

RIVER AND MARITIME BOUNDARIES BETWEEN
SOUTH AFRICA AND NAMIBIA

by

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River and Maritime Boundaries Between South Africa and Namibia

The thesis explores four aspects of delimitation beginning with the terrestrial boundary between the two countries. The 1890 Anglo-German treaty described it as the 'north bank' which is problematic due to fluctuations in the high-water mark, shifting sandbanks and the absence of an actual demarcation. The location of the Kudu gasfield opposite the mouth of the Orange emphasizes the importance of a clear delimitation since maritime boundaries are often extensions of terrestrial borders.

The maritime boundary will separate adjacent territorial seas, contiguous zones, economic zones and continental shelves. Special circumstances such as the presence of islands like the Penguin Islands have resulted in agreements utilising geographical co-ordinates, equidistance or lines perpendicular to the coast. In the absence of agreement, international law prescribes the median line solution and this option, together with other alternatives has been discussed in the South African-Namibian context.

The thesis examines the effect of the offshore islands on the proposed delimitation. Complicating factors such as Black Sophie island and the Lüderitz Bay islands have been investigated and their effect on the proposed division analyzed. The seaward delimitation of the islands has been discussed in the context of Article 121(3) of the Law of the Sea Convention which aims to prevent mere rocks from generating extended zones.

Fourthly, the maritime zones in and beyond Walvis Bay (the subject of a sovereignty dispute) have been investigated.

The aim of the thesis has been to consider overlapping areas, to identify relevant international law principles and to apply these principles to the factual situation taking into account special features justifying deviation from established principles in an effort to avoid potential disputes.

Conclusions drawn include a proposal that the boundary on the north bank is the low-water mark; that the line of equidistance, adjusted to accommodate security interests of the mainland and Penguin Islands, offers an equitable solution for adjacent zone delimitation in some cases while a combination of abatement and proportionality produces solutions for the remainder; that only three of the twelve islands ought to generate extended zones and that the equidistance line produces an equitable result for the Walvis Bay delimitation.

To my husband, Rommel and Resé

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ABBREVIATIONS

ADPILC	Annual Digest and Reports of Public International Law Cases
AILC	American International Law Cases
AJIL	American Journal of International Law
ASSAL	Annual Survey of South African Law
BFSP	British Foreign and State Papers
BILC	British International Law Cases
BYIL	British Yearbook of International Law
CILSA	Comparative and International Law Journal of South Africa
CSC	Geneva Convention on the Continental Shelf
CSIR	Council for Scientific and Industrial Research
CYIL	Canadian Yearbook of International Law
CYILA	Chinese Yearbook of International Law and Affairs
DJILP	Denver Journal of International Law and Policy
EEZ	Exclusive Economic Zone
ER	The English Reports
GA	General Assembly
GG	Government Gazette
GJICL	Georgia Journal of International and Comparative Law
GYIL	German Yearbook of International Law
ha	hectare
HSC	Geneva Convention on the High Seas
ICJ	International Court of Justice

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ICLQ	International and Comparative Law Quarterly
IJECL	International Journal of Estuarine and Coastal Law
IJIL	Indian Journal of International Law
ILC	International Law Commission
ILM	International Legal Material
ILR	International Law Reports
LLJ	Lesotho Law Journal
LOSC	Law of the Sea Convention
n	footnote in current thesis
NILR	Netherlands International Law Review
nm	nautical mile (1 nm = 1852 metres)
note	footnote in other works
OAU	Organisation of African Unity
ODIL	Ocean Development and International Law
para	paragraph/s
Proc	Proclamation
PYIL	Polish Yearbook of International Law
Rep	Reports
Res	Resolution
RGD	Revue Générale De Droit
SAJHR	South African Journal of Human Rights
SAJS	South African Journal of Science
SASD	South African Sailing Directions
SAYIL	South African Yearbook of International Law

(x)

SC	Security Council
SDLR	San Diego Law Review
SIULJ	Southern Illinois University Law Journal
SMB	Single maritime boundary
SOECOR	Southern Oil Exploration Corporation
SWA	South West Africa
SWAPO	South West African People's Organization
TSAR	Tydskrif vir Suid Afrikaanse Reg
TSC	Geneva Convention on the Territorial Sea and Contiguous Zone
UNRIAA	United Nations Reports of International Arbitral Awards
UNTS	United Nations Treaty Series
VJIL	Virginia Journal of International Law
YLJ	Yale Law Journal

CHAPTER I

INTRODUCTION

The delimitation of maritime areas may be regarded as one of the most important problems of the law of the sea. Disputes over the extent of territorial sovereignty and the spatial dimensions of these rights are often protracted, involving as they do, vital interests of particular states. On occasion, these lingering disputes develop into serious conflict.

Difficulties associated with delimitation of maritime zones have rapidly multiplied with the development of an extended continental shelf - potentially up to 350 nm - and the emergence into customary law of a 200 nautical mile exclusive economic zone. These areas overlap more frequently, creating the need to delimit them. Furthermore, the interests at stake are not confined to territorial extension of zones but include interests in the natural resources such as hydrocarbons on the shelf and, to a lesser degree, the living resources of the exclusive economic zone. This unprecedented acceleration in demands for expansion in order to secure interests of economic content together with differing viewpoints on delimitation matters has spawned disputes between developed and developing nations as well as within both these groups. Delimitation problems trouble small, medium range and large nations.

The delimitation of sea areas has always an international aspect; it cannot be dependent merely upon the will of the Coastal State as expressed in its municipal law. Although it is true that the act of delimitation is necessarily a unilateral act, because only the Coastal State is competent to undertake it, the validity of the delimitation with regard to other States depends on international law'.¹

1 Fisheries Case (United Kingdom v Norway) 1951 ICJ Rep 3 at 132.

For a boundary to be effective it has to be accepted by the states concerned. An acceptable boundary in international law embraces the requirement of certainty which includes the features of stability and finality though exact boundaries only developed when map-making and geographic techniques became sufficiently advanced to facilitate delimitation and especially demarcation.² It is this principle of finality and stability which underlies the conclusion of boundary treaties.

The boundary between South Africa and Namibia involves both a land boundary along the banks of the Orange River and a delimitation of the maritime zones including the territorial sea, contiguous zone, exclusive economic zone, fishing zone and continental shelf. Namibia has been a focal point in international politics as a result of the disputed termination of South Africa's mandate to administer the territory. This led to the eventual adoption of Security Council Resolution 435 whereby it was decided to establish a United Nations Transitional Assistance Group (UNTAG) to assist the special representative of the Secretary-General to carry out his mandate 'to ensure the early independence of Namibia through free and fair elections under the supervision and control of the United Nations'.³

In 1984 a dispute arose concerning the legitimacy of farming activities along the northern bank of the Orange River which

2 M Shaw Title to Territory in Africa (1986) 224.

3 Security Council Resolution 435 (1978) 29 September 1978; (1978) ASSAL 62. By virtue of General Assembly Resolution 2372 (xxii) 12 June 1968, South West Africa was renamed Namibia, a name selected by the South West Africa People's Organization of Namibia (SWAPO) who stated that the name was derived from the Namib on the coastal desert of the area. Namib is a Nama/Damara word literally meaning shield or enclosure. See G Tötemeyer South West Africa - Namibia (1977) 23.

separates the two countries.⁴ Though the matter was settled out of court, it raised the complex question of *international* boundaries. As a result, international law precedents, customary international law rules and state practice became relevant.

What will be discussed

International law concerning river boundaries will be dealt with by discussing possible boundaries and various problems followed by an examination of the agreement between South Africa and Namibia. This treaty is imprecise - a problem compounded by the fact that no demarcation ever took place. Thereafter, general principles relating to maritime delimitation of islands will be analysed. There are several islands situated off the Namibian coast whose potential to generate maritime zones such as exclusive economic zones and continental shelves will depend on their status in international law and be linked to the independence of the territory.

A detailed account of the rules regulating the closing off of river mouths will be undertaken as the Orange River mouth flows into the ocean on the west coast of Namibia. Following that, the status of Walvis Bay in international law will be analysed.

The discussion will focus on *delimitation* ie the determination of the boundary line by treaty or otherwise and its expression in verbal terms. Actual *demarcation* ie the physical demonstration of the delimitation by means of posts or beacons will not be discussed in detail since it is a practical aspect and requires detailed knowledge of geographic techniques, a topic clearly outside the ambit of

4 G Erasmus 'How to Farm on the South African/Namibian Border: Problems in Demarcating a River Boundary' (1984) 10 SAYIL 121 at 122.

this discussion. However, it is worth noting that demarcation problems are common and often ascribed to delimitations agreed upon without adequate field knowledge of the area involved.

It is not the writer's intent to comment on the legitimacy of the South African mandate to administer South West Africa/ Namibia as the territory is now an independent state. For the purposes of the discussion, the mandate will be considered to have been valid up until the independence of Namibia.⁵

Cognizance has been taken of the general acceptance by the international community of the independence of Namibia pursuant to Resolution 435.⁶

The discussion and proposed solutions are based on information as at 31 March 1991.

5 J C Heunis *United Nations versus South Africa* (1986) 492 *et seq*; 'South Africa's Foreign Policy and International Practice as Reflected in Speeches, Parliamentary Statements and Replies - 1983' (Ed W Booyse) (1983) 9 SAYIL 186 at 242; J Dugard 'The Revocation of the Mandate for Namibia Revisited: *Binga v Attorney General, South West Africa, and Others* 1984 (3) SA 945 (SWA)' (1985) 1 SAJHR 54; GA Res 2145 (xxi) 27 October 1966; SC Res 283 (1970) 29 July 1970 which called upon states to refrain from any relations with South Africa which implied recognition of the legitimacy of the the mandate. Other resolutions condemning South Africa's presence include GA Res 3295 (xxix) 13 Dec 1974, 3399 (xxx) 11 Dec 1975 and SC Res 245 (1968), 246 (1968), 264 (1969), 269 (1969), 276 (1970).

6 (n3); (1983) 9 SAYIL 240-242.

CHAPTER II.

RIVER BOUNDARIES.

(1) General.

Interest in international water rights is a recent phenomenon. Until recently, the importance of rivers lay in non-consumptive uses such as navigation and fishing. The development of hydro-electric power and the use of rivers for irrigation have led to the conclusion of many treaties but this increase in use of river water together with the scarcity of water in general has also produced more frequent disputes.

Boundaries can be described as those lines defining a territory, marking the limits of territorial sovereignty and jurisdiction.¹ Frontiers set limits to the territory over which a state may exercise sovereignty and in order to prevent conflict, a clear delimitation is essential.

Boundaries are usually divided into natural and artificial boundaries. The former consist of mountains, rivers, forests, lakes, the seashore and deserts while the latter can consist of signs, posts or beacons erected to demarcate the course of an imaginary line or of parallels of longitude or latitude.²

- 1 M Shaw Title to Territory in Africa (1986) 11; S W Boggs International Boundaries: A Study of Boundary Functions and Problems (1940) 5.
- 2 J G Starke An Introduction to International Law (1977) 219. According to Boggs (nl) 24 De Lapradelle argues that all boundaries are artificial as he does not regard rivers and mountains as features which are 'natural' to adopt for boundary purposes. He labels these two features 'derived artificial boundaries' and saves the term 'artificial boundaries properly speaking' for parallels of latitude and meridians of longitude. Boggs agrees that all boundaries are artificial, some simply less so than others and divides them into four categories, namely physical boundaries (those which follow a feature marked by nature such as a river, lake or desert); geometrical frontiers (straight lines or arcs of circles which disregard the

Usually, boundaries evolve in three stages; a preparation stage where principles are formulated, a decision stage which encompasses the delimitation itself and an execution stage which consists of the physical demarcation of the dividing line. One of the most important functions of a boundary line is that it fulfils a strategic role in creating a barrier meant to protect the state. However, boundary functions are generally negative, restricting in various degrees the movements of peoples and the exchange of goods, money and sometimes ideas.³

Boundary rivers are those rivers which separate two different states from each other.⁴ This type of river differs from one which runs *through* the lands of different states, often referred to as a 'successive river', in which case the dividing line runs *across* the river. When a waterway traverses or separates two or more states the rules of international river law are applicable. The main source of evidence of state practice are the numerous treaties entered into by a multitude of states in all regions of the world.⁵

(2) Problems associated with river boundaries

For a long time rivers have been regarded as ideal boundaries due to their tangibility, degree of permanence, easy recognition and the characteristic that it's use -- as requires no assistance from man in delimitation, the river actually delimiting itself. In addition, rivers are often

physical geography and topography of the land); anthropogeographic types (boundaries related to human occupancy of the land) and complex boundaries (compromise lines adjusted to a multiplicity of factors). See Boggs (n1) 25, 26.

3 Ibid 11.

4 L Oppenheim International Law (1955) 8ed Vol I 532 para 199.

5 S N Saliba The Jordan River Dispute (1968) 49.

conspicuous on maps of poorly explored countries, are usually better known than interstream areas because they have been the routes of explorers and traders and commonly serve as cadastral boundaries making their adoption as international limits convenient.⁶

Rivers are more troublesome as boundaries than appears at first glance. No two rivers are alike. No two parts of the same river are exactly alike, making a definition of a river boundary based on a theoretical typical river impossible.⁷ There are always several possible lines in the river which could be the border, so field knowledge of the particular river is essential if errors and ensuing disputes are to be avoided.

For all possible boundary lines except arbitrary ones, the stage of water is important and should be accurately defined since lines in the river vary between high and low water. Even if the water stage is specified, problems can still arise. A term such as 'mean high-water' is capable of various meanings such as the average of all levels above mean level determined on daily observations. It could denote the level exceeded by a certain percentage of observations. It could also refer to the line where vegetation ceases though this method is unreliable in tropical climates where vegetation growth often extends into the water. The slope of the river further complicates readings because a reading is only applicable to the segment of the river on which the gauge is situated.

Since the accuracy of the water stage is not beyond doubt, the best solution would be to adopt arbitrary lines or the thalweg as the boundary as both are independent of stage

6 S B Jones Boundary-Making: A Handbook for Statesmen, Treaty Editors and Boundary Commissioners. (1945) 110.

7 Ibid 108.

lines. Other alternatives such as river banks or the median line are affected by the rise and fall of the water.⁸

Standard definitions for river features are hard to find. Almost every topographic and hydrographic term is capable of more than a single possible interpretation. Each treaty should define the terms as *they were used by the drafters* of the instruments. Even common words such as 'channel', 'island' and 'bank' need to be clearly defined. Maps, even large-scale ones, seldom show a river with complete accuracy, illustrating yet another unattractive feature of a river as a border.

River boundaries are characterized by peculiar problems. Definitions of river boundaries are often expressed in relation to their landward margins or shore lines which shift both vertically and horizontally with melting snows, drought or tides while also migrating due to erosion and accretion.⁹ Another unique problem arises in that it is seldom practicable to mark boundary points in the water and it is often not feasible to mark them on land by reference to monuments or lights.¹⁰

To sum up, the problems of a river boundary include deciding *what line* in the river will be the limit, *how* it will be defined, the *terminology* used to describe features of the river and the effect of *physical changes* on the geographic elements in terms of which the boundary has been defined.¹¹ A notional line dividing a river longitudinally seldom meets the needs of the parties and it has been suggested that the concept of joint ownership, control and use would help in avoiding friction and conflict which is often the by-product

8 Ibid 113.

9 Boggs (n1) 176.

10 Ibid.

11 E Lauterpacht 'River Boundaries: Legal Aspects of the Shatt-al-Arab Frontier' (1960)9 ICLQ 208.

of unilateral control over parts or the whole of a boundary river used for a variety of purposes by nationals of more than one state.¹²

(3) Possible boundary lines.

(a) *Thalweg*.

Thalweg is a word of German origin though it is not clear when the word was first used to denote boundaries. According to De Lapradelle, the 1648 Treaty of Munster described the boundary as the *thalweg* of the Rhine but other writers aver that the term was first used more than one hundred years later.¹³

In any event, the term is today part of international boundary language, yet its precise meaning is not fixed and direct judicial authority is absent. Interpretations vary from the line of deepest soundings to the path of the main current which is normally used by downstream traffic or the axis of the safest and most accessible channel for the largest ships.¹⁴ '*Thalweg*' has been used to denote the line of greatest depth of the main channel of the river and has also been used to designate the particular part within the arms of a river which constitutes the best route for shipping on a big scale.¹⁵ According to Verzijl, the term could represent the line connecting the deepest points in the river, the deepest points in the channel or the centre of the normal principal navigation channel.¹⁶ Many writers assert that the *thalweg* is the main navigable channel.¹⁷ Others define it as the mid-channel of the river.¹⁸ Other

12 Ibid 234, 235.

13 D P O'Connell International Law (1970) Vol I 579.

14 A C Mc Ewan International Boundaries of East Africa (1971) 78.

15 Jones (n6) 116.

16 J H W Verzijl International Law in Historical Perspective (1970) Vol III 563, 564.

17 Lauterpacht (n11) 221.

18 Oppenheim (n4) 532 para 199.

descriptions include 'the proper course taken by boats going downstream at low water'.¹⁹ Bouchez regards the thalweg as the channel continuously used for navigation and notes that the thalweg is not a line but a boundary area because the channel itself is never a precise line though the middle of the channel is often indicated as the boundary line.²⁰ The only case in which the thalweg could be a precise line is where it described the line of deepest soundings at a specific water stage.²¹

Lauterpacht claims that any choice as to definition would be arbitrary, stressing the necessity of a comprehensive definition in boundary agreements.²² Many considerations such as navigability, volume of traffic, economic importance of the river, geological composition of the bed and existing treaties must be taken into account when deciding upon guidelines as to the interpretation of the term.²³ In some cases, a precise definition exists. The thalweg of the Rhine was described as 'the most suitable channel for downstream navigation of the normal lowest water levels'.²⁴

There appear to be no *international* judicial decisions on the definition of the thalweg, though the question was considered in a *dictum* in the Grisbadarna Case where it was described as 'the most important channel'.²⁵ However, there are several United States Supreme Court decisions in which the topic was dealt with.

19 G Kaeckenbeeck *International Rivers* (1918) 176 para 283.

20 L J Bouchez 'The Fixing of Boundaries in International Boundary Rivers' (1963) 12 ICLQ 789 at 793.

21 Ibid.

22 Lauterpacht (n11) 222.

23 McEwan (n14) 78.

24 Lauterpacht (n11) 218.

25 McEwan (n14) 79.

In the case of *State of Minnesota v State of Wisconsin*, the court found in favour of the 'principle navigable channel' as opposed to the line of deepest water, since

'... the middle of the principal channel of navigation is commonly accepted as the boundary. Equality in beneficial use would be defeated rather than promoted, by fixing the boundary on a given line merely because it connects points of greatest depth'.²⁶

In *New Jersey v Delaware* the court said

'International law today divides the river boundaries between States by the middle of the main channel, when there is one, and not by the geographical centre, halfway between the banks ... It applies the same doctrine, now known as the doctrine of *Thalweg*, to estuaries and bays in which the dominant sailing channel can be followed to the sea ... The *Thalweg* or downway, is the track taken by boats in their course down the stream which is that of the strongest current'.²⁷

Juristic writers usually distinguish between navigable and non-navigable rivers, and where no treaty exists, the rule is that the median line or *medium filum aquae* forms the boundary line in non-navigable rivers while for navigable rivers, the *thalweg* is the border.²⁸ Verzijl claims that the *thalweg* principle must be considered a general rule of customary law though not mandatory since nothing prevents states adopting a different solution for themselves.²⁹ The doctrine governs those cases where treaties are silent and no contrary tradition of long standing indicates a different legal regime.³⁰ It is also clear from state practice that

26 (1919-1942) ADPILC (Supplementary Volume) No 51 91 at 93.

27 (1933-1934) ADPILC No 48 128 at 129.

28 Oppenheim (n4); P Bravender-Coyle 'The Emerging Legal Principles and Equitable Criteria Governing the Delimitation of Maritime Boundaries Between States' (1988) 19 No 3 ODIL 171 at 179.

29 Ibid 180; Verzijl (n16) 561.

30 Ibid.

the thalweg boundary is a generally applied principle for rivers in which navigation is an important issue.³¹

The thalweg is more stable than the median line and therefore attractive as a dividing line. Nevertheless it remains crucial to give it a precise and appropriate geographical definition. It should also be specified what effect any changes in its lateral position will have on the adjacent territorial sovereignties.

Where rivers constitute boundaries in East Africa, the thalweg has been used irrespective of navigability. The Anglo-Italian Protocol of 1891 refers to the mid-channel (thalweg) of the River Juba while a similar agreement regulating the Tanzania-Malawi boundary stipulated that in the case of a river, the thalweg, if one existed, was the boundary, and if not, the middle of the bed was the demarcating line.³² Another example occurred along the Tanzania-Mozambique frontier, described as being '...along the course of the River Rovuma'. The Germans interpreted this as the thalweg or alternatively, the south bank, the matter finally being settled by agreement on the former.³³ The 1894 agreement relating to a portion of the Belgian Congo-Northern Rhodesian (Zambia) boundary referred to '...the thalweg of the Luapala up to its issue from Lake Bangweolo'.³⁴

It should be observed that there is no necessary relationship between the thalweg and the median line, though in most rivers they will cross each other at many points. Unfortunately *filum aquae* and 'thread of the stream' have sometimes been equated with the thalweg while in other cases

31 Bouchez (n20) 799.

32 McEwan (n14) 80, 81.

33 Ibid.

34 Boggs (n1) 167.

they have been accepted as a reference to the median line.³⁵ An example is found in the Treaty of Erzerum concerning the Shatt-al-Arab river which states that the circumstance that the frontier in the Shatt-al-Arab sometimes follows the low water mark and sometimes the thalweg or *medium filum aquae* shall not in any way affect the two states' 'right of user along the whole length of the river'.³⁶ Hirsch adduces that the drafters were simply referring to the 1913 Protocol which used the term *medium filum aquae* whilst they themselves used the more modern thalweg definition when they revised the boundary.³⁷ This confusion could be avoided by clear definitions of the terms employed.

