this, Dr. Smith sought to reconcile what he said in "Limits in the Seas" with what he said in his report by saying that even though the Brazil-Uruguay boundary was not a true equidistant line, he understood the intent was that the line was based on the equidistance method.

That's a very interesting response. It seems that Dr. Smith, in fact, includes a perpendicular as part of the equidistance method. Perhaps he was making the same point that I made earlier. A perpendicular is a simplified form of equidistance. If that was his view, then an angle bisector is also a simplified form of equidistance.

But when you go to his report you do find some confusion about the use of perpendiculars and angle bisectors.

16:48:19 I will go back to the Brazil-Uruguay agreement because Dr. Smith in his report at paragraph 11 quoted what Judge Aréchaga said about the Brazil-Uruguay agreement. Judge Aréchaga said the parties adopted a line nearly perpendicular to the general direction of the coasts which achieved substantially the same result as the equidistant line originally agreed to in a joint declaration. They adopted a perpendicular which achieved substantially the same result as an agreed equidistant line. But then Dr. Smith concludes on the basis of Judge Aréchaga's study that as a result of the use of equidistance, geography played a neutral role, and he said that in paragraph 12 of his report. Geography played a neutral role. But if you think about it, that comment doesn't withstand any analysis. Geography is hardly neutral if equidistance is used because it is particular coastal features of the geography that determined where the equidistance boundary would run.

Now, geography does play a neutral role if a perpendicular or an angled bisector is used because it's only general coastal fronts that determine the outcome, not particular coastal features. And if, as Judge Aréchaga says, you agree on equidistance but you draw a perpendicular, what you have done precisely is to give geography a neutral role. It's not that equidistance gives geography a neutral role, it's the other way around. The perpendicular gives it a neutral

16:50:06 role. So Dr. Smith got it completely the wrong way around.

Now, perpendicular and angular bisector approaches were adopted, as Professor Oxman pointed out, in Gulf of Maine, Tunisia-Libya, and in he mentioned the Grisbadarna, and in the Gulf of Maine case the angle formed by the coasts of Canada and United States formed something close to a right angle and the Chamber saw a bisector in the first sector as providing for an equal division of overlapping areas.

Now, last week Professor Schrijver said that the Gulf of Maine case does not provide a good example because the geography is more complicated than here, and in some respects that is true. But he overlooked the point that the Chamber rejected equidistance in the first sector not because of any major distorting features, but because of minor distorting features. It was rocks and islets that caused the distortion in the--that equidistance would produce in the first sector of the Gulf of Maine. It wasn't major features that caused the distortion, but minor features that caused the distortion. And the angle bisector divided the area equally without the impact of minor features that pushed or pulled the line one way or the other. In short, the angle bisector method is well grounded in law and provides an approach that avoids the pushing and pulling of an equidistance line.

Let me turn now, and I think, Mr. President, this is the final point I will deal with today, and the rest of my

16:51:48 presentation I will come back to in my next presentation. I want to deal now with the application of the bisector method. The last section of this, which I will not do today, relates to looking at the particular methods in this particular case, but I will do that as part of my presentation in my next presentation dealing with proportionality, so let me finish with the application of the bisector method in this case.

Now, the application of bisector method, as I mentioned, requires the drawing of coastal front lines, and that, of course, we have done, and I mentioned that earlier. If the angle bisector is drawn to those coastal front lines, the result is an azimuth--that is the coastal front lines that we talked about earlier--the result is an azimuth of 17 degrees. Now, Guyana has objected that the intersection of the coastal front lines does not occur at the land boundary terminus. Indeed, Mr. Reichler was at his rhetorical best last week when he asked how can you bisect an angle when the two coastal fronts do not meet. Well, we puzzled about that. We did think about consulting the Johns Hopkins experts, but in the end we just plucked up our courage and tried it ourselves. And here is what we did. We joined the lines, and then we bisected the angle, and it turned out to be 17 degrees.

Now, the complaint about coastal front lines not meeting, Mr. President, is really a misunderstanding about what coastal front lines really are. They are not lines on the

16:53:30 coast. They are notional lines representing generalized coastal direction and coastal length. They are lines representing the coast, but they don't have to be actually on the coast. Whether they are depicted on a map so that they meet depends on whether they are depicted in this case running on the outer portions of the coast or drawn further inland, and it all depends on the actual orientation of the coasts and the location of the land boundary terminus whether if they are drawn on the outer part of the coasts, they will necessarily meet.

Once their direction and length have been established, they can be transposed to meet the land boundary terminus if that serves a useful function. A bisector of an angle formed by the coastal fronts of Guyana and Suriname is an azimuth of 17 degrees wherever the intersection of those coastal fronts take place or wherever they're transposed to. Moving the line representing the coastal front of Guyana to intersect with the coastal front of Suriname to the 1936 Point still does not change the angle of the coastal intersection. The bisector is still at 17 degrees.

Now, having established a bisector, it is, of course, necessary to locate it. A bisector provides the appropriate direction and orientation for the boundary. But the question arises where do you locate it? Where does it run from? And you will recall, as Professor Oxman pointed out, in the Gulf of

16:55:06 Maine there was an agreed starting point, point A, which had been established by the parties because they did not want the chamber to decide disputed sovereignty over an island that lay between point A and the land boundary terminus.

So, in the first sector, having identified and having determined the bisector of the angle formed by the intersection of the coasts, the Chamber simply applied the azimuth simply starting at point A. In Tunisia-Libya, again as Professor Oxman pointed out, the second segment of the line was based on a bisector of the angle formed by lines representing the coastal front of Tunisia, and a line along the seaward coast of the Kerkennah Islands, and then that line was then transposed to intersect with the first segment of the line, which is also based on a bisector method, a perpendicular to the coast of the land boundary terminus. Again, two operations were involved: The determination of the bisector based on notional angles of coasts, and then the location of the bisector at the appropriate starting point of the line.

Now, in the present case, if there were no other circumstances to take into account, the appropriate starting point for the 17-degree bisector would be the land boundary terminus; that is, the intersection of the 10-degree line with the low-water mark. However, as we have demonstrated in the present case, as Professor Oxman demonstrated, in the present case the extension of the 10-degree line into the territorial

16:56:43 sea and beyond means that if the bisector method was to be used, the starting point would have to be further out, and that's something I will come back to, Mr. President, in my next presentation. And with your permission, we will come to an end at this stage and we will continue tomorrow.

ARBITRATOR SMIT: Professor McRae, have you tried to quantify the effect on these heads on the provisional demarcation line?

PROFESSOR McRAE: That will be the subject of my presentation on proportionality when we start to look at how each line can be tested against areas allocated under the proportionality models, in a similar way to which Mr. Reichler did on Saturday. We will be coming back to that.

ARBITRATOR SMIT: Okay, thank you.

PRESIDENT NELSON: Thank you very much, Professor McRae.

We will resume this oral hearing tomorrow morning at the usual time. Thank you.

(Whereupon, at 4:57 p.m., the hearing was adjourned until 9:30 a.m., the following day.)

CERTIFICATE OF REPORTER

I, David A. Kasdan, RDR-CRR, Court Reporter, do hereby certify that the foregoing proceedings were stenographically recorded by me and thereafter reduced to typewritten form by computer-assisted transcription under my direction and supervision; and that the foregoing transcript is a true and accurate record of the proceedings.

I further certify that I am neither counsel for, related to, nor employed by any of the parties to this action in this proceeding, nor financially or otherwise interested in the outcome of this litigation.

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DAVID A. KASDAN