What the median line and thalweg have in common is that both are based on the principle of equal rights for the riparian states regarding use of the river - navigation rights allotted equally by application of the thalweg.³⁸ In New Jersey v. Delaware the court found that '... the underlying rationale of the doctrine of the Thalweg is one of equality and justice'.³⁹

Though the term is now part of international boundary language, the thalweg is not automatically the best or most easily demarcated boundary. Where there are rapids there may be no determinable channel. Even where a thalweg does exist, complicated soundings will be required where islands split the stream. Though it may appear that the thalweg is independent of the water stage, it being determined by the configuration of the bed, it can occur that rivers which

35 Jones (n6) 117.

36 A M Hirsch 'Utilization of International Rivers in the Middle East' (1956) 50 AJIL 81 at 93.

37 Ibid note 49.

38 Bouchez (n20) 794; State of Wisconsin v State of Michigan (1935-1937) ADPILC No 54 164 at 164.

39 (n27) 379.

scour their channels when in flood while filling them at low water may cause shifts in the thalweg.⁴⁰

The thalweg features prominently in river boundary delimitations and it has acquired the status of a residual solution, as previously discussed, in the case of navigable rivers. However, the thalweg option is not capable of usurping a division based on historic title.⁴¹ That an historic title will prevail over the equitable doctrine of the thalweg is illustrated in *Iowa v Illinois* where the Supreme Court stated that the rule of the thalweg '...will be held to obtain unless changed by ... usage of so great a length of time as to have acquired the force of law'.⁴² In

40 Jones (n6) 117.

41 Historic title will also prevail over subsequent criteria for delimitation because it and other vested rights have been respected at sea as well on land, and have taken precedence over the median or equidistance principle as well as over other rules - S Rhee 'Sea Boundary Delimitation between States Before World War II' (1982) 76 AJIL 555 at 586. The requirements for historic title are briefly

- (1) uninterrupted possession accompanied by an intention to will and act as sovereign; continuous, peaceful and effective display of state sovereignty with sufficient evidence of the manifestation of state sovereignty appropriate in the circumstances
- (2) over a period of time
- (3) which has achieved a degree of publicity or notoriety
- (4) and with absence of protest by, and acquiescence in such display of authority on the part of, other states who have either real or constructive knowledge and who are affected, or liable to be affected by, the perfection of a new territorial title. See Bravender-Coyle (n28) 178.

The importance of historic rights was illustrated in the *Grisbadarna* award where the Permanent Court of Arbitration, in delimiting the territorial sea between Sweden and Norway, deflected the dividing line south in order to take account of historic rights Sweden possessed. See 11 R International Arbitration Awards 155, 160 (Perm. Ct. Arb. 1909) reprinted in (1910) AJIL 226.

42 147 US 1 (1893), Bravender-Coyle (n28) 178.

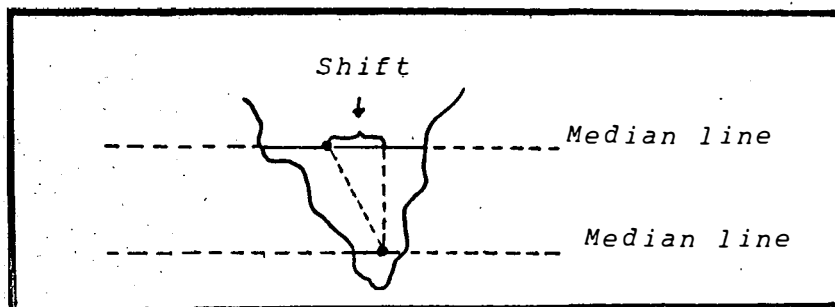
New Jersey v Delaware, the court, referring to Westlake, commented that 'Unless prescription or convention has entrenched another rule, we are to utilize the formula that will make equity prevail' and since the court could not identify an established prescriptive title it applied the doctrine of the *thalweg*.⁴³ In *Arkansas v Tennessee*, the court rejected the contention of Arkansas that the *thalweg* is of such a dominating character it prevails over concepts of acquiescence and prescription and confirmed instead that '...when it is established that there has been acquiescence in a long-continued and uninterrupted assertion of dominion and jurisdiction over a given area ... the original rule of *thalweg* no longer applies'.⁴⁴ Naturally, a treaty will similarly prevail over the doctrine of the *thalweg*.⁴⁵

(b) Median line

As a limiting line, the median line is inexact without further definition. It could be the median line of the river or the channel and if there are islands, it is important to stipulate whether the median be determined for the whole river or for one branch only.

This line can be difficult to establish because in most cases, due to unequal height and slope of opposite banks, its position will shift as the river rises and falls.

D1



43 (n33) 131, 133; I J Westlake International Law (1910) 2ed 146.

44 310 US 563 (1940) 571.

45 Bravender-Coyle (n28) 180.

The boundary agreement should specify some definite water stage such as the low-water mark by which the median shall be established.⁴⁶ Alternatively, the median line at the average level could be the dividing line.⁴⁷ Ideally, the median line should be determined as if one were in a boat following a line always equidistant from the nearest points on opposite sides.⁴⁸ This produces a continuous but not necessarily straight line and for practical purposes the demarcators should have the power to smooth the line, substitute straight segments where necessary and even be able to depart from the median in appropriate circumstances.⁴⁹

The requirement of certainty is met by this method of delineation since only one median line can be drawn, producing a precise definition. State practice during the 19th and 20th century confirms the use of the median line in the case of non-navigable rivers while prominent writers share the opinion that in the absence of a treaty, the *medium filum aquae* forms the boundary line in non-navigable rivers.⁵⁰

(c) Bank

By itself, the term 'bank' is ambiguous. It could refer to the actual edge of the water or it could denote a slope marking the edge of a flat land through which the river flows. If it refers to the former, the water stage at which the edge is determined needs to be designated.

46 McEwan (n14) 80; Boggs (n1) 184.

47 Bouchez (n20) 793.

48 Jones (n6) 114; Boggs (n1) 184.

49 Jones (n6) 114.

50 Oppenheim (n4) 532 para 199; Bouchez (n20) 793. For an example illustrating the use of the median line see *Arkansas v Mississippi* (1919-1922) ADPILC No 61 96 at 97.

The nature of banks varies. Some rivers run within well-defined banks. Others may have a definite bank on one side while the water on the other side spreads out over low country and sand bars. Some rivers have no discernible banks where the water on both sides spreads out over adjoining low country.

There is no reason why one riparian state should not own the entire width of a boundary river, in effect depriving the opposite state of access to the water. However it is unusual considering the underlying *rationale* of other methods of division such as the thalweg or median line which are based on concepts of equality and justice. Nevertheless it is possible that the whole bed be assigned to one state only but this is '...an exceptional case created by immemorial possession, by treaty or by the fact that a state has occupied the lands on one side of a river at a time prior to the occupation of the lands on the other side by some other state'.⁵¹ A 1928 treaty between the Netherlands and the United Kingdom concerning the river Odong in Borneo used this exceptional method and Bouchez concludes that this occurs either when one state is more powerful than the other and this method is the result of power politics or, though less likely, when one of the states is not interested in the boundary river.⁵²

As exceptional as it may be, even arbitrators have on occasion drawn a boundary along the banks of a river. E P Alexander in his award of 30 September 1897 regarding the San Juan del Norte assigned the full width of the river to Nicaragua as did King Victor Emanuel III in his award of 30

51 W G Hall A Treatise on International Law (1924) 8 Ed 147, 148 para 38; Starke (n2) 220; Oppenheim (n4) 533 para 199; A L Shalowitz Shore and Sea Boundaries (1964) Vol Two 376.

52 Bouchez (n20) 791; H W Jayewardene The Regime of Islands in International Law (1990) 222.

May 1905 between Great Britain (for Rhodesia) and Portugal (for Angola) relating to the river Cuando - a result later implemented by treaty.⁵³

Where one state does own the entire river, the optimum line is the high-water mark on the opposite bank. The opposite state would naturally be less disadvantaged if the line was the low-water mark which would be the more equitable line. Obviously if a bank is to be the dividing line a clear reference to a water mark is crucial.⁵⁴ If such a reference is absent, Bouchez submits that the line is the bank at low-water mark because '...the land which is dry at low water mark is a natural and integral part of the river bank and can therefore be best controlled from that bank'.⁵⁵ In support of this, Bouchez cites the United States Supreme Court decision in the case of *State of Vermont v State of New Hampshire* where it was held that the boundary line on the western bank of the River Connecticut was the low-water mark or the point to which the river recedes at its lowest level without reference to extreme droughts.⁵⁶

If one state's boundaries extend to the opposite bank it means that the opposite state has no *incontestable* rights regarding fishing, moorings or the use of water supply. In the Tigris-Euphrates estuary, Turkey and its successors exercised jurisdiction over the whole river and only as a result of subsequent treaties did Iran acquire anchorage and navigational rights.⁵⁷

Unique peculiarities have arisen where the bank is the border line. The eastern end of the Kenya-Tanzania boundary

53 Verzijl (n16) 546.

54 A O Cukwurah *The Settlement of Boundary Disputes in International Law* (1967) 51.

55 Bouchez (n20) 792; McEwan (n14) 86; Jayewardene (n52) 222.

56 (1933-1934) ADPILC No 50 135 at 135.

57 Jones (n6) 119.

on the Indian Ocean is formed in part by a line running along the 'eastern bank' of the Ngobwe Creek, a line subsequently referred to as the line along the 'left bank'.⁵⁸ The use of cardinal points (points of a compass) is unsuitable for rivers and can lead to confusion. Using terms such as 'left' and 'right' are more appropriate providing they are applied correctly ie in the way they would appear to an observer facing *downstream* and not necessarily as they appear to one facing a map. Cartographic convention shows north at the top of a map and if the river flows *southward* the right bank of the river is the left hand side of the person observing the map. 'Right' and 'left' are used as if the observer faced *downstream*. If the boundary was described as the 'eastern bank' an uninstructed observer could easily assume that the eastern bank (ie the bank on his own right hand side) is the right bank of the river when it is in fact, the left bank.⁵⁹ This precise situation led to Liberian diplomats agreeing to an alteration of the thalweg boundary to the right bank of the Cavally River in the 1907 agreement between the Ivory Coast and Liberia - an amendment which placed the entire river under French sovereignty!⁶⁰

It should also be noted that river banks are not always stationary. Erosion occurs rapidly where rivers flow through plains of loose material making the bank a less than ideal boundary, the requirement of permanence being at risk due to erosion.

(d) Source

Reference to the source of a river creates the impression of the existence of a precise point. In practice however, it is remarkably difficult pinpointing the exact source of a

58 McEwan (n14) 85.

59 Ibid.

60 Ibid.

river which is often an indeterminate area such as a swamp or estuary. The river can also break up into several tributaries of similar length and the question arises as to which tributary is the source. Is it the longest, the widest or the one carrying the most water?

A possible solution is to allow a demarcating commission to establish an artificial boundary as close as possible to the assumed source and to bestow on it the status of the actual boundary.⁶¹ Even simpler would be to state that the boundary proceeds to a convenient point near the source, the point to be selected by the demarcators.⁶²

If there are two or more branches to be followed in locating the source of the river, the general rule is that the boundary must follow the *major* channel. In the Argentine-Chile Award the court used three principal criteria in determining the major channel, namely the length of the water course, the size of its drainage area and the annual volume of its discharge.⁶³

A problem associated with use of the source as a frontier is that it is almost impossible to indicate the exact source on a map. The 1: 1000 000 scale often used in boundary delimitations cannot show the details of the source.⁶⁴ Once again, a definition involving a river source based on a map without actual field knowledge may also produce errors.

River sources are seldom used in frontier delimitation for the source can at most provide a starting point for the boundary. It cannot influence the demarcating line down the river. The question as to which of the lines - thalweg or middle of the river is the actual boundary line is not eliminated by indicating the source as the starting point.

61. McEwan (n14) 88.

62. Jones (n6) 129.

63. McEwan (n14) 89.

64. Jones (n6) 129.

(e) Mouth

It is often assumed that the mouth of the river has a precise location. However, some rivers enter the sea through swamps or by several branches while others, having no actual mouths, sink into desert sands. There are also rivers entering the sea through deltas with several mouths but no principle one. A river can also open new mouths and abandon old ones so most mouths represent an area rather than a single geographic point, and this can complicate boundary treaty interpretation.⁶⁵ It is of course possible to apply the doctrine of the thalweg to a river mouth or estuary.⁶⁶

In the Case Concerning the Honduras and Nicaragua Arbitral Award, Nicaragua argued that because the mouth of a river is not a fixed point it cannot serve as a common boundary between two states.⁶⁷ The court found that the boundary commenced at the mouth of the Coco River and followed the thalweg upstream, clearly making the thalweg the boundary even at the mouth of the river.⁶⁸

When a river's mouth enters the sea passing through shifting or unstable banks, problems may arise as to whether the boundary remains fixed or not.⁶⁹ The Anglo-Portuguese agreement of 1938 concerning the Rovuma River which separated Tanzania from Mozambique avoided confusion by stipulating that the boundary line would follow the thalweg even when the position thereof was changed by a natural alteration in the bed.⁷⁰

65. McEwan (n14) 86.

66. Ibid; New Jersey v Delaware (n27).

67. 1960 ICJ Rep 192 at 216.

68. Ibid.

69. See discussion *infra*.

70. McEwan (n14) 87.

One could offer the same suggestions when using the mouth as a boundary as when the river source is used. Where possible, a precise point should be defined, and failing that, a convenient point near the mouth could be decided upon in pursuit of stability and certainty. Similarly, mouths can only provide a starting point for determining the frontier as the mouth, just like the source, cannot influence the demarcating line further down the river.

(f) Channel

Boundaries have been described as the 'median line of the channel' or 'principal channel'. The term 'channel' is ambiguous. It could represent the entire breadth of flowing water or it could refer to the deeper parts only. The ambiguity increases where there are different channels for upstream and downstream navigation or varying channels for small and large vessels. The 'principal' or 'main' channel could be the one most used, the deepest or the widest one. It requires precise circumscription.

The channel is not necessarily of constant width, so fixing the median line is not a simple task. Even with a multitude of soundings the edges of the channel, from which a median must be measured, might not be clearly defined.⁷¹ The line of deepest water in the channel does not normally lie along the median line but moves outwards on the curves.⁷²

In *navigable* streams, the deepest continuous channel may well be an appropriate line - one almost identical to the thalweg - but it is in most cases difficult to locate the deepest channel. The demarcation commission should once again be free to deviate from this line using arbitrary lines approximate to the deepest channel.

71 Jones (n6) 115.

72 Ibid.

The boundary between Mexico and the United States as contained in the Treaty of Guadalupe-Hidalgo of 1848 described the boundary in the Rio Grande as being '...up the middle of that river following the deepest channel'. This seemed to denote the median line of the deepest channel but it was not clear whether 'channel' referred to the entire breadth of the river bed or to the deeper portions only. In a subsequent treaty, the boundary was fixed as '... the middle of the deepest channel of the river'.⁷³ In practice, the boundary in the Rio Grande seems to have been the deepest continuous channel but the example illustrates the necessity of each treaty defining the terms as used by the drafters of the instrument. These definitions should preferably be incorporated after inspection of the particular feature in question.

(g) Straight segments

The advantage of rationalizing the sinuous line of the thalweg or the median into a series of straight segments is that the boundary can be determined with greater ease and, by using markers, will be visible. This is in sharp contrast to the thalweg or median line which cannot be identified at a glance. Another attractive feature is that arbitrary lines or straight segments are not fixed with reference to a particular water stage, thus producing a stable boundary line.

This alternative is not problem free should the river be an unstable one. The boundary could cross peninsulas created by accretion of river deposits. Then arbitrary straight lines can no longer be the boundary line in the river itself if the river is not markedly stable. This probably explains why this method of division is seldom used.⁷⁴

73 Ibid 116.

74 Bouchez (n20) 796.

(h) Boundaries across rivers.

This is an aspect best left to demarcators and not delimitators. If a straight line segment of a boundary is intersected by a river the course continues without deviation. If such a line intersects a winding river at several places, to follow the river itself may result in a simpler boundary line.

(i) Tunnels and bridges.

Certainty here is vital for prevention of border incidents. The centre of a tunnel is the appropriate boundary line. When a bridge is involved, the centre of the bridge or the boundary line of the river superimposed on the bridge are two possibilities. The advantage of the former is that river course change would be irrelevant. Some bridges are completely under the sovereignty of one of the riparian states. The Treaty of Versailles determined that France alone exercised sovereignty over the bridges of the Rhine.⁷⁵

(j) Tributaries.

A uniform rule dealing with this feature is lacking. Some tributaries are included in international agreements despite lying entirely in the territory of one of the countries. Others, including major tributaries, have not been dealt with by instruments regulating the boundary river they feed.⁷⁶

(4) Islands in rivers

The presence of islands in rivers has been dealt with in a variety of ways. Usually the ownership of the island is determined by its position in relation to the thalweg or median line. In the St Croix river section of the United States - Canada boundary it was agreed that islands whose sovereignty was mutually recognized would not be

⁷⁵ Ibid 817.

⁷⁶ Hirsch (n36) 100.

reallocated. Instead, the boundary would extend through the channel separating them from the other country regardless of whether it followed the main channel or thalweg.⁷⁷

Another solution has been to allocate all islands upstream from a certain point to one state and those downstream from the same point to the other state. All islands between the confluence of the River Domoni and the Rovuma River were allocated to Portugal in terms of the Anglo-Portuguese agreement of 1938 while those islands north of the confluence were assigned to Tanganyika.⁷⁸ This kind of distribution could lead to problems when dealing with an international boundary as the line could follow a narrow thread of water between an island and the foreign mainland, leaving a broad river between the same island and the mother state.

If the thalweg is the frontier and there are no prior claims to islands then the allocation is simple providing the thalweg is determinable. Difficulties arise if the river is unstable because the size, shape and position of the islands can alter. The thalweg could conceivably shift from one side of the island to the other. It is also possible that new islands could emerge and existing ones disappear.

The solutions have varied. Many jurists have submitted that sovereignty over islands remains constant and that the original boundary line remains in the original channel even though the thalweg has subsequently shifted.⁷⁹ In the Rio Grande River the sovereignty over the 'bancos' changed only if the size and population of the island was below fixed limits.⁸⁰ If an existing treaty makes provision for changes in islands the incidence of potential disputes is reduced

77 Jones (n6) 126.

78 McEwan (n14) 94.

79 Jones (n6) 127.

80 See discussion *infra*.

^{ed} providing the treaty itself has defined the term 'island' accurately. Islands have been defined as '...those which emerge when a river is in full flood and which contain land vegetation and rock or firm soil and are not shifting sand banks.'⁸¹

In a treaty adopted by Brazil and the United Kingdom in 1932 it was stated that if the thalweg shifted to the other side of the island the sovereignty would remain consistent but if the *island* changed shape and attached itself in peninsula-like fashion to the foreign state mainland, the sovereignty would change accordingly.⁸² Where a new island appeared it would belong to the state on whose side of the thalweg it emerged wherever the thalweg was situated at the time of emergence.⁸³ If two separate islands joined by way of *alluvio* the sovereignty of the resulting island would be determined by its relation to the thalweg at the time of the union.⁸⁴

New islands in boundary rivers which arise by alluvion and emerge within the boundary line of one of the riparian states accrue to the territory of that state while islands which appear *upon* the boundary line are divided by that line into parts which accrue to the land of the states concerned.⁸⁵

(5) Course changes

A troublesome feature of a river as a barrier is that the river may, and often does, change its course. Where the river flows in a narrow valley, the course changes are usually slight and slow. Other rivers actively build up their beds due to sediment overload which can produce

81 McEwan (n14) 94.

82 Ibid 96; Jones (n6) 127, 128.

83 Ibid 128; McEwan (n14) 96.

84 Ibid.

85 Oppenheim (n4) 565 para 234.

various courses with no consistent main channel. There are also rivers which neither cut down vigorously nor build up rapidly but which meander. This is a common occurrence and most treaties which deal with course changes refer specifically to this kind of behaviour.

Lateral changes of course usually occur in one of two ways. *Accretion* takes place when the river eats away one of its banks, often depositing sediment on the other side at the same time. *Avulsion* refers to sudden, rapid course changes often preceded by accretionary narrowing of the meander neck.⁸⁶ Less obvious effects on channels can occur due to alteration in land use such as afforestation, clearing of woodland, agricultural land development and urbanization. Nevertheless, these activities cause changes in runoff and sediment production which in turn affect the river channel and induce change.⁸⁷

The oft stated requirement that accretion must be slow has given rise to argument with treaties usually resorting to words such as 'slow' and 'gradual'.⁸⁸ If the frontier is unstable, the boundary treaty ought to regulate this. If it does not, the boundary line becomes an imaginary line shifting with every course change making border administration difficult. If the treaty is silent, some writers posit that if the boundary is the thalweg or median line (and thus influenced by the flow) then the line shifts automatically with course changes though the actual boundary does not change until a revised demarcation has taken place and markers, if any, are adjusted.⁸⁹ However, it would be best for the treaty itself to deal with course changes and to prescribe revised demarcation after major changes or better still, at regular intervals.

86 Jones (n6) 120.

87 River Channel Changes (1977) (Ed K J Gregory)2.

88 Jones (n6) 120.

89 Ibid.

Sometimes a river suddenly abandons its bed entirely or dries up ~~altogether~~. The line in a navigable river continues to run along the middle of the old thalweg in the abandoned bed.⁹⁰ For non-navigable rivers, the line runs through the middle of the abandoned bed.⁹¹

Prominent jurists (and many treaties too) have stated that a river boundary only shifts after accretion has taken place and not in the wake of avulsion. This viewpoint is further entrenched in judicial decisions. In *Hogue v Stricker Land and Timber Co* the court stated

'It is settled beyond the possibility of dispute that ... when the bed and channel are changed by the natural and gradual processes known as erosion and accretion, the boundary follows the varying course of the stream, while if the stream from any cause, natural or artificial, suddenly leaves its old bed and forms a new one, by the process known as avulsion, the resulting change of channel works no change of boundary, which remains in the centre of the old channel....'⁹²

Other writers do not always agree on this approach. A meandering river on a flood plain, will, given time, shift avulsively in every part of its course unless restrained by engineering works.⁹³ If the boundary remains unaltered it can lose all relationship to the actual river and become a line not clearly marked in nature and difficult to mark artificially.⁹⁴ This reflects the majority viewpoint namely, when gradual additions to one river bank occur the state controlling that bank is presumed to own the territorial increment.⁹⁵ This viewpoint was initiated by

90 W Levi Contemporary International Law : A Concise Introduction (1979) 136.

91 Oppenheim (n4) 566 para 235.

92 (1933-1934) ADPILC No 49 133 at 134.

93 Jones (n6) 122.

94 Ibid.

95 G Schwarzenberger International Law (1957) Vol 1 295.

Grotius who added that where a river changes its course the boundary changes, but that avulsion produced no adjustment.⁹⁶ McEwan doubts whether these principles can be rigidly applied since the practical implications of avulsion could result in a state losing access to the river if the waters subsequently lie entirely within the territory of the opposite state because the boundary does not change.⁹⁷

Nevertheless, many riparian states have adopted these classical rules though a trend has emerged whereby treaties modify the rigid application thereof. In the Anglo-Italian Protocol of 1891, the boundary commenced at the mouth of the River Juba and proceeded along the thalweg to a certain point, dividing the territories which later became Kenya and Italian Somaliland. A sudden change in course altered the position of the mouth in 1909, effectively shifting the mouth one and a half miles south. According to the classical rule, the boundary remained in the location of the former thalweg, leaving Italy with no access to the main entrance.⁹⁸ Italy contended that the treaty intended the boundary to follow the thalweg *in general* and not the thalweg at any fixed moment. The matter was settled two years after the sudden change, the parties agreeing that in the event of a similar change of course, the thalweg as it existed *from time to time* would be the boundary. This left the left bank under Italian control and the right bank under British control, confirming a rejection of strict adherence to the classical rule and producing instead a solution based on an equitable sharing of boundary waters.⁹⁹ This example illustrates the undesirability of a strict, technical application of the avulsion-no change rule which can produce absurd results. Another example appeared in an

96 Grotius *De Jure Belli ac Pacis* Book II Ch 3 xvi (2), xvii (1); (1919-1922) ADPILC No 60 96.

97 McEwan (n14) 90.

98 Ibid 92.

99 Ibid 92, 93.

agreement relating to the River Pakchan (the boundary between Burma and Thailand) which provided that the thalweg '...wherever it may be...' would be the dividing line.¹⁰⁰ It is clear that the doctrine of avulsion-no change ought not to be regarded as a (generally accepted rule of international law, much less a universal one.

State practice concerning shifting boundaries varies. A treaty concluded in 1840 by France and Baden provided that every October, when the Rhine waters were at their lowest, a commission would determine the thalweg and this line would remain in force until the next annual revision.¹⁰¹ Other treaties have allowed the prevention of course changes by artificial means. For example, a convention between Finland and Norway permitted prevention by means of engineering works on condition action was taken immediately and that the measures adopted did not prejudice the other party.¹⁰²

The Rio Grande underwent so many course changes in the thirty years following the original treaty of 1848 that a second convention in 1884 contained the principle that '... the dividing line ... follow the centre of the normal channel... notwithstanding any alterations in the banks or in the course ... provided that such alterations be effected by natural causes through slow and gradual erosion and deposit of alluvium...' ¹⁰³ The treaty rejected adjustment following avulsion which resulted in the formation of small banks or 'bancos' of which the administration was uncertain. Eventually a further agreement allotted these banks according to whether they were situated on the right or left of the river.¹⁰⁴ Portions of the Rio Grande have subsequently been stabilized by dredging and diking and the

100 Ibid 92.

101 Jones (n6) 124.

102 Ibid.

103 J R V Prescott Boundaries and Frontiers (1978) 87.

104 Jones (n6) 123.

boundary now lies in the rectified channel instead of the natural bed.

'The parcels of land that, as a result of these cuts or of merely taking the new axis of the channel as the boundary line, shall remain on the American side of the axis of the rectified channel shall be the territory and property of the United States of America, and the territory and property of the United Mexican States those on the opposite side...' ¹⁰⁵

In contrast, Austria and Switzerland agreed that the boundary would remain fixed, unaltered by course changes '... even after the completion of two cuttings and shall continue to follow the middle of the old bed of the Rhine...' ¹⁰⁶ Sometimes provision is made for a demarcation commission to determine boundary adjustments. The treaty of St Germain provided that the commission could specify whether the line would react to changes of course or channel or whether the frontier would remain fixed as at the moment of conclusion of the treaty. ¹⁰⁷

The effect of change in the physical features of a river was examined in the Chamizal Arbitration where it was held that '... this fluvial boundary would continue notwithstanding modifications of the course of the river caused by gradual accretion of the one bank or degradation of the other bank...' ¹⁰⁸ There are also many examples of boundary limitations remaining constant despite avulsion. ¹⁰⁹

Of course states can agree on the consequences of course changes. They could decide on various solutions, for example

105 Ibid.

106 Ibid.

107 Ibid 123, 124.

108 (1911) 5 AJIL 785 at 794; D J Harris Cases and Materials on International Law (1983) 3ed 167.

109 Lauterpacht (n11) 223.

- (a) that the boundary shall be the thalweg wherever it may be situated *at the time*
- (b) that the thalweg shall be surveyed annually - thus the line will only change once a year if the thalweg has shifted
- (c) that the frontier shall remain unchanged, thus excluding the effect of alluvial change. Even in this case the agreement is usually modified to the effect that the boundary will shift if *both banks* of the new course of the river fall under the jurisdiction of one of the two riparian states.¹¹⁰

Maintaining the old boundary has often been the solution to disputes between two provinces of the *same* country but these decisions of national courts do not set standards for the practice of states concerning *international* boundaries.¹¹¹ At the same time, there are so many treaties confirming that the boundary line does react to course changes that it cannot be asserted that maintaining the old boundary is a general rule.¹¹² The treaty between the United Kingdom and the United States of America concluded in 1908 stated that the line would follow the centre of the main channel or thalweg as *naturally existing*.¹¹³

Where the boundary is the thalweg and the treaty does not deal with course changes, it could be argued that the thalweg, being a functional boundary ensuring equal rights of navigation, is automatically adjusted to preserve the equality. To adhere to the original thalweg would negate the functional nature of the boundary. Unfortunately, automatic adjustment means that there never will be (or at least not for long) a clear boundary as the actual and legal boundaries may constantly differ.

110 Bouchez (n20) 800.

111 Ibid 801.

112 Ibid.

113 Ibid.

It is submitted that periodic adjustment at regular intervals is a practical solution. The thalweg of the Danube limited the sovereignty of the riparian states until the succeeding verification irrespective of changes undergone in the interval.¹¹⁴ Periods of verification could vary from annual verifications to ten year periods though it would be undesirable to uphold a discrepancy for a long time. Short intervals will avoid this.

Physical changes are not only problematic when the thalweg represents the border but also when the *bank* limits state jurisdiction. Banks can similarly change through accretion and erosion. Examples are few due to the exceptional nature of the bank as a boundary. On July 16 1930, an arbitration treaty between Guatemala and Honduras stated that '... the boundary is established on the right banks of the Tinto and Montagua rivers at mean high water mark, and, in the event of changes ... whether due to accretion, erosion or avulsion, the boundary shall follow the mean high water upon the actual right banks of both rivers'.¹¹⁵

Where the river itself cuts a new bed, adhering to the original boundary could imply that the river partly ceases to exist as a boundary river. If the line shifts, one of the riparian states could lose territory and be seriously disadvantaged. One solution could be the re-establishment of the old course by artificial means. The states could agree that the boundary shifts if the state gaining territory compensates the losing state by transferring another area, where the river is not the boundary, to the latter. Another possibility is that the states could agree

114 Ibid 804.

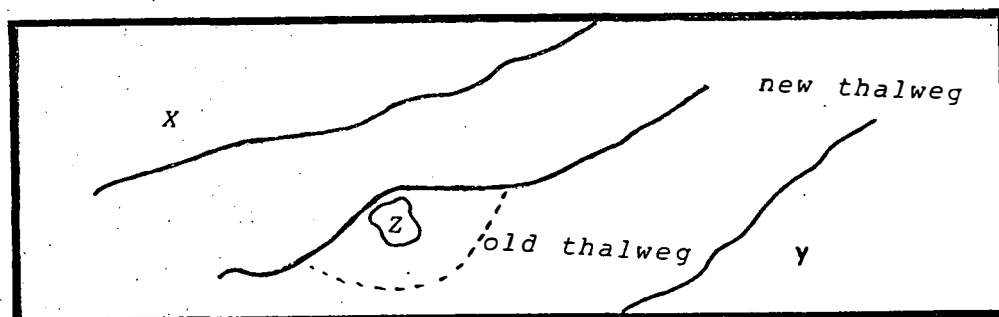
115 Ibid 803.

that the 'losing' state possesses a guaranteed right to utilize the lost section of the river.¹¹⁶

The ideal situation regarding islands is for the treaty to state which islands belong to which state. For example, all islands on one side of the thalweg could belong to the state of that side. If the boundary shifts and a functional boundary such as the thalweg is employed, then the status of the islands ought to remain unchanged.¹¹⁷

Concerning islands, there are several options as the following diagram illustrates:

D2



- (a) if the old thalweg still exists, it could be maintained as the boundary in that part of the river *where the island is situated*
- (b) if the new thalweg is the *only* existing channel then the island Z could fall under the sovereignty of state Y

116 Ibid 809.

117 Ibid 815.

- (c) if the new thalweg is the only existing channel the island could be an *enclave* in a water area controlled by Y
- (d) if several islands are involved, X and Y states could trade off equal numbers in which case the new thalweg will be the definitive boundary for the whole river
- (e) if island Z becomes an integral part of one bank ie when the bed between the bank and the island rises to the mean high-water level of the river then the island falls under the sovereignty of the 'bank' state
- (f) if the island is split in two by the new thalweg, the pre-existing sovereignty could be maintained or the states could agree on joint sovereignty for the whole island.¹¹⁸

A new island will naturally belong to the state on whose side of the boundary line it is situated. If the line severs the newly emerged island it can be divided or the states could exercise joint sovereignty.

Can states themselves take measures to maintain existing boundaries and prevent alterations? Some treaties allow states to force the river to return to its old bed. In a treaty between the Netherlands and Belgium of 1843, provision was made that if the thalweg of the Meuse changed *substantially*, the boundary line reacted, but the losing state could, at its own expense, force the river back to its old bed, providing that the works had to be done within four years of the event.¹¹⁹

What is the effect of a course change due to artificial causes? No problem arises if the states agree on the consequences. Most treaties contain clauses prohibiting changes by one state without the consent of the other. In

¹¹⁸ Ibid 817.

¹¹⁹ Ibid 810.

1911 the Institut de Droit International adopted a rule prohibiting unilateral artificial alterations detrimental to the non-consenting state.¹²⁰ What are the consequences, if any, should a state commit a unilateral act of this nature? According to the principle *ex injuria jus non oritur* the alteration is illegal forever. On the other hand, acquiescence could change a claim into a right. In other words, a unilateral alteration followed by effective exercise of authority over that part of the river could become a valid right depending on the attitude of the other state.¹²¹

There appear to be no general principles of international law applicable to river course changes and the ensuing consequences. Each change possesses its own particular character due to the concrete circumstances. If there is an agreement regulating the effects of boundary shifts then the matter is settled. If an existing treaty is silent on course changes then those caused by a gradual process of erosion and accretion should initiate a corresponding adjustment.¹²²

(6) Demarcation and administration of river boundaries

One of the oft cited advantages of a river boundary is that it is visible without the need for artificial markings. Normally, however, *more* markings are required along a river boundary than are required for many artificial boundaries and it is often more expensive to maintain river boundaries where course changes occur.¹²³ Many river boundaries require permanent or semi-permanent commissions to deal with the constant and varied occurrence of problems such as water

120 Ibid 813.

121 Ibid 814. The USA based its argument on this principle in the Chamizal award (n108).

122 Bouchez (n20) 808.

123 Jones (n6) 132.

utilization, conservation of fisheries and the maintenance of navigation aids.

(7) Continuance of treaty obligations.

(a) General

Processes by which independence is attained include an orderly transfer of constitutional power to dependent territories and succession, where no regular grant of power is involved. A detailed exposition of the topic is not within the ambit of this discussion. Nevertheless it is worth noting that independence of colonial territories is a process distinguishable from the traditional forms of secession while trust territories were initially endowed with a special status in anticipation of independence.¹²⁴ What effect does the attaining of independence have on existing treaties?

There is a tendency towards *continuity* of treaty relationships not least of all because the successor states themselves will be as much prejudiced as other states in their relations *inter se*, by the collapse of the system.¹²⁵ Not unexpectedly, there exists another view, namely that a new state starts with a clean slate. This entails selecting the obligations it wishes to honour. However, there is a marked caution in the rejection of *all* previous treaty commitments.¹²⁶ For example, the Congo (Brazzaville) continues certain treaties concluded on its behalf between France and the United States.

In accordance with the practices of international law and because of the circumstances under which the Republic of Congo attained international

124 The Effect of Independence on Treaties International Law Association (1965) 2.

125 Ibid.

126 Ibid; C W Jenks 'State Succession in Respect of Law-Making Treaties' (1952) 29 BYIL 105 at 107; D P O'Connell State Succession in Municipal Law and International Law (1967) Vol II 4.

sovereignty, the latter considers itself to be a party to the treaties and agreements signed prior to its independence by the French Republic and extended by the latter to the former overseas territories, provided that such treaties or agreements have not been expressly denounced by it or tacitly abrogated by a text replacing them'.¹²⁷

There are certain treaties juristically regarded as creating *real* obligations and hence surviving changes of sovereignty, and these treaties are usually labelled 'dispositive'.¹²⁸ It should be noted that there is by no means universal agreement on the appropriateness or content of the term with some writers even rejecting the distinction between dispositive and contractual treaties.¹²⁹

A dispositive treaty is said to create permanent obligations which exist independent of the treaty which created them (and independent of the personality of the state exercising sovereignty).¹³⁰ This means that where *real* rights have been created which attach to a particular *territory*, they survive if the territory becomes part of a new state. Treaties delimiting boundaries fall into this category, a viewpoint supported by international and arbitral decisions.¹³¹

Udokang analyses the doctrine of dispositive treaties and concludes that the issue is both complex and ambivalent.¹³² Some jurists claim that dispositive treaties bind successor states while others do not afford dispositive treaties special status, treating them as they would treat

127 O Udokang Succession of New States to International Treaties (1972) 210.

128 Ibid 327; P C Szasz 'Succession to Treaties under the Namibian Constitution' (1989-1990) 15 SAYIL 65 at 70, 76.

129 O'Connell (n126) 12; Udokang (n127) 327 note 1.

130 Ibid 328.

131 Case Concerning the Temple Preah Vihear (Cambodia v. Thailand) 1962 ICJ Rep 6.

132 Udokang (n127) 398.

international treaties in general.¹³³ Automatic devolution of dispositive treaties is thinly supported by the practice of states and judicial practice is characterized by caution not to confirm orthodox doctrines.¹³⁴ Udokang submits that neither the various doctrines nor judicial precedents adequately explain the divergence which exists between the prevailing doctrine of localized obligations and the practice of states.¹³⁵ O'Connell agrees, stating that

'The variety of problems raised with respect to the effect of changes of sovereignty upon treaties and the complicating factors present in concrete instances, inhibit the elaboration of a unitary principle of law on the evidence of State practice'.¹³⁶

Fortunately problems attendant on state succession are now largely regulated by treaties indicating certain tendencies without establishing fixed rules of law.¹³⁷

Non-dispositive treaties are not contentious since most bilateral treaties contain termination clauses. For example, all commercial treaties are terminable on notice while it also occurs that old bilateral treaties, on the face interminable, are in fact, obsolete.¹³⁸ The correct diplomatic practice is for successor states to serve notice of termination of treaties no longer useful and to initiate negotiations for the termination of those which appear interminable.¹³⁹

133 Ibid.

134 Ibid 398, 399.

135 Ibid 401.

136 O'Connell (n126) 24.

137 F C Okoye International Law and the New African States (1972) 49.

138 O'Connell (n126) 24.

139 Ibid.

(b) Effect of change of sovereignty on boundary treaties

A state can acquire from another only so much territory as that other possessed, and the latter's boundary treaties delimit the extent of the territory acquired.¹⁴⁰ Thus, where a treaty defines a frontier, what is inherited is *not the treaty* but the territorial extent of sovereignty.¹⁴¹ This was confirmed by the following declaration of the International Court of Justice in the Temple Vihear Case.

'In general, when two countries establish a frontier between them, one of the primary objects is to ~~achieve stability and finality~~. This is impossible if the line so established can, at any moment, and on the basis of a continually available process, be called in question, and its rectification claimed ... Such a process could continue indefinitely, and finality would never be reached. Such a frontier, so far from being stable, would be completely precarious.'¹⁴²

Furthermore, according to the principle of *res transit cum suo onere*, rights and duties contained in boundary treaties not only remain valid but devolve *ipse iure* upon the successor state - serious international tension would result if states refused to recognize the validity of these treaties.¹⁴³ In view of the widespread instability which new territorial claims by a state could cause, it is possible to aver that frontier provisions contained in a treaty devolve automatically upon a successor state. Problems can arise when the treaty leaves the actual delimitation to a boundary commission and the delimitation has not been completed on the date of a change of sovereignty or when the treaty contains reciprocal rights and duties or regulates future activities. It could be that

140 Ibid 273.

141 Ibid; Okoye (n137) 94.

142 1962 ICJ Rep 6 at 34.

143 Udokang (n127) 386; Oppenheim (n4) 159.

the answer lies in the severance of the dispositive from the non-dispositive provisions.¹⁴⁴

According to several writers, the principle of *uti possidetis* confirms the intangibility of frontiers inherited from colonial times, a principle adopted by newly emancipated African states.¹⁴⁵ The principle is not limited to any particular region but is a principle of universal application.¹⁴⁶ *Uti possidetis* has been given implied recognition in Article III of the Charter of the Organization of African Unity which requires members to respect the sovereignty and territorial integrity of each state and the Organization (Somalia dissenting) resolved to declare that member states respected the frontiers existing at the time they became independent.¹⁴⁷ It can be argued that there exists an African doctrine of respect for pre-independence boundaries, a principle affirmed for Europe in the Helsinki Agreement of 1976.¹⁴⁸ A few examples will illustrate this point.

144 O'Connell (n126) 273; Udokang (n127) 380.

145 G J Naldi 'The Case Concerning the Frontier Dispute: *Uti Possidetis* in an African Perspective' (1987) 36 ICLQ 893 at 898. The author notes at 897 that the principle was essentially a political one as it sought to ensure that no territory was to be considered *terra nullius* and thus vulnerable to further colonization. The expression refers to *possession* in the sense of administrative control. See also Guatemala-Honduras Boundary Arbitration (1933-1934) ADPILC No 46 115 at 117.

146 Naldi (n145) 902; G N Barrie 'Uti possidetis versus self-determination and modern international law: in Africa the chickens are coming home to roost' (1988) 3 TSAR 451 at 456.

147 Res AHG/16-1 of OAU 24 July 1964; Article 2 paragraph 1 (c) of the Charter of the OAU; O'Connell (n126) 273; McEwan (n14) 22, 27-31.

148 N S Rembe 'The Vienna Convention on State Succession in respect of Treaties: an African perspective on its applicability and limitations' (1984) 17 CILSA 131 at 138; Okoye (n137) 107; M Akehurst *A Modern Introduction to International Law* (1984) 5ed 158.

Though no formal agreement concerning the boundary between Surinam and British Guyana existed, the River Courantyne had been tacitly recognized as the border. The only uncertainty was whether the boundary line was the western bank or the thalweg but eventually the two Dutch colonies of Surinam and Berbice agreed on the former.¹⁴⁹ When Berbice was ceded to Great Britain the latter claimed that the thalweg was the dividing line. In the end the Netherlands Minister of Colonies declared in 1924 that the left (western) bank was indeed the boundary line having found confirmation in state practice, and the entire width of the Courantyne was placed under Netherlands sovereignty.¹⁵⁰

CC Tanganyika (Tanzania) was formerly a German territory whose boundaries with Nyasaland (Malawi) were described in the Anglo-German Treaty of 1890. The border followed the eastern, western and northern shores of Lake Nyasa. Unfortunately, survey maps drawn up after World War I depicted the boundary as going *through* the lake. This gave Tanzania ownership of that part of the lake. In response to the uncertainty, the Prime Minister of Tanzania issued a statement in 1961 acknowledging that no part of the lake fell within the territory of his country.¹⁵¹ Less than seven years later, this no longer represented Tanzania's position on the sovereignty of Lake Nyasa. Tanzania argued that a middle line was not only the historical boundary but also the equitable one. Predictably, Malawi sought to uphold the original treaty which placed the lake under its sovereignty. Though the treaty denoted the eastern shores as the boundary line, concrete evidence illustrated the fact that the British authorities not only acquiesced to continuing public and official German (Tanzanian) activity on the waters of Lake Nyasa, but had also accepted the

149 O'Connell (n126) 274, 275.

150 Ibid 275.

151 Okoye (n137) 102.

middle line as the limiting line in various official instruments.¹⁵² As a result it could be claimed that the trust territory inherited the boundary as *evidenced in the practice* of the mandate and that the administering authority of the latter had no legal power to change or compromise the boundary of the mandated, and subsequent trust territory.¹⁵³

African border conflict has often been blamed on European colonial administrations imposing artificial boundaries on the continent. This is partly true in that many European powers did delimit their spheres of influence in Africa by vaguely identified and at times non-existent natural features often totally disregarding the effect of local conditions.¹⁵⁴ These boundaries were often fixed when little was known of the geography and the socio-cultural conditions of the African peoples.

According to state practice it can be said that new African states have by their attitude affirmed a principle of succession to colonial boundaries. Disputes following independence can be ascribed to the inherently artificial nature of the frontiers and to political and economic considerations rather than to a rejection of the principle of succession to existing boundaries.¹⁵⁵ In fact, many arguments used to question the continued validity of certain boundary treaties imply that succession is not denied in principle though it is equally true that though colonial boundaries may be durable they are not necessarily unchangeable and some old boundary disputes require urgent, peaceful solution.¹⁵⁶

152 Ibid 103.

153 Ibid.

154 Ibid 104.

155 Ibid 107.

156 Ibid; Udokang (n127) 381.

(c) Vienna Convention on State Succession in Respect of Treaties.

This Convention, adopted on 22 August 1978 was the result of intensive preparations undertaken by the ILC. It was the first multilateral treaty dealing comprehensively with the consequences of decolonization and is generally declaratory of customary law although not all the articles have achieved this status.¹⁵⁷

Article II provides that succession does not affect treaties establishing boundaries. Boundary treaties are *sui generis* firstly because they are expected to apply *ad infinitum* and secondly because, unlike ordinary contractual agreements, they create an objective juridical situation which continues independent of the existence of the original signatories.¹⁵⁸ As such, boundary treaties have been given exceptional status under general international law.¹⁵⁹

To challenge an established frontier is to challenge not only the concept of state but also to question fundamental principles of international law such as sovereignty, territorial integrity and non-interference in the internal affairs of states. Article II reflects present realities and current state practice.¹⁶⁰

157 Rembe (n148) 143. The Convention is not yet in force but it is considered a belated codification of state practice. Article 49(1) of the Convention requires fifteen ratifications or accessions to enter into force. As of 31 December 1989, there were three ratifications, five accessions and seventeen unratified signatures. Only three accessions have taken place since 1980. See Szasz (n128) 67 note 12. For a detailed discussion of the implications of the Treaty see M G Maloney 'Succession of States in Respect of Treaties : The Vienna Convention of 1978' (1979-1980) 19 VJIL 885.

158 Cukwurah (n54) 108.

159 Szasz (n128) 76; Rembe (n148) 138.

160 Ibid.

The Convention is important for the independent state of Namibia and both the UN Council for Namibia and SWAPO participated at the Conference. The Council proposed a resolution on Namibia which declared that South Africa was not the predecessor state in the case of Namibia and affirmed numerous OAU and United Nations resolutions on the territorial integrity of Namibia.¹⁶¹

(d) Namibia - succession to pre-independence treaties

At the United Nations Conference on Succession of States in terms of Treaties in April and May of 1977 and July and August of the following year, the representative of the United Nations Council for Namibia stated that '... the Council considered that, in the case of Namibia, failure to apply the "clean slate" principle would impose an intolerable burden on the territory once it had become independent'.¹⁶² The Conference also adopted a resolution declaring the Council the predecessor state of a future independent Namibia.¹⁶³

As to the pre-colonial German treaties concluded with Portugal in 1886 defining the northern border and the 1890 treaty with the United Kingdom concerning the eastern and southern boundaries of Namibia, it appears that these boundary treaties remain valid to this day.¹⁶⁴ The clean slate doctrine will contain an exception in line with Article II of the Convention which expressly states that a succession of states does not as such affect a boundary established by treaty.¹⁶⁵ The independent state of

161 Ibid 143; Maloney (n157) 903 note 87. Neither South Africa nor Namibia has taken any steps to become a party to the 1978 Convention.

162 Y Makonnen 'Namibia: Its International Status and the Issues of Succession of States' (1987) 3 No 1 LLJ 183 at 201, 202.

163 Ibid 202.

164 Ibid 205; Szasz (n128) 76.

165 Makonnen (n162) 205.

Namibia will have to deviate from applying the clean-slate doctrine in order to respect the continued validity of existing boundary treaties.

(8) Namibia - land territory

(a) Introduction

Namibia lies between 17° and 29° south latitude and between 12° and 25° east longitude with a total area of 824 269 square km, representing approximately three percent of the total area of Africa. The territory extends from the Kunene River in the north 1280 km south to the Orange River. The latter river represents the southern boundary of Namibia, separating it from South Africa.

This boundary attracted attention after a dispute arose when a farmer began farming on a narrow strip of fertile land situated on the northern bank of the Orange River which at the time had not yet been officially surveyed by the South West African administration.¹⁶⁶ This was probably because the agricultural potential of the area had not attracted attention. A reluctance to bear the cost of expensive surveys may also have contributed to this state of affairs. The farmer refused to leave and proceedings were initiated in the name of the Administrator-General based on the allegation that the farmer was unlawfully occupying state territory. According to the farmer, the land in question did not form part of Namibian territory and as a result, the Supreme Court in Windhoek lacked the necessary jurisdiction to hear the matter.¹⁶⁷

The issue involved the precise location of the boundary line between South Africa and Namibia. The matter ended abruptly

166 G Erasmus 'How to Farm on the South African/Namibian Border : Problems in Demarcating a River Boundary' (1984) 10 SAYIL 121 at 122.

167 Ibid.

with an out-of-court settlement whereby the farmer agreed to abandon the fertile strip of agricultural land.¹⁶⁸

Of great importance was the fact that the question of the exact boundary demarcation had been raised. At the time of writing, this boundary line has yet to be demarcated and the problem will have to be addressed in view of the independence of Namibia.

(b) Historical background

South West Africa - since 1968 usually referred to as Namibia in international politics - was discovered in the 15th century by Portuguese navigators searching for a sea-route to the East around the Cape of Good Hope. In the 16th century, Hereros and Wambos from the north penetrated the territory which was sparsely inhabited by nomadic Bushmen and Hottentot tribes. In the 19th century some Hottentots (Namas) left the Cape Colony and settled in the southern part of the territory.

South West Africa fell under the influence of the Cape government in the 19th century. From 1883 German traders were active in the territory and the area was placed under the protection of the German Reich in 1884. With the exception of the port of Walvis Bay, the whole of South West Africa remained under the control of Germany until 1915.

The tension between the British and the Germans as a result of their competition for territories in Africa was diffused by agreements between the two nations, the most important being the 1890 Anglo-German Agreement whereby certain territories in East, West and Southern Africa were recognized as falling within their respective spheres of influence.

The northern boundary of the Cape Colony was proclaimed by Sir Harry Smith, Governor of the Cape, in the Cape of Good Hope *Government Gazette* of Friday 23 December 1847 as

'...to where it (the Kraai River) falls into the Orange River, and thence following the course of the last mentioned River, along its left bank to where it empties itself into the South Atlantic Ocean'.¹⁶⁹

Going downstream, the southernmost boundary was thus the southern bank. In 1890 the northern boundary between the Cape Colony and the Transgariep was the south bank of the Orange River.¹⁷⁰ Apparently the Germans were unaware of this, and in terms of the 1890 Treaty, naively agreed to the north bank as the dividing line between the German Protectorate and the Cape Colony. Von Moltke attributes this to a lack of experience, Germany being 'in its cradle as a Colonial Power'.¹⁷¹

The southernmost frontier of the present day Namibia was therefore described in the Agreement between Germany and the United Kingdom as

'To the south by a line commencing at the mouth of the Orange River, and ascending the north bank of that river to the point of intersection by the 20th degree east longitude'.¹⁷²

According to the Germans, the waterline marked the bank, the boundary advancing and retreating as the waters rose and fell.¹⁷³ In 1909 the Cape and British authorities were prepared to accept the thalweg as the boundary in exchange

169 J von Moltke 'The Boundaries of South West Africa' (1977) *South West Africa Annual* 170 at 171.

170 Ibid.

171 Ibid.

172 Erasmus (n166) 123; Article 111(2) of the Anglo-German Agreement of 1890 relative to Africa and Heligoland [South African Treaties (G81-98) 380].

173 V Prescott 'Africa's Boundary Problems' (1979) *Optima* 28 No 1 3 at 10.

for continued British ownership of islands in the river and exclusive operation of ferries for a fixed period, but war intervened, the negotiations never produced anything concrete and the north bank remained undefined.¹⁷⁴

The border remains unchanged despite changes of sovereignty over the two territories.¹⁷⁵ Being a German colony, South West Africa after World War I became a Class C mandate over which the Union of South Africa exercised power. Through state succession the boundary between Namibia and the Republic of South Africa, as stipulated in the original treaty, remains unchanged.

Despite a formal delimitation, the dividing line was never demarcated. The verbal terms have until now not been manifested in an actual demarcation by some or other physical means. Up until the enterprising farmer's case there was no pressing need for a precise demarcation of the line because, since the mandate of 1920, the territory of Namibia had been administered as an integral part of South Africa. South Africa had for a long time exercised full administrative power on both sides of the Orange River. In 1985 powers regarding internal government were transferred to a transitional government in Windhoek - only foreign affairs and external defence matters were excluded.¹⁷⁶

It is the line on the *north bank* which requires demarcation as it not only represents the extreme southern limits of Namibia, but also the point at the coast from which the international maritime boundary between the two countries

174 Ibid.

175 See discussion *supra* (7) (b).

176 The transitional government was implemented on 17 June 1985 in terms of Proc 101 1985 GG 9790 of 17 June 1985 as amended by Proc 222 1985 GG 10035 of 13 December 1985; Financial Mail 26 April 1985 54. This act was condemned by SC Res 566 (1985) as being in violation of SC Res 435 (1978).

will be drawn. Being an *international* boundary, it requires application of international law principles. Even if Namibia was not an independent state it would not affect the principles to be applied as it has an 'internationalized' status as confirmed by the International Court of Justice in its advisory opinion on South West Africa:

'....the Union of South Africa acting alone has not the competence to modify the international status of the Territory of South-West Africa, and that the competence to determine and modify the international status of the Territory rests with the Union of South Africa acting with the consent of the United Nations.'¹⁷⁷

The subsequent (though not undisputed) termination of South Africa's mandate and the creation of the United Nations Council for Namibia in 1967, a body which represented the territory in international organizations, further 'internationalized' the status of the area.¹⁷⁸ The United Nations Council for Namibia was established in terms of General Assembly Resolution 2248 (S-V) of 19 May 1967. Despite rejecting the validity of the revocation of the mandate, South Africa did acknowledge this international status and supported the principle of independence for Namibia. This was confirmed by the enactment of the South West Africa Constitution Amendment Act 95 of 1977 (whereby article 38 of the South-West Africa Constitution Act 39 of 1968 was amended) whose introduction reads '... with a view... to the eventual attainment of independence...'¹⁷⁹

177 1950 ICJ Rep 128 at 144. For an interesting theory on the acquisition of territorial sovereignty pending the foundation of a state see J G Starke 'The Acquisition of Title to Territory by Newly Emerged States' (1965-1966) 41 BYIL 411 at 415.

178 J A Faris 'South Africa's severance of links with South West Africa' (1977) 3 SAYIL 49 at 52, 53; (1983) 9 SAYIL 240 (Ed W Booyse); G A Res 2248 (s-v); G Tötemeyer South West Africa-Namibia (1977) 20.

179 The date of commencement of Act 95 of 1977 was 1 July 1977.

It is indisputable that principles of international law must prescribe the nature of the eventual position of the boundary line.

(c) South Africa's interpretation of the Treaty of 1890. The intention of the parties as evidenced in the Anglo-German Treaty of 1890 was that the *entire* river bed should form part of the British Cape Colony and subsequently of South Africa. This same treaty dealt with river boundaries on other fronts too. For example, the boundary between Namibia and the present day Botswana was fixed as the centre of the main channel of the Chobe River.¹⁸⁰ Though the arrangement concerning the Orange River boundary was by international standards exceptional, it was nevertheless deliberate.

The first record of an official enquiry into river banks as boundaries was contained in the Report of the Select Committee on River Boundaries of 1899.¹⁸¹ According to the minutes of evidence given, the Surveyor-General at the time stated that where neighbouring farms were divided by rivers, the farms on each side were bounded by the 'near bank' because '...it was too difficult to know exactly what the centre of the river is'.¹⁸² In response to a question on the position of independent governments the Surveyor-General was of the opinion that the middle of the river constituted the dividing line.¹⁸³

The Examiner of Diagrams made a startling submission that '... in surveying farms along the southern bank of the (Orange) river I took the inner bank'.¹⁸⁴ The reasons for

180 South African Treaties (G 81-98) 390 Art III.

181 Cape of Good Hope Report of the Select Committee on River Boundaries (1899) Cape Times.

182 Ibid 3 para 13, 7 para 50.

183 Ibid 9 para 61.

184 Ibid 11 para 71.

this practice were that he felt it undesirable to extend the property to the middle and also because there were islands in the river and '...if we did not take the precaution to consider the southern bank of the river as the boundary, the riparian proprietors might have claimed the islands'.¹⁸⁵

Most notable is the fact that the inner or *southern* bank was determining the extent of farms bordering the Orange River and this *subsequent* to the Anglo-German Treaty. It could have signified a waiver of the exclusive bank rights granted in terms of the Treaty but this was not likely. This submission was based on the reasons given for using the inner bank, namely that, if not, riparian owners could claim the islands. In terms of international boundaries it would not have been logical to settle for the inner bank, thereby creating the opportunity for the opposite state to extend its boundary across the entire river. This submission is borne out by the fact that in terms of the Treaty, South Africa's territory extended to the north or outer bank.

The evidence must of course be treated cautiously as the report concerned internal river boundaries and the issue of international river boundaries was not specifically dealt with. The remarks by the officials concerned were evidence of practice at the time and did not necessarily represent the official standpoint.

The official South African viewpoint on the exact location of the boundary line was first stated in a legal opinion of 1929 submitted by the Secretary of Justice to the Secretary of Lands.¹⁸⁶ Referring to the southern boundary of the mandated territory the view was expressed that '... this boundary, somewhat unprecisely defined in Article III of the agreement between Germany and Great Britain, dated 1st

185 Ibid.

186 Erasmus (n166) 128.

July 1890, must be regarded as following the *normal* or *average high water line* of the Orange River on its right or North bank' (own italics). Consequently, land belonging to private land owners could only extend to the line reached on the north bank by average yearly floods. The opinion also emphasized that no part of the bed of the river was *terra nullius*.

This interpretation was subsequently reaffirmed. In 1937 the Department of Justice confirmed that the boundary was a line running along the right bank or north bank of the Orange River reached by the average yearly floods.¹⁸⁷ In 1960, as part of an enquiry by the Odendaal Commission into various political aspects of South West Africa, it was once again made clear that the official viewpoint was that the precise line followed the high-water mark on the northern bank.¹⁸⁸

The Department of Foreign Affairs has to date not issued a formal statement to this effect, but a legal advisor in that Department, in a written article, briefly mentioned an opinion by Bouchez that the line ought to be the *low-water mark*.¹⁸⁹

Thus according to existing information, the line has been described as the 'high-water mark' the 'average high-water line' or the line of the 'average yearly floods'. The 'high-water mark' is less precise than the *average high-water line* and it has been suggested that the 'high-water mark' line of the Odendaal Commission, in order to be a logical definition, be interpreted as an *average line*.¹⁹⁰ The legal opinions have dealt explicitly with the definition

187 Ibid 129.

188 Report of the Commission of Enquiry into SWA Affairs (Odendaal Commission) (1962-1963) RP 12/1964 10.

189 J C Heunis 'Internasionale Reg met betrekking tot Internasionale Grense' (1982) TSAR 244 at 252; Bouchez (n20) 792.

190 Odendaal Commission Report (n188); Erasmus (n166) 130.

of the boundary while the Commission's report merely referred thereto in passing and is less authoritative.¹⁹¹

Technically, average lines can be measured using measuring stations erected in specific areas. Statistical analysis of the data produced by these stations can determine average lines. Alternatively, hydrological experts can fix these lines by analysis of data relating to volume of water, the gradient at specific points, evaporation and topographical features.¹⁹² Average high-water lines can then be plotted on maps. To summarise, it is theoretically possible to draw a high-water line along the northern bank of the river though it could take years to complete.

The status of the definitions used in the legal opinions are problematic due to the omission of the necessary frequency or time element. Flood lines are determined for certain specific periods or frequency of floods of specific intensities to indicate average flood lines over fixed periods such as ten, twenty, fifty years or longer. The line produced is known as the probable maximum flood.¹⁹³ Therefore, the 1929 definition of the 'average high-water line' is imprecise since there is no accompanying time period. The alternative description of the line as the 'line of average yearly floods' is equally vague. Does 'yearly' refer to a specific year or a number of years? No specific year is mentioned. If it refers to a number of years the line at the 'average yearly flood' over a certain number of years and the 'average high-water line' over the same period will coincide.¹⁹⁴

It appears that the method used was to take the high-water or flood line on a yearly basis and then calculate the

191 Ibid.

192 Ibid.

193 Ibid 131.

194 Ibid.

average over a certain number of years.¹⁹⁵ Unfortunately, the drafters of the opinion omitted to stipulate the number of years.

Erasmus points out that the phrase used is 'normal or average high water' as if the two were the same, indicating that extreme floods would be ignored. This is supported by state practice. A boundary agreement between South Africa and Venda states that the river boundaries are drawn '...equidistant from the highest line reached by ordinary summer floods on both banks and such line shall be determined by two land surveyors'.¹⁹⁶

Has the construction of large irrigation dams on the Orange River such as the P M K Le Roux Dam affected the high-water or flood lines? Large dams on the Orange and its tributaries will influence flood patterns but will not prevent floods as such - in fact local floods will be largely unaffected.¹⁹⁷ why?

(d) Other examples

It would be to the obvious advantage of South Africa if the line is fixed as far north as possible, namely the high-water line, especially where the area between that and the low-water line is not negligible. Several metres multiplied by the length of the boundary bank could be economically important where the area involved is fertile, appropriate for agricultural development and of strategic value.

The interpretation of the treaty provisions indicating the high-water line as the delimiting line is a unilateral South African interpretation. Is this a valid act in terms of international law? The legal opinion of 1929 cites no

195 Ibid.

196 Sec 3.1 of the boundary agreement between Venda and South Africa; Heunis (n189) 252 note 50.

197 Erasmus (n166) 130.

authority or grounds for the particular interpretation. Does either customary international law or general principles provide guidelines and what precedents, if any, can be cited as authority for considering the high-water line definitive?

As discussed *supra*, river banks are not frequently used as boundaries, and even more exceptional are cases where both banks belong to a single riparian state. As stated before, part of the exceptional quality is the fact that if one state's territory includes the opposite bank, it leaves the other state with no guaranteed rights of access to and use of the river. Unusual it may be, but examples can be found. Verzijl even goes so far as to say that in the Balkans the *general trend* as seen in treaty provisions between Russia, Austria and Turkey was to leave either the entire river to one of the states or to fix their respective boundaries along both banks of the river.¹⁹⁸

The decision of the Swiss Federal Court in 1897 concerned the boundaries of the cantons of Zurich and Schaffhausen along the Rhine with Schaffhausen claiming, on the basis of a previous award, that the line ran along the left bank of the Rhine leaving the entire width of the river under her jurisdiction.¹⁹⁹ Zurich was in favour of a median line division, arguing that modern concepts of international law favoured the median line solution. The Federal Court found for Schaffhausen stating

'The circumstances that now, in accordance with the development of objective law, more importance is attached to the doctrine of international law, according to which the boundary of two States divided by a river is usually found in the middle of the said river, and less importance is attached to the actual possession and events of feudal law,

198 Verzijl (n16) 543.

199 K H Kaikobad 'The Shatt-al-Arab River Boundary: A Legal Reappraisal' (1985) 56 BYIL 49 at 76.

can not now effect any change in the juridical condition determined in such an authentic way any more than it could have done so previously. For the principal question to be decided today is whether the present dispute has not already been decided, at least to a certain extent, in a legally binding manner, and whether thereby a condition has been created which must be guarded according to the principles of acquired rights, regardless of how the dispute would be decided according to the now prevalent norms and conceptions.²⁰⁰

Other examples include the Chiers, a tributary of the Meuse, which was ceded by Austria in its entirety to France according to the Treaty of 1769 and the River Vincent Pinson in South America, the entire sovereignty of which was granted to the French by virtue of a treaty in 1797.²⁰¹

In South America too, the frontier between Surinam and French Guyana was, pursuant to an agreement signed by the Dutch and French Governors on 9 November 1836, along the right bank of the Maroni river, although for purposes of navigation in the estuary, the limits lay along the median line.²⁰²

A fairly recent instance of a claim by a single state to sovereignty over the full breadth of a boundary river is that of the German Federal Republic concerning the river Elbe.²⁰³ In 1859 the Chattahoochee River up to the 'normal level of the water on the opposite bank of the Alabama' was placed under the sovereignty of Georgia.²⁰⁴ The United States of America has in the past fixed state boundaries

200 D Schindler 'The Administration of Justice in the Swiss Federal Court in Intercantonal Disputes' (1921) 15 AJIL 149 at 167, 168.

201 Verzijl (n16) 545; P K Menon 'International Boundaries—A Case Study of the Guyana-Surinam Boundary' (1978) 27 ICLO 738 at 754.

202 Kaikobad (n199) 78.

203 Bulletin of Legal Developments (1966) (1) 121; Verzijl (n16) 546.

204 Ibid 557.

along the banks of rivers as illustrated in a treaty concluded with Spain in 1819 when the former secured for itself sovereignty over the entire breadth of the future boundary rivers of the Sabine, Red River and the Arkansas.²⁰⁵

The major portion of the boundary between Iran and Iraq constitutes a land boundary except for the southernmost fifty miles where the Shatt-al-Arab river separates the two countries. The present boundary (with certain exceptions) runs along the low-water mark of the left, 'east' or Iranian bank. The exceptions include a port, certain islands and a portion of the river where the boundary line is the thalweg. A dispute arose over utilization of the river - in particular, navigation rights. The treaty of Erzerum of 1847 confirmed the sovereignty of the Persian Government over the port of Muhammara, the island of Khizr and the land on the eastern bank. A subsequent protocol defined 'bank' as including the lands connected with the coast at low-water.²⁰⁶ Turkey therefore enjoyed sovereignty over the whole river up to the normal low tide line on the Persian bank. Iran contended that the original treaty, subsequent protocol and eventual delimitation were invalid but the matter was finally settled in 1937.²⁰⁷

There are many treaties which do not define 'bank' with any precision. In cases like these, the high-water line *has* been the boundary line. Verzijl analysed state practice, found several examples dating back to the 17th and 18th centuries and concluded that this specific method appeared where the content of the agreement often depended on the military strengths of the various countries.²⁰⁸ He further deduced that none of the examples testified to the adoption

205 Ibid 547.

206 Lauterpacht (n11) 211.

207 Ibid 215.

208 Verzijl (n16) 545, 546.

of any fixed general customary rule as the solution was often based on arbitrary considerations or on military strength.²⁰⁹

According to the Anglo-German agreement, the boundary belongs in the exceptional class with both banks forming part of South African territory. The only outstanding issue is where exactly the line on the northern bank must be drawn. In a similar case where the Red River divided Oklahoma and Texas, the location of the 'south bank' was omitted. In the majority judgement it was stated

'...there is a material difference between taking the bank of a river as a boundary and taking the river itself'.²¹⁰

The dissenting opinion held the view that the boundary of a flowing stream is at the *low-water mark* because the boundary should be so fixed as to give free access to the water and to prevent a narrow strip of land south of the river from accruing to the state owning the north side, thus cutting off the river from the owner of the south side.²¹¹

In the case *Handly's Lessee v Anthony* the court reiterated that where a river is the boundary between states

'...the mind will find itself embarrassed with insurmountable difficulty in attempting to draw any other line than the low water mark... The principle that a country bounded by a river extends to low water mark, is a principle so natural, and of such obvious convenience as to have been generally adopted ...'.²¹²

Bouchez claims that if a boundary definition is absent, the boundary line is at the *low-water mark*, his argument being

209 Ibid 543.

210 *Oklahoma v Texas* (1923-1924) ADPILC No 49 96 at 98.

211 Ibid 98, 99.

212 4 AILC 52 at 57, 58.

that the land which is dry at low-water mark is a natural and integral part of the river bank.²¹³ The obvious justification for this method is that control of the bank is facilitated thereby. Analogies illustrating the use of the low-water mark are not hard to find. According to Articles 5 and 7(1) of the Law of the Sea Convention, straight baselines must be drawn from the low-water mark. Article 13 of the 1958 Geneva Convention on the Territorial Sea and Contiguous Zone similarly requires baselines closing off river mouths to be drawn from the low-water mark.

The practical application in those cases where one state has exclusive rights to both banks is significant. According to the Franco-Swiss Agreement of 1780, France had complete control over both banks of the Doubs river. Even so, subsequent negotiations ensured that Switzerland could eventually claim a share in fishing rights, generation of power and the right to take water for general use.²¹⁴ Even though the bank was the formal boundary, the *de facto* position was similar to a median line or thalweg division. A gradual diminution of exclusive rights had taken place, which initiated a fundamental change in accordance with international law to such a degree that Switzerland's sovereignty could no longer be regarded as limited.²¹⁵

The Namibian situation presents a similar historical picture. The Cape Colony did once only extend to the southern bank of the Orange River.²¹⁶ The Treaty of 1890 then granted exclusive rights to both banks to what was later to become the Republic of South Africa. Due mainly to geographic, demographic, political and administrative factors, no diminution of these exclusive rights took place. When the farming activities of an individual were noticed, they came

213 Bouchez (n20) 792.

214 Erasmus (n166) 134.

215 Ibid.

216 Ibid.

to an abrupt end when the legality thereof was disputed by the Attorney-General of South West Africa.²¹⁷ Considering the South African government's interpretation of the boundary treaty, one would have expected the objection to come from Pretoria since it was on South African territory that the individual was farming.

~~This absence of reaction poses several questions.~~ Could it realistically be claimed that South Africa, if aware of the activities, tacitly acknowledged a *de facto* diminution of the exclusive rights it had up to the high-water mark on the north bank? Could South Africa attribute the lack of response to the fact that these limited farming activities were not particularly noteworthy since the whole area was being administered by South Africa anyway, thus negating any tacit acceptance of an erosion of rights to the north bank? It is not impossible to construe the absence of an official objection *because it was South African territory*. If so, there was simply no need to make an issue of it since no-one else, including the South African government itself, intended at that stage to compete with the farmer for utilization of that particular strip of land. It is worth noting that inhabitants of the southern bank themselves carry on farming activities such as grazing their goats on the northern bank.²¹⁸ This does not support arguments based on tacit acknowledgement by South Africa to a division of exclusive bank rights.

It is doubtful whether any international law implications originate from South Africa's non-reaction to the farmer's activities for the simple reason that acquiescence cannot be construed from non-reaction to a *private individual's* acts as opposed to another state's activities. Thus there was no need for the South African government to oppose the

217 See discussion Chapter 1.

218 Erasmus (n166) 137.

initiative of the farmer since no international law consequences could flow from a response or absence thereof.

(e) Conclusions.

It is an undisputed fact that the Anglo-German Treaty of 1890 creates an exceptional boundary in that both banks are part of South African territory. Rare though this kind of delimitation may be, examples thereof do exist. Though the equitable doctrine of the *thalweg* is infinitely more attractive as a method of division, there is no doubt that a treaty will prevail over this doctrine.²¹⁹

South Africa's viewpoint that the *high-water line* delimits the extent of its sovereignty on the northern bank is characterized by consistency and also supported by examples as previously discussed. Factors undermining this attitude include the fact that it is a *unilateral* interpretation upon which South Africa relies; that it has to date not been made clear on what grounds South Africa bases its view regarding the high-water mark; that state practice does not favour this viewpoint; that the selection of river banks as boundaries has been limited and has not given rise to customary international law and that juristic opinion, in cases of unspecified bank frontier lines, favours the low-water mark.

The fact that juristic opinion in cases of unspecified bank boundaries favours the low-water mark is further supported by judicial precedent, albeit not *international* judicial decisions. In *State of Vermont v State of New Hampshire*, the boundary between the two states was described as the western banks of the River Connecticut.²²⁰ Despite the defendant's arguments to the contrary, the court held that the low-water mark was the definitive line and defined it as

219 Bravender-Coyle (n28) 180.

220 (1933-1934) ADPILC No 50 135 at 135.

the line drawn at the point to which the river recedes at its lowest stage without reference to extreme droughts.²²¹ In *New Jersey v Delaware* the court found that:

'Within the twelve-mile circle the river and the subaqueous soil thereof up to low-water mark on the easterly or New Jersey side will be adjudged to belong to the State of Delaware.'²²²

Furthermore, there is no presumption in favour of exclusive title to both sides of boundary rivers.²²³ In *Die Twee Gebroeders* it was found that there was, in principle, a presumption in favour of a communal use of the rivers flowing through the territories of states.²²⁴ The judge noted that while a state may have, by virtue of a prior settlement, secured possession of the banks of a river,

'...the general presumption certainly bears strongly against such exclusive rights, and the title is a matter to be established, on the part of those claiming under it, in the same manner as all other legal demands are to be substantiated, by clear and competent evidence'.²²⁵

If South Africa's interpretation prevails, it would be prudent with a view to future relations with Namibia to reach an agreement with the Namibian administration on access to and utilization of rights to the Orange River. For example, a potential future hydro-electric scheme could be a joint development project.²²⁶ There are many examples of states granting to the nationals of the opposite riparian state, rights to be enjoyed in the territory of the former, which rights usually include consumption of water as well as grazing and watering of flocks.²²⁷ These rights are vital

221 Ibid.

222 (n27) 133.

223 *Kaikobad* (n199) 77.

224 165 ER 485.

225 Ibid 486.

226 W E Kenworthy 'Joint Development of International Waters' (1960) 54 AJIL 592 at 592.

227 Hirsch (n36) 91.

to potential farmers on the north bank. Their economy and very existence would be endangered by the imposition of 'new' boundary lines without negotiated rights to their roaming grounds. Apart from farmers, access rights for nomadic Bushmen are also relevant.

Even without an agreement regulating joint use of the water, established rights will have to be considered. Inhabitants of the southern bank conduct activities such as livestock grazing on the northern bank while inhabitants of the northern bank have *de facto* access to the river. In a similar situation, an agreement regarding the Jordan-Yarmuk Basin was drawn up after the First World War which ensured that any existing rights over the use of the waters of the Jordan by the inhabitants of Syria were to be maintained unimpaired.²²⁸

The manner in which a solution is reached on the exact location of the limiting line is important as unilateral action on the part of either of the countries will meet with international rejection. It is a matter to be agreed upon between the governments of Namibia and South Africa.

The demarcation of the agreed water line along the northern bank will be no easy matter. It would be appropriate for a combined demarcation commission to undertake the task.²²⁹ It goes without saying that both countries should be equally represented on this combined commission.

In addition, this commission's mandate ought to include a discretion to determine the exact line of demarcation. The high-water mark is not the undisputed frontier line. The low-water mark is theoretically sound but thinly supported by international judicial precedent. In the circumstances,

228 Ibid.

229 Erasmus (n166) 132.

it would be inappropriate to direct the commission to determine the line as either the high or low-water mark. Instead, the discretion ought to be exercised with regard to all legitimate interests and claims by both states. If South Africa and Namibia were to agree that the boundary line on the north bank be arbitrated on the basis of international law the result, considering the distribution and nature of support for both the high and low-water marks, could conceivably be a line between the two extremities. In the meantime, Erasmus suggests that a suitable and practical *modus vivendi* be established in order to deal with situations similar to the enthusiastic farmer.²³⁰

Thus although it is true that no two international rivers are the same, and that therefore general principles applicable to all international rivers cannot be established, there are nevertheless general principles of law applicable to all international rivers of whatever description, for example the principle which lays down that rights must be exercised in good faith'.²³¹ No matter how favourable the eventual demarcation may be for South Africa, this principle will be significant.

Perhaps the most prudent observation on the topic of boundaries can be accredited to Boggs who commented that a good boundary is one '... which serves the particular purposes for which it is designed with a maximum of efficiency and a minimum of friction'.²³² Hopefully any future joint commission established to finalize the boundary line on the north bank will be acutely aware of these requirements.

230 Ibid 137.

231 H Lauterpacht International Law (1970) Vol 1 27, 28 para 9.

232 Boggs (n1) 21.

CHAPTER III

MARITIME BOUNDARIES

(1) General Principles

(a) Introduction

The key to all zonation of water and seabed off the coast of a state is the baseline. It is from this limit that maritime zones such as the territorial sea, contiguous zone and exclusive economic zone are measured. The baseline also has the critical function of separating internal waters from territorial waters with their significant differences in legal regimes. Where the baseline is the low-water line, this separating function does not arise. For example, the Republic of South Africa has selected the low-water mark as its baseline, even in the case of juridical bays such as False Bay.¹

Whatever the width of the respective zones, the location of the baseline further seaward projects the outer limit of the first maritime zone, the territorial sea, and subsequent zones outwards. The specific placement of the baseline is therefore fundamental in determining how far seaward a state may exercise its jurisdiction. One exception is the continental shelf zone. This zone is determined by reference to distance and exploitability of the resources thereon and by reference to a geological description coupled with a distance factor.²

(b) The normal baseline

In the Fisheries Case, the court did not hesitate to find that, for the purposes of measurement of the territorial sea, it is the low-water mark which represents the practice of states.³ Article 3 of TSC and Article 5 of LOSC describe

1 Sections 2 and 3 Territorial Waters Act 87 of 1963 as amended by Act 98 of 1977.

2 Article 1 of the Geneva Convention on the Continental Shelf and Article 76 of LOSC.

3 1951 ICJ Rep 116 at 128.

the normal baseline as the low-water line along the coast as marked on large-scale charts officially recognized by the coastal state.⁴

The term 'low-water mark' may have different meanings and there appears to be no uniform standard by which states determine this line. It is usually defined as the lowest level attained by the sea-surface relative to the land. In practice, it is almost impossible to establish this line with accuracy since there is no mark left by ebb-tide on a seacoast similar to that left by high waters where transported sand, algae and other growth form a visible line.⁵ It is also a fact that extreme events occur over increasing time intervals. A low-water mark lower than ever experienced will occur which precludes any absolute limit being established for the low-water mark.⁶

A more realistic measurement is a mean low-water mark which is taken from the average height of the low-water tide over a selected time period. The TSC and LOSC provisions do not contain a detailed definition but state only that it is the low-water line along the coast as indicated on large-scale maps. Clearly, it is up to the coastal state to decide on how to draw an accurate low-water mark.

Hydrographers use several tide levels such as the Lowest/Highest Astronomical Tide (the lowest and highest levels which can be predicted to occur under average meteorological conditions and under any combination of astronomical conditions); Mean Low/High Water Springs (the

4 According to W L Griffin 'The Emerging Law of Ocean Space' 1967 (1) The International Lawyer 548 at 556-560, 'large-scale' refers to a scale of 1/80 000 or larger.

5 H Kühl Baseline Determination : An Examination with Special Reference to the Low-Water Mark (1986) 18.

6 D P O'Connell The International Law of the Sea (1984) Vol II 635.

height of mean high/low water springs is the average throughout a year when the average maximum declination of the moon is 23,5 degrees, or the heights of two successive high/low waters during those periods of 24 hours when the range of the tide is greatest); Mean Low/High Water Neaps (as aforementioned when the range of the tide is least) and Mean Level or Mean Sea Level which is the mean of the heights of Mean High Water Spring Tide, Mean High Water Neap Tide, Mean Low Water Spring Tide and Mean Low Water Neap Tide.⁷

When constructing a tidal boundary, two surveying aspects are involved, namely a vertical one and a horizontal one. The vertical aspect (tidal datum) is represented by the height reached by the tide during its vertical rise and fall, is determined by observation and is for all practical purposes, permanent.⁸ The horizontal aspect is fixed on the line where the tidal plane intersects the shore and is not only dependent on the tidal datum but is also influenced by both natural processes such as accretion and erosion and artificial changes made by man.⁹ A water boundary ~~determined by tidal definition is thus not a fixed, visible mark on the ground such as a fence but '...represents a condition at the water's edge during a particular instant of the tidal cycle'.~~¹⁰

It is clear that an exact hydrographical definition of a low-water mark is almost impossible. As a result, a legal definition on charts will always involve a mean low-water mark. As there are several potential definitions, the low-water mark selected by a particular state to serve as the normal baseline will usually be acknowledged. The

7 Kühl (n5) 20.

8 G H Knight The Law of the Sea : Cases Documents and Readings. (1980) 5-12.

9 Ibid 5-13.

10 Ibid.

international customary law principle of 'good faith' should be observed in selecting the low-water mark.¹¹

Once the mark has been established, it serves as the point of departure in determining the inner and outer limits of the various zones. The method most frequently used to draw the outer limit is to construct a line at a certain distance from the baseline following all the sinuosities of the coast. Other methods include the 'envelopes of arcs of circles' and straight baselines.¹²

Regarding South Africa, a definition is found in section 1 of the Territorial Waters Act 87 of 1963 which states that the low-water mark 'means the lowest line to which the water of the sea recedes during periods of ordinary spring tides'. The actual position of the line is in the hands of the surveyor who has to settle the lengths of the 'periods' and the precise meaning of 'ordinary'.¹³ In the Territorial Sea and Exclusive Economic Zone of Namibia Act 3 of 1990, low-water line is described as the 'line of lowest astronomical tide'.

In the United Kingdom, the definition similarly lacks precision and uniformity. On survey maps the low-water mark is defined as 'mean low-water' in England and Wales, as 'mean low water springs' in Scotland and as the 'lowest astronomical tide' on Admiralty charts.¹⁴

Despite the wide range available, a generally accepted definition of the elusive low-water mark is the Mean Low Spring Tide. It appears that international standardization of the low-water mark as a baseline is not required

11 Kühl (n5) 22.

12 R R Churchill and A V Lowe The Law of the Sea. (1988) 2ed 29.

13 Kühl (n5) 27.

14 Ibid 28.

providing states define their maritime boundaries with sufficient clarity. On the whole, however, precise delimitation lines have not yet been settled.¹⁵

(c) Special cases.

Usually, the establishment of a baseline along the coast depends on the determination of the low-water mark and we have seen that even regarding ordinary coastlines, more than one method is available for identifying this line. However, geographical features often produce extraordinary coastlines when the low-water line becomes inappropriate or impractical and it is then that a system of straight baselines becomes useful.

Article 4 of TSC and Article 7 of LOSC describe appropriate conditions in which straight baselines can be used in order to fix the inner limit of the sea zones. Included are deeply indented coastlines, fringing islands off the coast and unstable coastlines.¹⁶ River-mouths, bays and estuaries are other features validating the use of straight baselines and will be discussed with respect to the Orange River mouth *infra*.¹⁷

It should be noted that the low-water mark is still a fundamental feature since it is points on the low-water line which are selected as basepoints to be linked by a straight baseline. In addition, the use of straight baselines must be justified by the existence of certain geographical circumstances. Despite being the exception, they are widely and liberally used but are not problem-free. Some states ignore the directional and suitability requirements, drawing straight lines far out to sea at odd angles. Moreover, the fact that no maximum length has been prescribed creates

15 Ibid; D P O'Connell The International Law of the Sea (1982) Vol 1 176.

16 Article 7 (1) and (2) LOSC.

17 Article 9, 10 LOSC.

ample opportunity for abuse.

Examples of such abuse abound. The straight baselines of Burma and Ecuador are in some places at an angle of 60° to the general direction of the coast whereas the Norwegian system, generally regarded as the standard model, does not deviate more than 15° .¹⁸ In other cases, baselines are drawn so that the sea areas inside the lines are insufficiently closely linked to the land to be subject to the regime of internal waters. Burma has drawn a 222 mile long line across the Gulf of Martaban at one point 75 miles from the nearest land.¹⁹

(2) Specific Maritime Boundary - Orange River Mouth

A Introduction

Identifying the river-mouth has to do with where the river relinquishes its fluvial character and where the sea begins, for it is the mouth which separates the river from the sea into which it flows. Locating the mouth can be difficult. River currents may project their fresh, muddy waters far out to sea while sea tides can extend for many miles up-river. In the River Plate, the tidal system goes half-way up the river to a line uniting Montevideo and Punta del Indio.²⁰ Some mouths are extremely wide. The mouth of the Amazon is so broad one may sail inland for days without sighting land.²¹

The mouths of navigable rivers, especially in Europe, have often been the subject of intense debate. The Rhine for example, rises in Switzerland, flows between France and Germany, then through German territory alone ending in a delta-like formation in the Netherlands. The latter had sovereignty over the shores of the mouth but it was not

18 Churchill and Lowe (n12) 32.

19 Ibid.

20 O'Connell (n15) 227.

21 R Peattie Look to the Frontiers (1944) 90.

into which it flows. Each of the examples will be discussed *infra* since river-mouths are not only relevant with reference to the closing off thereof by baselines where there is a single riparian state but are particularly important where the mouth forms part of a terrestrial boundary between two or more states. In the latter case, the establishment of the appropriate baseline is crucial as it will determine the point from which a lateral delimitation in the adjacent sea will emanate.

(a) River flowing directly into the sea.

A river can reach the coast directly without changing its stream shape. Obviously the line of demarcation is that which continues the shoreline.²⁶ As such, the river-mouth does not influence the baseline from which the territorial sea will be measured, the baseline as it were not being interrupted by the river but merely continuing along the shoreline.

Article 13 of the 1958 Geneva Convention on the Territorial Sea and Contiguous Zone (TSC) as well as Article 9 of the Law of the Sea Convention (LOSC) both provide that

If a river flows directly into the sea, the baseline shall be a straight line across the river between points on the low-water line of its banks (TSC has 'low-tide').

This confirms that the mouths of rivers of simple stream form do not affect the baseline. In effect the baseline, following the shoreline until the first side of the mouth ie bank, cuts across the water expanse of the mouth in a straight line and links up with the other side of the mouth or opposite bank.

Thus Article 13 provides for the automatic or self-executing closure of rivers in order to establish the baseline.

Neither article contains details as to specific configurations or dimensions of a river 'flowing directly' into the sea. One possible deduction to be made is that it is a river which does not flow through a bay or estuary before meeting the ocean.

These provisions apply to rivers with a single riparian state as well as to rivers bordered by two or more riparian states.²⁷ However, not all states accept such a widespread application of Article 13. The United States of America objected to the method of closure of the River Plate stating that

'Furthermore, it is the view of the United States Government that the provisions of Article 13 relate only to rivers which flow directly into the sea from the territory of a single State and not to rivers whose coasts belong to two or more different States.'²⁸

Notably, there is no limit on the *length* of the closing line across the river-mouth. This means that for rivers such as the St Lawrence and the Amazon, the length could exceed the maximum for a bay-closing line, ie 24 nm. The opportunity for abuse is self-evident. An allegation of abuse arose when Argentina and Uruguay, by virtue of an agreement in 1961, drew a line 120 miles in length across the mouth of the River Plate between Punta del Este in Uruguay and Cabo San Antonio in Argentina, both states claiming validity based on ~~Article 13.~~²⁹ Few cartographers would define the River Plate as one which enters the sea directly. Furthermore, the Plate estuary had in the past been claimed

27 Churchill and Lowe (n12) 39; 'Contemporary Practice of the United States Relating to International Law' (1963) 57 AJIL 403 at 404.

28 M M Whiteman Digest of International Law (1965) IV 343.

29 Ibid 342; Churchill and Lowe (n12) 39. Both countries were signatories to the Geneva Convention but neither was a party. See discussion on River Plate (2) A (g)(i).

as an historic bay, which if consistent with the principles of international law on historic waters, would render reliance on Article 13 unnecessary.³⁰

If a straight baseline is drawn across the mouth in terms of the TSC or LOSC, the enclosed waters become internal waters. Article 16 LOSC requires baselines determined in accordance with Articles 7, 9, 10, 12 and 15 to be shown on charts of a scale or scales adequate for ascertaining their position or alternatively, to be substituted by a list of geographical co-ordinates of points. Furthermore, the coastal state is required to give due publicity to such charts or lists and to deposit a copy thereof with the Secretary-General of the United Nations. Without such publicity requirements, a mariner would not know the precise position of the closing line.³¹

(b) River flowing into a bay.

In the Draft Conventions and Comments on the law of territorial waters prepared by the Harvard Law School it was suggested that river-mouths, irrespective of the geographic realities, be assimilated to bays, and, if the distance across the mouth exceeded ten miles, the area should not be treated as internal waters - ie not be closed off.³²

Article 5 of the Draft Convention stated that

The seaward limit of a bay or river-mouth the entrance to which does not exceed ten miles in width is a line drawn across the entrance. The seaward limit of a bay or river-mouth the entrance to which exceeds ten miles in width is a line drawn across the bay or river-mouth where the width of the bay or river-mouth first narrows to ten miles.

30 Churchill and Lowe (n12) 39.

31 Knight (n8) 5-121.

32 (1929) 23 AJIL (Special Supplement) 241 at 265; Whiteman (n28) 336, 337.

In the accompanying comment it was noted that similar questions arose in regard to river-mouths where the opening into the sea was very broad and it appeared reasonable to apply to such waters the same rules as applied to bays.³³ It followed that if the indentation did not at any point narrow to ten miles (and unless it was an historic bay) the baseline was the normal baseline ie the low-water mark following the sinuosities of the coast in accordance with draft article 2.³⁴

Article 6 of the Draft Convention proceeded to determine that when the waters of the bay or river-mouth which lay within the seaward limit thereof were bordered by two or more states, these states could agree upon the division of these waters. Failing agreement, the territorial sea was to be measured not from the seaward limit, but from a line following the sinuosities of the shore in the bay or river-mouth. In other words, the baseline was the low-water mark of the coastline. This particular example of mouths bordered by several states was identified as one normally dealt with by convention, each state no doubt desiring to protect its right of ingress to and egress from the high seas. Naturally, if all the waters of the river entrance were part of the territorial sea of a single state, the right of innocent passage would provide a means of transit for the other states.³⁵

The rejection of the ten mile rule in the Fisheries Case eliminated this solution. It was held that 'Consequently, the ten-mile rule has not acquired the authority of a general rule of international law'.³⁶ Thus a blanket solution of treating river-mouths as bays was discarded.

33 (1929) 23 AJIL (Special Supplement) 241 at 266.

34 Ibid 266, 267.

35 Ibid 275.

36 1951 ICJ Rep 116 at 131.

If a river-mouth is also *de facto* a bay, then baseline principles regarding bays will be relevant. The geometric semi-circle test is used to determine whether an indentation is a bay in the *legal* sense. This test involves a line being drawn between the natural entrance points of the indentation. A semi-circle having a diameter equal to this line is constructed and its area measured. Thereafter, the area of water between the line across the indentation and the low-water mark around the indentation is calculated and if it exceeds the area of the semi-circle the indentation is a bay. If so, a closing line can then be drawn across it.³⁷ If this line exceeds twenty-four miles in length, a straight line of twenty-four miles is drawn *within* the indentation in such a way as to enclose the greatest amount of water possible. This line then constitutes the baseline.³⁸ Around unenclosed parts of the indentation, if any, the baseline will be the low-water mark. The test will not be applicable where straight baselines are used, to historic bays or to bays or enclosures whose coasts belong to more than one state.³⁹

The test appears deceptively clear-cut. In practice the application can be complicated. Often it is not clear which are the 'natural entrance points' to the bay. In Post Office v Estuary Radio Ltd two possible sets of points emerged, neither being very obviously the natural entrance points to the indentation.⁴⁰

37 Article 7 (2) TSC, Article 10 (2) LOSC.

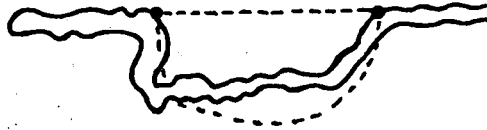
38 Churchill and Lowe (n12) 35.

39 Ibid 36.

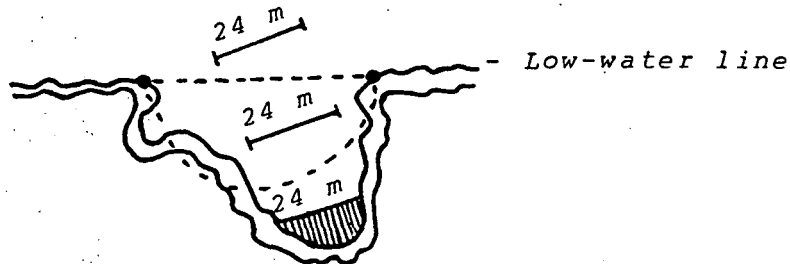
40 9 BILC 171 at 175.

D1

ARTICLE 7 - TSC



Area of the Bay is less than that of the semi-circle - Not a Bay under the Convention



Area of the Bay is greater than the area of the semi-circle - Internal waters include largest area enclosed by 24 mile line

(c) River broadening into an estuary.

Where the river broadens and intersects the sea via an estuary, a criterion becomes necessary to establish the baseline of the territorial sea. Estuaries are unique in that, from a cartographical point of view, they are simply bays and not a special feature. However, when water physics, ecology and other scientific and sociological factors which influence the law are considered, estuaries are distinct from bays and may well constitute a special legal category.⁴¹ Verzijl is of the opinion that there is a cartographic distinction between the two. Bay-like river estuaries ordinarily show one or more deeper channels through which the river flows, a feature not characteristic of ordinary bays.⁴²

41 O'Connell (n15) 222.

42 Verzijl (n25) 593. This distinction allows a

What makes a river-mouth an estuary? The mere fact that the river *broadens* as it approaches the sea does not automatically indicate an estuary. O'Connell proposes that an estuary exists only if the current terminates in the tidal stream within the entrance.⁴³ According to Bouchez, an estuary is a tidal mouth of a river - the nature and structure of the water area being determined by the sea tide or action of the sea.⁴⁴ Accordingly, the estuary is considered a part of the sea.⁴⁵ The author concludes that if there is a river-mouth *stricto sensu* (ie no estuary) the structure of the water area depends primarily upon the action of the river itself and the mouth is then part of the river.⁴⁶ Bouchez concedes that the distinction is difficult to make in practice because the water area where the river meets the sea is nearly always influenced by both river and sea.⁴⁷ River currents may project their fresh, muddy waters far out to sea while sea tides can run far up rivers. Another potential definition encountered is that estuaries are river-mouths which widen so much on nearing the sea they take on the character of bays. Unfortunately, 'so wide' is a vague criterion and one must conclude that there is no general consensus on the distinction between estuaries and mouths *stricto sensu*, each decision being influenced by the particular circumstances present.⁴⁸

If the river-mouth is an estuary, various possibilities arise.

follow the thalweg. In the case of bays, the median line or line of equidistance is presumed to be the boundary unless proof to the contrary exists.

43 O'Connell (n15) 222.

44 L J Bouchez *The Regime of Bays in International Law* (1964) 21.

45 Ibid.

46 Ibid 21,22.

47 Ibid 22.

48 Bouchez (n44) 23; Whiteman (n28) 339; United Nations Conference on the Law of the Sea - Official Records Vol III 193, 194.

If the river-mouth is an estuary, various possibilities arise.

(i) estuaries to be treated as bays.

At the Hague Codification Conference in 1930, it was suggested that a river widening into an estuary be treated as a bay.⁴⁹ Consequently, the draft article submitted to the Geneva Conference provided that if the river flowed into an estuary the case was to be treated as a bay.⁵⁰ However, this proposal did not survive the voting procedures at the Conference resulting in estuaries being left unresolved by Article 13 of ISC and subsequently, Article 9 of LOSC. Both ultimately dealt exclusively with rivers which maintain their stream shape, flowing directly into the sea. Several distinguished jurists agree that estuaries should be regulated by bay provisions unless the coastal state clearly proves that the water area involved is part of the river itself.⁵¹

(ii) some estuaries to be treated as bays.

The provisions on bays and their baselines could be applicable where the estuary flows into a gradually widening indentation, creating a geographic feature similar to a bay as occurred in *Post Office v Estuary Radio Ltd.*⁵² The case concerned alleged illegal radio broadcasts from Red Sands Tower, a structure in the Thames estuary. The Post Office relied on the bay principle since the Thames estuary was a bay within the meaning of Article 5(1) of the Territorial Waters Order in Council of 1964 whilst Estuary Radio,

49 O'Connell (n15) 224 note 256. This proposal was supported by *inter alia* South Africa, the United Kingdom, India and New Zealand though other states maintained that special circumstances could create an exception.

50 Ibid 225.

51 Churchill and Lowe (n12) 39; Bouchez (n44) 22.

52 9 BILC 171, 187.

relying on other entrance points, ~~denied the existence of a bay.~~⁵³ V. According to the Post Office, the tower was located in a part of the sea which lay on the landward side of the baseline drawn across the 'bay' in the Thames estuary and was therefore situated in internal waters.⁵⁴

According to Diplock J, a bay in the ordinary sense of the word indicated an indentation or concave curvature in the coastline but for the purposes of determining a state's sovereignty, it had a more precise meaning as evidenced by Article 7(2) of TSC. Diplock J commented that a bay is '... a well-marked indentation whose penetration is in such proportion to the width of its mouth as to contain landlocked waters and constitute more than a mere curvature of the coast. An indentation shall not, however, be regarded as a bay unless its area is as large as, or larger than, that of the semi-circle whose diameter is a line drawn across the mouth of the indentation'.⁵⁵ The estuary, though not described as a bay, met the semi-circle test which was held to be applicable to all kinds of bays and not only to natural bays since one is essentially working with an artificial calculation based on the natural entrance points.⁵⁶

Another suggestion at the Hague Codification Conference was that the individual configuration of each river-mouth should determine whether bay rules applied or not. This meant that some, but not all mouths would be assimilated to bays.⁵⁷

53 Ibid 191.

54 Ibid 195.

55 Ibid 196.

56 Ibid 182. Diplock J stated that the indentation must not only be well-marked, but must also have an identifiable mouth in order to locate the natural entrance points. Much of the dispute concerned the position of the entrance points and the calculation of the water area for the purposes of the semi-circle test. See Kuhl (n5) 55.

57 O'Connell (n15) 224.

This solution relied on a distinction between mouths and estuaries and was unhelpful since agreement on this distinction was notably absent.⁵⁸

(iii) estuaries unregulated by convention.

Another view is that if estuaries are not the subject of a sufficiently established general definition so as to make a general rule for baseline definition appropriate, then estuaries that do not meet the semi-circle test for bays are left unregulated by convention. In that event, customary law must be applied in identifying the baseline. Consequently, all relevant factors including geographical, historical and economic considerations must be taken into account.⁵⁹

It appears as if this is the *de facto* position. Estuaries are left unregulated by the TSC and LOSC and their treatment as bays is not generally accepted, unless the indentation has sufficient water area as required by the semi-circle test. Uruguay raised this point when confronted with objections to the closing off of the La Plata estuary alleging that 'To state that the established principles in the matter of bays are applicable to all or certain estuaries, or that these, or certain of them, fall within the definition of bays does not correspond with the rules and principles of international law'.⁶⁰ This was of course prior to the Estuary Radio decision where it was confirmed that if an *indentation*, including an estuary, met the semi-circle test, bay provisions on baselines were applicable. It is suggested that this represents customary law.

58 Ibid.

59 Ibid 225. Kühl contends that it is preferable to deal with rivers which flow into an estuary and those which flow directly into the sea in the same way with the result that all rivers can then be closed off in terms of Article 9 of LOSC. Estuaries would then be treated like every other indentation. See (n5) 57.

60 O'Connell (n15) 229.

(d) River flowing into a delta.

Just as a river flowing into an estuary is not covered by Article 13 of TSC or Article 9 of LOSC, so too where a river enters the sea via a delta it is unlikely that these provisions are relevant. A delta has been described as the lower stretches of a river which flows into the sea through different arms, one of which is designated as the real river boundary.⁶¹

The delta baseline will be the low-water mark or a straight baseline and it is possible that the provisions on islands and low-tide elevations as basepoints may be relevant.⁶² For example, where a low-tide elevation is situated wholly or partly at a distance not exceeding the breadth of the territorial sea from the mainland or an island, the low-water line on that elevation may be used as the baseline for measuring the breadth of the territorial sea.⁶³

The presence of a delta does not automatically influence baselines. It is only where the presence of the delta produces a *highly unstable coastline* that the feature becomes relevant. The LOSC contains a provision dealing with this exceptional geographical situation which has no equivalent in the TSC. Article 7(2) provides

Where because of the presence of a delta and other natural conditions the coastline is highly unstable, the appropriate points may be selected along the furthest seaward extent of the low-water line.

It is clear that the existence of a delta alone is insufficient justification to draw straight baselines arounds its perimeter. Other natural conditions must

61 Verzijl (n25) 608.

62 Churchill and Lowe (n12) 39.

63 Article 11 TSC; Article 13 LOSC.

contribute to the instability.⁶⁴ Unstable coasts which retreat but which lack a delta are not included.⁶⁵ Volcanic action often creates unstable coasts. Along the Siberian coast tundra cliffs are often subject to spectacular erosion with the onset of spring. In future, it may even occur that because of the way that other provisions of the LOSC have been stretched, countries with unstable coasts but which lack a delta will seek to give an extended interpretation to Article 7(2) so as to include all unstable coastlines, whether deltaic or not.

Article 7(2) is designed to give relief to countries experiencing a retreat of their baseline. This kind of erosion can be attributed to damming which reduces sediment supply to downstream areas, to wave and current action removing sediment from the shore of the delta faster than it is being delivered or to discharge reduction as a result of river diversion for irrigation and industrial use which may result in the river being unable to maintain former sediment loads and leading to erosion.⁶⁶ Construction of harbour works may deflect waves and currents causing them to attack and erode a new section of the coast while the removal of sand and gravel for construction industries may lower the level parts of the delta leaving them vulnerable to invasion by the sea during exceptional tides and storms.⁶⁷ Naturally the removal of vegetation can also make the coasts of deltas

64 J R V Prescott 'Straight Baselines : Theory and Practice' in *The UN Convention on the Law of the Sea : Impact and Implementation* (1987) (Ed E D Brown and R R Churchill) 288 at 303; S McDonald and V Prescott 'Baselines along Unstable Coasts : An Interpretation of Article 7(2)' (1989) 8 *Ocean Yearbook* (Ed E M Borgese, N Ginsburg and J R Morgan) 70 at 76-82, 87-89. Not all commentators agree on the clarity or precise scope. See E Bird and V Prescott 'Rising Global Sea Levels and National Maritime Claims' (1989) 1 No 3 *Marine Policy Reports* 177 at 191, 192.

65 Prescott (n64) 303.

66 Ibid.

67 Ibid 305.

easier to erode.⁶⁸ Even without human intervention deltas may change shape and growth in one area may be matched by erosion in another. Disturbances sometimes break banks during floods and new courses may be established which might mean that the coast at the mouth of the abandoned channel is no longer nourished with sediment, thus producing erosion.⁶⁹

Article 7(2) has been poorly drafted. Firstly, the phrase 'highly unstable' is not capable of precise mathematical interpretation but probably indicates rapid, short-term fluctuations such as the Nile delta which is retreating at the rate of 40 metres per year.⁷⁰ Secondly, it is not evident over what period the instability should manifest itself. Does it refer to instability arising after 1982 when the LOSC was adopted or can instability of earlier decades be used to justify straight baselines?⁷¹ Thirdly, it is not clear if a third type of coastline in addition to deeply indented coasts and coasts fringed with islands is created or whether it applies only to deltas along coasts which fall into these two categories.⁷² It is submitted that a third category is created, for the delta provision would be unnecessary if the coastline, in order for the delta example to apply, had to be accompanied by an indented coastline or fringe of islands. The case would already be covered. Fourthly, the content of the phrase 'and other natural conditions' is vague. Fifthly, there is disagreement about whether a delta must be present or

68 Ibid.

69 Ibid 303.

70 Churchill and Lowe (n12) 31; Prescott (n64) 305.

71 Ibid 306. A state may take the view that the reference to the *furthest seaward extent of the low-water line* refers to the outermost line which can be positively identified in, for example, the last fifty years. Prescott discourages this policy as it would open the way to immoderate extensions of maritime claims based on distant and drowned coastlines of earlier periods.

72 McDonald and Prescott (n64) 81,82; Churchill and Lowe (n12) 31.

whether other highly unstable coasts are included. Finally, it is not certain whether the use of the 'furthest seaward extent of the low-water line' is subject to the general rules on the use of low-tide elevations as basepoints as contained in Article 7(4).⁷³

At present there is insufficient state practice to clarify the application of this provision.

Article 7(2) also provides that where straight baselines are drawn along the furthest seaward extent of the low-water line of deltas, then notwithstanding subsequent regression of the line, the straight baselines shall remain effective until changed by the coastal state.

(e) Navigable river

It has also been suggested that river-mouths, irrespective of size, should be treated as navigable rivers and be entirely national.⁷⁴ Subsequent criticism was based on the argument that the ten-mile limit for bays covered the point though it was noted that this meant that river-mouths were to be treated as bays simply for want of an alternative rule.⁷⁵

(f) Unstable river-mouths

It is beyond doubt that changes in the shoreline, however and how quickly effected, produce changes in the baseline from which maritime zones are measured. O'Connell suggests that the actual median line should apply, involving a shift in the boundary.⁷⁶ But this makes it difficult to apply the law since official charts and the geographic reality will not necessarily be consistent. If the official chart prevails, a state could conceivably exercise sovereignty in

73 Ibid.

74 O'Connell (n15) 223.

75 Ibid.

76 O'Connell (n6) 682.

de facto foreign territory. It seems sensible to require obligatory rectification of the charts by the state whose shoreline has altered.

Treaties often include provisions dealing with changes in the geographical situation, especially where recognized unstable coastlines exist. One such solution is periodic revision followed by rectification of official documents if necessary. Other agreements provide for fixed points which remain permanent despite baseline displacement. The most well-known example is the agreement between the United States and Mexico concerning the shifting mouth of the Rio Grande, discussed *infra*.

The effect a changing coastline has on the lateral delimitation of the territorial sea arose in *Texas v. Louisiana*.⁷⁷ Confirming an earlier decision of the Supreme Court that the baseline is to be located with reference to the *current* coastline and not to some point that may have existed at one time, the Special Master held that the position of the basepoint from which the lateral boundary would proceed was governed by the notion of 'modern ambulatory coastlines'.⁷⁸

Obviously, if the boundary is fixed by reference to geographic co-ordinates, subsequent changes to the coastline are irrelevant.

(g) State practice

(i) River Plate

The estuary of the Plate has a superficial area of 40 000 square kilometres and a true entrance of 175 nm. The tidal stream goes half-way up the river to a line uniting Montevideo and Punta del Indio, and though the salinity of

⁷⁷ 59 *ILR* 195 at 223, 240.

⁷⁸ *Ibid* 240.

the waters and the existence of tidal flats up to this point indicate a predominantly sea character, the continuance of the current and the contour of the coasts suggest an equally strong fluvial character.⁷⁹

The closing line of the Plate first attracted attention in connection with the jurisdictional boundaries of Argentina and Uruguay when the question arose whether the median line or thalweg constituted the boundary. A subsidiary issue was whether the answer to the aforementioned question depended upon whether the La Plata estuary was part of the river or part of the sea following an incident involving a Canadian sealer. The territorial issue between the two states was settled by an agreement which provided for free navigation of the Plate.⁸⁰

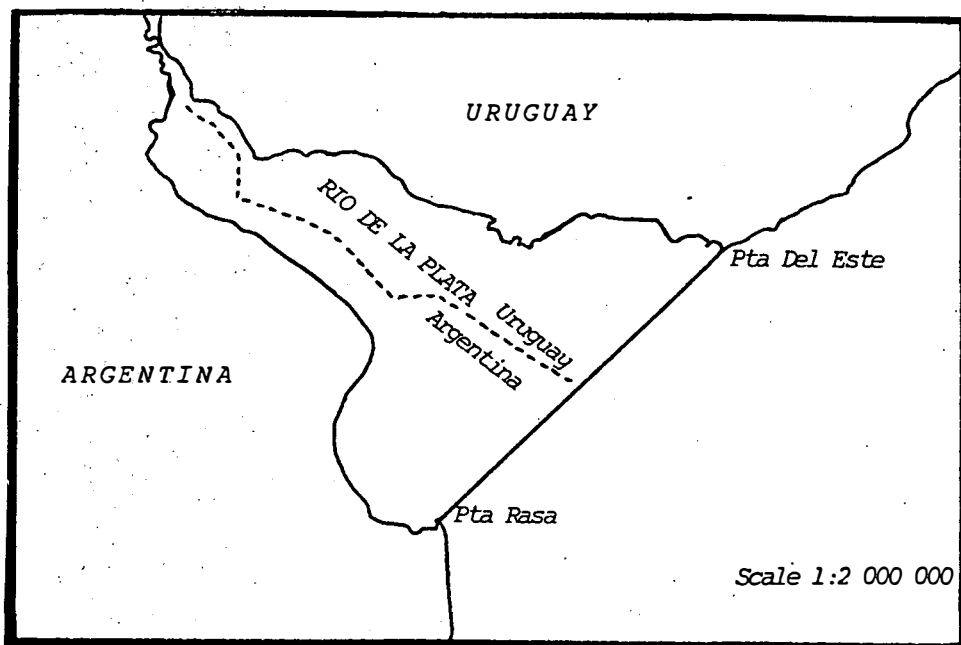
The two states then proceeded to interpret the article permitting river-mouths to be closed in a remarkable way. On January 30 1961, they agreed to close the mouth of the La Plata estuary by a straight line measuring 120 nm between Punta Rasa of the Cabo San Antonio in Argentina and Punta del Este in Uruguay. This line was to serve as the baseline.⁸¹

79 O'Connell (n15) 227.

80 Ibid. For a detailed exposition on the navigation rights see A British Digest of International Law (1967) (Ed C Parry) Vol 2b Phase I Part III 154.

81 (1963) 57 AJIL 403 (n27).

D2



[Reproduced from Scovazzi (n253) 9]

No geomorphologist would fix the mouth at the site selected by these two states and this selection was considered contrary to the spirit of the rules relating to river-mouths.⁸² Both countries defended the closure on the basis of Article 13 of TSC which does provide for closure of a mouth via a straight baseline between points on the low-tide line of its banks.⁸³ The length of the closing line was of course not limited by the Convention. The closure was clearly not contrary to the provisions of the relevant article but it was considered contrary to the underlying rule regarding river-mouths. Furthermore, reliance on Article 13 was inconsistent with previous claims to the estuary as an historic bay.

82 J R V Prescott *Boundaries and Frontiers* (1978) 145.

83 Bouchez (n44) 165.

The closure was met with protests from a number of states, none more vociferous than the United States, United Kingdom, France, the Netherlands and Italy who all contended that the estuary of the Plate constituted a part of the high seas. Several states emphasized that closure of a bay using a straight baseline in terms of Article 7 was not possible as the provision only dealt with bays '...the coasts of which belong to a single state'.⁸⁴ It was also alleged that, with the exception of bays surrounded by a single state, there was no known basis in international law for a coastal state to claim the waters of a bay or estuary beyond the limit of the territorial sea measured from the low-water mark on the coast.⁸⁵ In the case of a multi-national bay, therefore, the waters beyond the territorial sea were high seas, and no agreements to the contrary were binding on states not party to such agreements.⁸⁶

The argument that Article 13 validated the closing line ignored the fact that the provision only relates to rivers flowing directly into the sea whereas the Plate flows into an estuary or bay.⁸⁷ Furthermore, it was the view of the United States that the article only incorporated rivers which flowed directly into the sea *from the territory of a single state* and did not include rivers whose coasts belonged to two or more different states.⁸⁸ If so, the 1961 Declaration was inconsistent with general principles of international law and not validated by Article 13.

Similarly, the United Kingdom averred that in the case of bays enclosed by more than one state, the territorial sea was to be measured from the low-water mark, thus confirming that Article 7 only relates to bays '...the coasts of which

84 Whiteman (n28) 343.

85 (1963) 57 AJIL 403 (n27).

86 Ibid.

87 Ibid 404; Whiteman (n28) 343.

88 Ibid; Knight (n8) 5-122.

belong to a single state'.⁸⁹

In response, the Uruguayan government argued that from Punta del Este inland, the determination of the baseline according to the TSC implied that the geographical limits of the Plate be determined by *agreement* with the other party to the condominium.⁹⁰ It was *communis opinio* among both Uruguayan and Argentinian writers that the water area belonged to the coastal states.⁹¹

In addition the Uruguayan government rejected the contention that the Plate estuary was a bay or other portion of the sea, found unacceptable any interpretation of Article 13 or customary law which would effectively deny sovereignty of the fluvial territory and contended that 'To state that the established principles in the matter of bays are applicable to all or certain estuaries, or that these or certain of them, fall within the definition of bays does not correspond with the rules and principles of international law'.⁹² The government also emphasized the significance of the elimination of the reference to estuaries in Article 13.⁹³

Unperturbed by the opposition, a Protocol on the Plate was signed at Buenos Aires on 14 January 1964 which reaffirmed the terms of the Joint Declaration on the External Boundary of 1961. The two states undertook to collaborate in the establishment of works to promote navigation and agreed to set up a mixed river commission for this purpose.

Several writers have since commented on the aforementioned actions. Bouchez concentrated on whether the water area was

89 Whiteman (n28) 343; J R V Prescott Political Frontiers and Boundaries (1987) 143.

90 O'Connell (n15) 228.

91 Bouchez (n44) 164.

92 O'Connell (n15) 229.

93 Ibid. O'Connell confirms the plausibility of the Uruguayan interpretation at 225 note 261.

an estuary or a river-mouth. If an estuary, it was part of the sea but if it was found to be a mouth, it was part of the river itself.⁹⁴ According to Argentinian jurists, the Rio de la Plata is a river and not an estuary, an assertion based on the quality of its waters, the fact that these always flow into the ocean, the existence of channels and banks in its mouth, as well as on the special characteristics of the prevalent fauna and flora.⁹⁵ Other commentators place emphasis on the existence of streams and the slope of coasts in support of the view that the water area is part of the river. In a detailed examination of the La Plata basin, Garretson observes that the Plata River maintains reasonably parallel banks combined with a freshwater current as far as Montevideo, and concludes that it is not unreasonable to claim that body of water 'upriver' as internal waters, ie not part of the high seas or territorial sea. However, he states that the "...true mouth of the Plata River, and, thus, the seaward terminus of the entire basin, are, moreover, rather naturally drawn where the geographical 'throat' ends and the 'jaws' of the bay present themselves".⁹⁶ He defines the La Plata estuary as the area extending southeastward from the joint mouth, attaining a total breadth of 65 miles.

Bouchez expresses doubt as to whether the Plate flows directly into the sea. However, he differs from the viewpoints of both the United States and the United Kingdom that in the case of more than one state enclosing the entrance, the maritime zones must be measured from the low-

94 Bouchez (n44) 165.

95 Ibid (though a certain amount of sea influence is acknowledged eg the water is salty and there is a high and low-water level); A de las Carreras 'International River Boundaries in the Argentine Republic' (1987) 9 International Relations 56 at 59.

96 The Law of International Drainage Basins (1967) (Ed A Garretson, R Hayton and C Olmstead) 315.

water mark.⁹⁷ Though Article 7 of TSC refers to bays enclosed by a single state only, this does not necessarily imply that bays enclosed by more than one state are excluded from the sovereignty of those states. The only assumption which can be made regarding bays enclosed by two or more states is that there is no *codified* rule of international law.⁹⁸

Relevant too was the question of historic bays and the accompanying principles since claims to the La Plata estuary had previously been based thereon. Although the 1961 Declaration did not refer to the existence of an historic title, Bouchez suggests that this is the only reason capable of justifying sovereignty over an area as large as the Plate estuary.⁹⁹ Jurists have noted the fact of uninterrupted and continuous usage during a long period of time. However in 1905 the United Kingdom did protest against the claim by Uruguay to part of the estuary outside the 3 mile limit.¹⁰⁰ On the other hand, a claim to historic waters will not automatically be rejected on the basis of a single protest. The claimant states are entitled to exercise their sovereignty if they can prove their title.¹⁰¹

Proof of an historic title arose in *United States v. Louisiana* where it was argued that the Mississippi Sound was an historic bay and therefore internal waters.¹⁰² The court found the existence of three factors decisive: the exercise of *authority* over the area by the claiming nation, the *continuity* of the exercise of authority and the *acquiescence* of foreign nations.¹⁰³ In effect, the coastal state must

97 Bouchez (n44) 166.

98 Ibid.

99 Ibid.

100 Ibid.

101 Ibid; G N Barrie 'Historical Bays' (1973) 6 CILSA 39 at 61.

102 (1979-1986) 2 AILC (2nd series) 47.

103 Ibid 51 (*italics* supplied).

have exercised sovereignty over the area continuously during a time sufficient to create a usage and have done so under the general toleration of the community of states.

In addition, the court noted the existence of substantial agreement that a fourth factor, the *vital interests* of the coastal nation such as geographical configuration, economic interests and self-defence was to be considered. However, juristic opinion has it that the so-called 'vital interests' of the coastal state do not constitute sufficient ground on their own to validate a claim to an historic title. It is the reliance thereon in conjunction with all the other considerations which, through their combination, indicate international acquiescence.¹⁰⁴

In *El Salvador v Nicaragua*, the now defunct Central American Court of Justice held that the Gulf of Fonseca was an historic bay under the exclusive jurisdiction of Honduras, Nicaragua and El Salvador because it displayed all the essential characteristics of territorial waters, namely '...secular or immemorial possession accompanied by *animo domini* both peaceful and continuous and by acquiescence on the part of other nations, the special geographical configuration that safeguards so many interests of vital importance to the economic, commercial, agricultural and industrial life of the riparian States and the absolute, indispensable necessity that those States should possess the Gulf as fully as required by those primordial interests and the interest of national defense'.¹⁰⁵ What emerges is that

104 Ibid. Y Z Blum *Historic Titles in International Law* (1965) 177, 260. According to Blum, the acquisition of historic title on purely 'vital grounds' is not justified. The interests such as fishing, mining of sand and gravel and possibly tourism will be considered alongside other pertinent factors to the extent that they are clearly evidenced by long usage and are recognized by the family of nations. See Prescott (n64) 310.

105 Judicial Decisions Involving Questions of

the geographical factor together with the other interests of the coastal state indicate the degree of consent accorded to historic claims by the nations affected thereby - in the case of maritime historic claims, the entire international community. The three riparian states were judged co-owners of the waters of the Gulf except for the innermost three miles which was the exclusive property of each.

If one accepts this reasoning, in which way could the waters of the La Plata estuary be apportioned? One of the states could exercise sovereignty over the whole bay, both states could exercise joint sovereignty over the entire water area or each state could exercise sovereignty over part of the water area. Several Argentinian jurists argue on historical grounds that Uruguay, on attaining independence, could not exceed the limits of the old frontiers and up till then, Argentina had enjoyed exclusive rights over the Rio de la Plata.¹⁰⁶ Predictably, Uruguayan commentators point to the existence of a *condominium* as an historic fact which may only cease to exist if the riparian states agree otherwise.¹⁰⁷ The weight of authority appears to support the condominium concept which is borne out by practice in that each state carries on the works necessary for maintaining navigability of the channels while still exercising its criminal and civil jurisdiction up to the median line.¹⁰⁸ Thus the entire area of water is subject to the sovereignty of either Argentina or Uruguay as determined by the median line.

(ii) River Scheldt estuary.

The two riparian states are the Netherlands and Belgium. There are basically three channels which connect the Scheldt with the high seas. The main one, the Wielingen, passes

International Law (1917) 11 AJIL 674 at 705.

106 Bouchez (n44) 167.

107 Ibid.

108 Ibid.

through the territorial sea of Belgium. Belgium claims that the Wielingen is Belgian territory as an immediate consequence of the normal measurement of the territorial sea while the Dutch claim to the estuary is founded on historic title.¹⁰⁹ The Wielingen is of vital interest to both states as it is pre-eminently a channel fit for navigation. The important harbours of Antwerp and Flushing are situated in the Wielingen-Scheldt area.

Despite these conflicting claims, the dispute remained dormant mainly because a treaty had been signed in 1843 regulating navigation, pilotage and fishing rights in the estuary though remaining silent on the sovereignty of the channel itself.¹¹⁰ In 1920, the status of the Wielingen was discussed at the Conference of Paris but no solution emerged since the Belgian government refused its co-operation.¹¹¹

Presently, both nations are partners to the North Atlantic Treaty Organization and the European Economic Community, diminishing the prospect of a dispute. At the same time, their interdependence emphasizes the need for a definitive settlement. Two possible solutions recommend themselves, namely submission to the International Court of Justice or agreement on the *thalweg* as the appropriate frontier.¹¹² The *thalweg* alternative is the most attractive since implementation thereof will ensure that both nations will have free and direct communication with the high seas. However, the *thalweg* solution is not likely since the Belgian portion is enclosed by the Netherlands part. (No

109 Ibid 131; Verzijl (n25) 598; *re* navigation rights see (n80) *supra*; E Franckx 'Maritime Boundaries and Regional Co-operation' (1990) 5 IJECCL 215 at 221 notes 44, 45; E Somers 'The Problem of the Wielingen : The Delimitation of the Belgian Territorial Sea with Respect to the Netherlands' (1988) 3 IJECCL 19 at 31-33, 35.

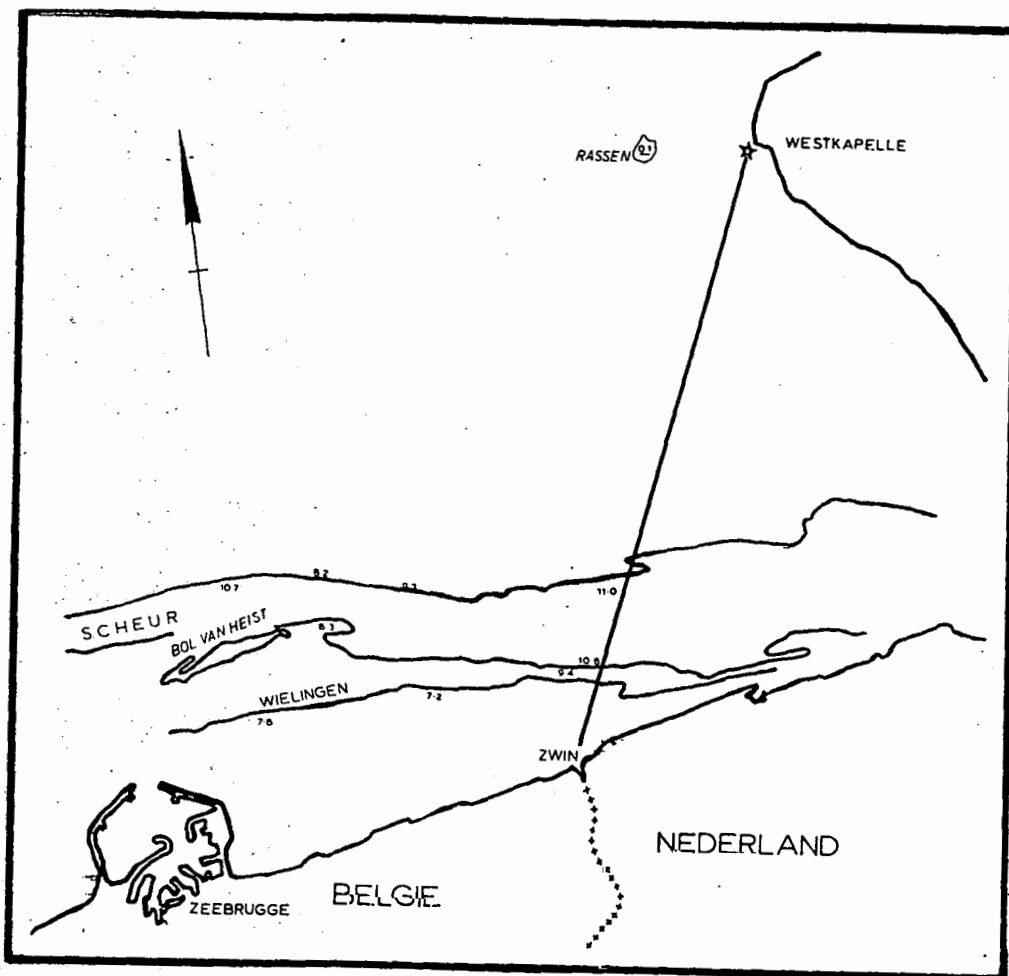
110 Ibid 34.

111 Ibid 35.

112 Ibid.

thalweg can lead to the open sea. An agreement based on appropriate servitudes aimed at ensuring free navigation is more likely.

D3



[Reproduced from Somers (n109) 30]

(iii.) Ems estuary

These waters are situated between the Netherlands and Germany. At places the distance between the two coasts is 18 miles though only 3 at the entrance between the German island Borkum and the Dutch island Rottumeroog. Except for

the main channel the estuary is shallow, necessitating continual dredging for the subsistence of the fairway in the estuary.¹¹³ Important harbours in the area are Delfzijl in the Netherlands and Emden in Germany.

There is no agreement between the riparian states as to the boundary in the estuary though the Dutch government regards the thalweg of the main channel to be the dividing line.¹¹⁴ Germany claims sovereignty over the whole Ems estuary by virtue of an historic title based on a 15th century bill of enfeoffment which was actually only a forged edition of a genuine feudal instrument dated 1464 that in no way supports their claim.¹¹⁵ The dispute has for all practical purposes been laid to rest by the Treaty of 1960 and the Convention of Bennekom of 1962.¹¹⁶ The sovereignty issue was left in abeyance, but the two states regulated practically all possible controversial questions which could have arisen as a result of the estuary dispute. The states did however agree on an 'exploitation boundary' for the purposes of exploration of the natural resources, an arrangement based on equal division of the resources in the boundary area.¹¹⁷ The industrial development of the Emden region, involving the diversion of the eastern navigable Ems channel in a more southerly direction, was the *raison d'être* for a new Treaty of Co-operation signed in 1984.¹¹⁸ From the viewpoint of maritime delimitation, the results of the Treaty are unsatisfactory as sovereignty over the diverted Ems channel and other parts of the Ems-Dollard estuary is still disputed.

113 Bouchez (n44) 124.

114 Ibid 125.

115 Ibid.

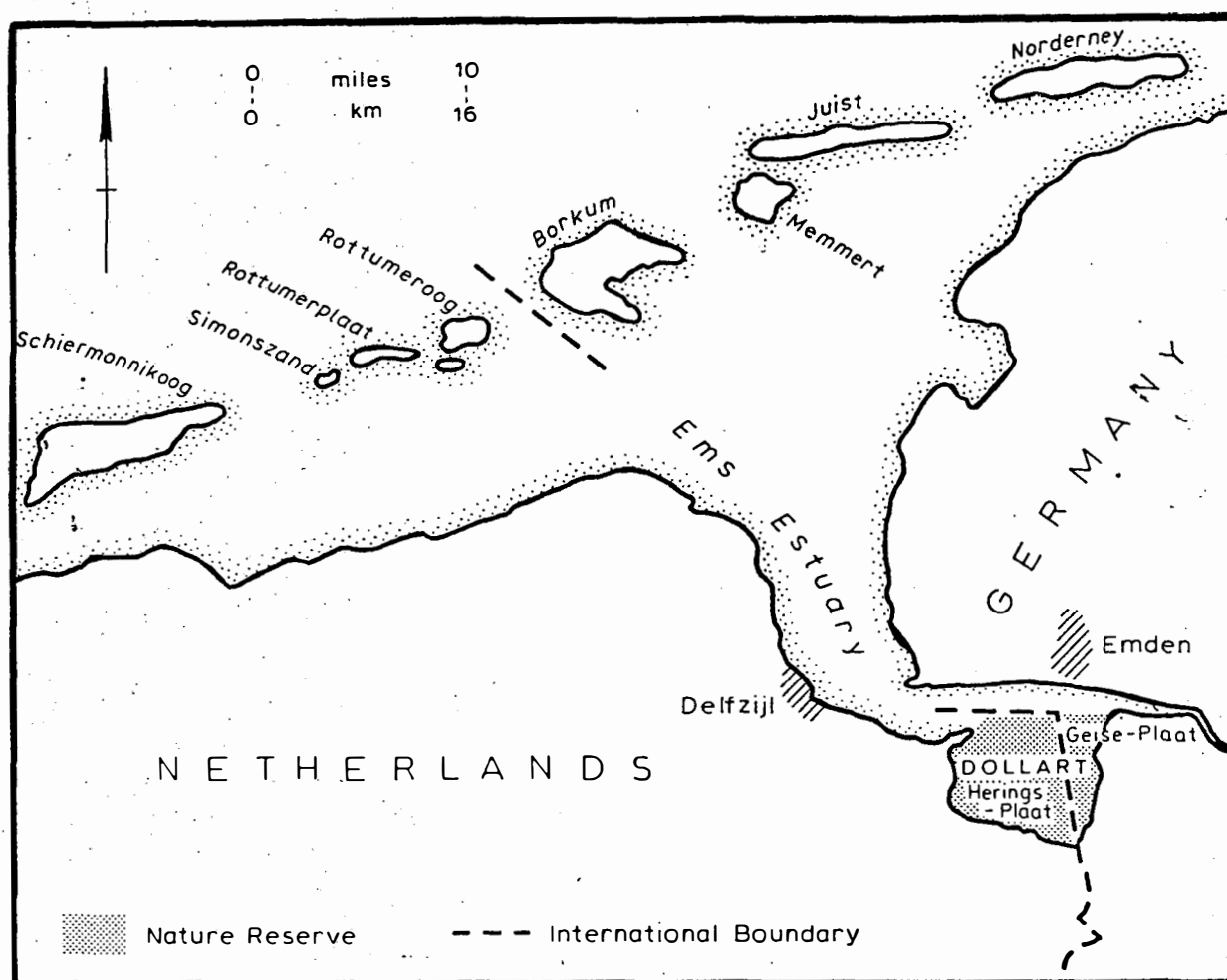
116 Ibid 130.

117 Ibid.

118 G J Tanja 'A New Treaty Regime for the Ems-Dollard Region' (1987) 2 IJECL 123 at 129, 130.

After considering possible solutions, including the regime of a condominium and the thalweg of the variable channel, Bouchez suggests that the boundary should coincide with the main navigable channel as this would safeguard equal navigation rights for both.¹¹⁹ If a change occurs in the channel, the states could agree on a new boundary after mutual consultation.

D4



[Reproduced from Tanja (n118) 133]

¹¹⁹ Bouchez (n44) 127.

(iv) Hariabhanga and Raimangal Rivers.

The estuary of the Sundarbans is situated between India and Bangladesh. The width of the Hariabhanga river where it flows into the estuary is 2 miles wide while that of the Raimangal is half a mile wider.

The report of the Bengal Boundary Commission of 1947 stated that

'The line shall run southward along the boundary between the districts of Khulna and 24 Parganas to the point where that boundary meets the Bay of Bengal'.¹²⁰

In other words, the boundary between the states is the boundary between the aforementioned districts. However, from the report of the Commission it does not appear that there is a clear delimitation in the estuary of the Sundarbans.¹²¹ This example illustrates the practical difficulty of delimiting frontiers in an estuary not only because of an absence of a uniform definition but also due to the fact that estuaries have not been specifically dealt with in international conventions. That customary law is not clear-cut on the issue merely aggravates the uncertainty.

(v) Tana River estuary

The river Tana is the boundary between Ghana and the Ivory Coast. The entrance to the sea is very narrow but of no significance since navigation on the Tana (Tendo) Lake is only possible during a certain time of the year, namely the *Harmatton* season.¹²²

120 Ibid 142.

121 Ibid 143.

122 Ibid 140.

An Anglo-French boundary agreement of 1889 stipulated that

'On the Gold Coast, the English frontier shall start from the seacoast of Newtown at 1,000 metres to the west of the house occupied in 1884 by the English commissioners. It shall thence go straight to the Tendo Lagoon. The line shall then follow the left bank of that lagoon and of that of Ahy and the left bank of the river Tanoe, or Tendo, as far as Nougoua'.¹²³

The entrance to the estuary is thus completely under the sovereignty of one of the coastal states, namely the Ivory Coast. No special provisions were agreed upon to protect the shipping rights probably because of the limited navigation opportunities.¹²⁴

(vi) Chuy mouth

The Uruguayan-Brazilian Joint Boundary Commission established the mouth of the Chuy Stream whose bed had been recognized as unstable since 1853. The Agreement came into force on 12 June 1975 and described the mouth for the purposes of the seaward boundary between these two adjacent states as follows:

'The location of the mouth of the Chuy Stream shall be fixed at the point defined by the intersection of the line running from the present Chuy light in a direction nearly perpendicular to the general line of the coast, on the same bearing as the maritime lateral boundary (specified below), with the Atlantic Ocean. The maritime lateral boundary between the two countries shall be defined by the rhumb line which, starting from the above-established point, shall run on a bearing of 128 sexagesimal degrees (counting from true north) to the outside limit of the territorial sea of both countries. The extension of that rhumb line running inland passes by the Chuy light. Both of the Commission Heads also state that the principal marker No.1 (reference marker), erected by the Joint Boundary Commission in 1853 near the left bank of Chuy Stream and on

123 Ibid.

124 Ibid.

firm ground for better protection from the water, will be maintained in its original position, and that at the opportune time the necessary works to ensure that Chuy Stream will have its normal outlet at the above-established point will be undertaken'.¹²⁵

Analysed, the Brazil-Uruguay maritime boundary consists of a single rhumb line. It commences at the mouth of the Chuy Stream and follows a bearing of 128° from true north and extends to the outer limit of the two states' territorial seas. Thus the boundary line separating these two adjacent states is a 'line running from the present Chuy light in a direction *nearly perpendicular to the general line of the coast*' (own italics). In 1969 the Foreign Ministers of both countries stated that the two governments recognized as the *lateral* limit of their maritime jurisdictions the *median* line whose points were equidistant from the nearest points on the baseline, it being apparent that the Joint Boundary Commission had decided that a simplified and normal line was equitable to both sides.¹²⁶

(vii) Rio Grande.

The Mexico-United States boundary reaches the sea via the Rio Grande whose mouth occupies various positions on the coast as the river cuts across the sandspit at the mouth in flood season. The migration of the mouth is usually in a northward direction under the force of longshore currents. In order to achieve a measure of permanence, the states signed an agreement in November 1970 containing a novel feature.

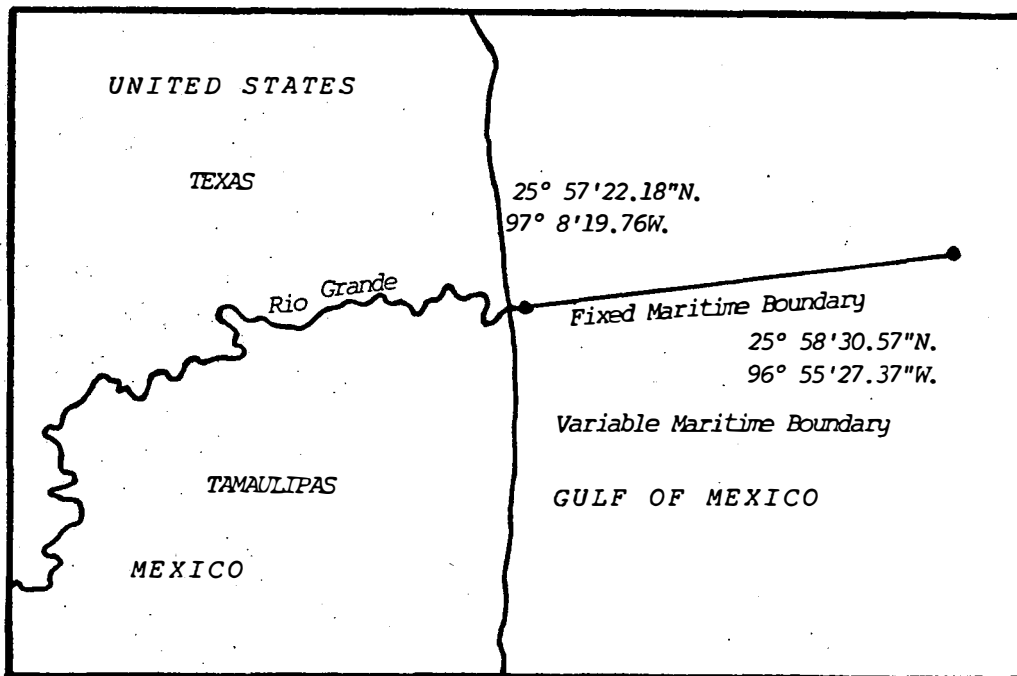
Due to the unstable mouth, the states agreed that the starting point of the boundary line would be the centre of the mouth with the second point a fixed point at 25° 57'

125 R Churchill, M Nordquist and S Lay New Directions in the Law of the Sea : Documents V. (1977) 9, 10.

126 Ibid 11.

22.18" North latitude and 97° 8' 19.76" West longitude approximately 200 feet due east of the midpoint of the mouth at the time of the treaty. From this fixed point the maritime boundary continues seaward in a straight line, the delineation of which represents a practical simplification of the line drawn in accordance with the principle of equidistance established in Articles 12 and 24 of TSC.¹²⁷ This line then extends 12 nm into the Gulf.¹²⁸ This means that the starting point could shift if the mouth shifts, but the second point remains constant. This fixed point will act as a hinge between the seaward boundary section which is permanent and the short landward boundary section which will move as the mouth of the Rio Grande moves.¹²⁹

D5.



Some important features can be noted. Firstly, the starting point - the midpoint of the mouth - was the midpoint at the

127 US Dept. of State Limits in the Seas (Series A) No 45; Prescott (n82) 158; Knight (n8) 6-14.

128 Ibid; J E Mueller Restless River (1975) 111,112.

time of the treaty (ie at the time of the mapping of the river immediately after signature) so that subsequent changes to the mouth area will not affect the starting point. This effectively eliminates the destabilising effect of the unstable river-mouth. Secondly, the single permanent section lies very close to the course of the line of equidistance. Thirdly, an equidistant boundary was constructed from the mouth to the 12 nautical mile limit measured from the low-water baselines and this point of intersection was chosen as the terminal point of the maritime boundary.

Both governments sought a simple limit, practical to administer and one which would not cause difficulties for craft operating with unsophisticated gear, and agreed to establish two markers on the ground, one in each state, in order to assist in the visual determination of position relative to the maritime boundary.¹²⁹

(viii) Sabine River

In *Texas v Louisiana* the lateral boundary in the territorial sea between the two states was the issue at stake.¹³⁰ The Special Master was required to determine the appropriate baseline from which a lateral equidistant line could be constructed. After examining prior case law, it was held that though essentially a domestic dispute, the Convention coastline was used by the United States in its domestic relations and that the TSC was to be applied in the determination of the lateral boundary dispute.¹³¹

Two jetties, each approximately 3.1 miles in length, extended from the midpoint of the natural mouth of the Sabine to the midpoint of the jetties in the Gulf at the

129 Knight (n8) 6-14, 6-15.

130 59 ILR 195.

131 Ibid 224.

terminus.¹³² These jetties were constructed in the 1880's and extended from time to time as congressional appropriations became available.¹³³ The jetties in effect extended the river, in turn shifting the mouth to the gulfward terminus of the jetties. This development was supported by acquiescence and expert testimony that the geographic middle of the jetty channel marked the lateral boundary.¹³⁴

Texas claimed that though the jetties formed part of the coastline in terms of Article 8 of TSC which states that the outermost permanent harbour works forming an integral part of the harbour system are part of the coastline, they did not extend the coastline for the purposes of delimiting a lateral boundary.¹³⁵ Louisiana contended that the jetties were, for all purposes, part of the coastline.¹³⁶

Texas further posited that the lateral boundary began in the middle of the natural mouth, the jetties having no effect on an already existing boundary.¹³⁷ After dismissing this claim based on an historic title it was held that in terms of Article 8, the outermost permanent harbour works were part of the mouth. *In casu*, these harbour works were the jetties at the entrance to the Sabine River into the Gulf of Mexico.¹³⁸ These jetties were to be included as part of the baseline ...whether in harmony or in conflict with Article

13.¹³⁹

Regarding closure of the mouth, Texas relied on Article 13 of the Convention which would require the baseline to be a

- 132 Ibid 210.
- 133 Ibid 209.
- 134 Ibid 211, 243, 244.
- 135 Ibid 231.
- 136 Ibid 224.
- 137 Ibid 231.
- 138 Ibid 225.
- 139 Ibid 243.

straight line across the mouth of the river between the low-tide line of its banks . If applied literally, the jetties, not being banks, could not be used as points which would contradict Article 8. In other words, if the line was drawn across the *natural mouth* only, this would negate the prior finding that the jetties were part of the coastline. Of course this conflict could only arise if Article 13 was correctly interpreted as reading across the *natural mouth* and the word 'banks' was interpreted as excluding the jetties.¹⁴⁰ The Special Master found that on the facts, the jetties happened not to extend beyond the low-water mark, avoiding the potential conflict between Articles 8 and 13.¹⁴¹ The low-tide line would be at the terminus of the jetties even under Article 13. In another situation, depending on where such a low-tide line was established, it could turn out that a baseline constructed in terms of Article 13 would exclude the jetties as part of the coastline though this is a doubtful consequence in the light of the finding that the jetties were part of the baseline '...whether in harmony or in conflict with Article 13'.¹⁴²

The mouth was eventually located at the terminus of the jetties and the lateral boundary was to be drawn from the geographic middle of the jetty channel.¹⁴³ This was supported by the conclusion that a lateral boundary line drawn using the modern coast with a baseline including a closing line across the river at the head of the jetties would produce an inequitable division of the seabed.¹⁴⁴

(ix) Rincon Island

In *United States v California* the decision centred on whether the coastline followed the mean low-water line along

140 Ibid (italics supplied).

141 Ibid.

142 Ibid 242,243.

143 Ibid 243,244.

144 Ibid 244.

the natural shore, or whether it followed the seaward edge of the fifteen piers and the Rincon Island complex which projected into the sea from the shore.¹⁴⁵

Rincon Island was a privately owned artificial island used to service offshore oil facilities and was built on large concrete tetrapods resting on the ocean floor. The island was connected to the mainland by a causeway with a pipeline running beneath and alongside it. Neither the pipeline nor the island had any noticable effect on the coastline.¹⁴⁶

The fifteen piers were mounted on precast concrete and varied in length from 500 to 3500 feet. All were attached to the mainland with water flowing freely beneath each one. These piers had no effect on the shoreline and could not be described as coast protective works.¹⁴⁷ The Special Master found that neither the Rincon Island complex nor the piers constituted a coastline extension, so the coastline followed the natural coast in the vicinity of these structures.¹⁴⁸ California excepted to the report of the Special Master.

The dispute turned on the word 'coastline'. Article 3 of TSC stipulates that '...the normal baseline is the low-water line'. The Special Master noted that because the piers do not have a low-water mark they cannot form part of the normal baseline.¹⁴⁹

California based its exception to the finding on the content of Article 8 of the same Convention. This provision states that the 'outermost permanent harbour works' are part of the coastline for the purpose of delimiting the territorial sea. In the Louisiana Boundary Case it was found that 'harbour

145 (1979-1986) 2 AILC (2nd series) 81.

146 Ibid.

147 Ibid 82.

148 Ibid.

149 Ibid.

works' describes structures erected along the coast at inlets and rivers '...for protective purposes or for enclosing sea areas adjacent to the coast to provide anchorage and shelter'.¹⁵⁰ *In casu* it was held that the piers neither 'protected', 'enclosed' nor 'sheltered' and were not permanent harbour works and therefore not part of the coastline.¹⁵¹ It is clear that in order to qualify as such, a beach or harbour protection role must be evident.

(x) Coco River mouth.

One of the first boundary conflicts to arise between Nicaragua and Honduras seems to have occurred in 1858 when Nicaragua complained that municipal authorities of San Marcos de Colon (Honduras) had repeatedly intruded into the Espino Valley which was Nicaraguan territory.¹⁵² After various attempts at securing a workable treaty, the Nicaraguan government in 1895 published a map which showed the eastern end of the boundary with Honduras at the mouth of the Laguna de Caratasca. This aggravated the situation with both sides eventually agreeing to an arbitration award, the King of Spain being the sole arbiter.¹⁵³

The Award stated that the extreme common boundary point on the Atlantic coast would be the mouth of the river Coco (Segovia or Wanks) in the sea, next to Cape Gracias á Dios, considering as the mouth of the river that of its principal branch between Hara and the island of San Pio at the aforesaid Cape. This left for Honduras the islets lying within the principal branch before reaching the bar and allocated to Nicaragua, the south bank of the principal branch together with the island of San Pio, the bay and settlement of Cape Gracias á Dios between the continent and

150 394 U.S. 11 at 37 note 42; 89 S.Ct. 773 at 788.

151 (1979-1986) 2 AILC (2nd series) 81 at 83.

152 G Ireland Boundaries, Possessions, and Conflicts in Central and North America and the Caribbean. (1941) 128.

153 Ibid 137.

San Pió.¹⁵⁴ From the mouth of the Coco, the frontier line followed the thalweg upstream until it reached the place of its confluence with the Bodega from where it followed the thalweg of the latter until it joined the River Guineo.¹⁵⁵

Initially the Award was accepted but nothing practical was done regarding the demarcation or execution thereof. Then in 1912 Nicaragua disputed the validity of the decision on the grounds that there was a valid treaty prescribing arbitration conditions which had not been met. As a result, the nullity could not be remedied by express or tacit consent since the existing treaty could only be altered by a new agreement formally made, approved and ratified.¹⁵⁶ In addition, it was argued that not only was the Award contradictory in that, after establishing the thalweg in the principal branch of the Coco as the dividing line, it then proceeded to allot the islets and bays therein to Honduras but it also mentioned a settlement, Hara, which did not exist.¹⁵⁷

The dispute remained quiescent for some 58 years but was eventually referred to the International Court of Justice in 1960.¹⁵⁸ Nicaragua relied on the invalidity of the Award based on treaty conditions not having been met in the appointment of the arbiter. It was also stressed that the mouth was not a *fixed point* and could not therefore serve as a common boundary, especially since vital navigation rights would be involved in accepting the mouth as the boundary.¹⁵⁹

154 Ibid 138.

155 Ibid.

156 Ibid. The provisions of the Gámez-Bonilla Treaty are set out in full in M M Whiteman Digest of International Law (1965) III 633-635.

157 Ireland (n152) 140.

158 Honduras v Nicaragua 1960 ICJ Rep 192.

159 Ibid 216. The Award stated that the boundary would commence at the mouth of the River Coco and then follow the thalweg or *vaguada* upstream - Whiteman (n156) 633 at 637, 638, 642.

nature of the sandbar.

(ii) lateral boundary

The location of the entrance point to the mouth will not only indicate the commencement of the north bank for the purposes of the land boundary but will also influence the lateral maritime boundary as it will determine the point from which the lateral line will be drawn. Also, the Kudu gasfield straddles the mouth of the Orange River and the exact position of the mouth will have a considerable influence on the distribution of this oilfield.

When identifying the mouth, both the northern and southern banks must be considered in establishing the feature. The southern bar can be part of the coastline because of a geomorphological fact, ie if it can be clearly distinguished from the seasonally inundated area landward thereof. The same conclusion must naturally be drawn with respect to the sandbar attached to the opposite bank if the identical fact can be established. The area immediately landward of the southern sandbar is seasonally inundated and can be distinguished from the sandbar *which is actually the coastline at this point*.¹⁷⁴

Factors in favour of the entrance to the mouth being at the unattached end of the northern sandbar (ie point B) include firstly, that in terms of the 1890 Treaty, the boundary is at point B.¹⁷⁵ Secondly, the sandbar has the feature of permanence, it being only episodically inundated. It is only during exceptional river floods that the sandbar is inundated and then only for short periods. Extraordinary floods of this nature display no fixed pattern as they do not occur at regular intervals.¹⁷⁶ It is therefore a

174 Erasmus and Hamman (n166) 52 (italics supplied).

175 Ibid.

176 Ibid 54.

permanent structure above the water line. Thirdly, a clear distinction can be made between the episodically inundated area (sandbar) and the adjacent seasonally inundated area.

If the mouth extends between points B and C then the sandbar extending from points A to B is a prolongation of the Namibian coastline and of the river bank on the northern side since it has the effect of permanently directing the flow of the river. A river bank has been defined as '...that which contains the stream when it keeps the natural direction of its course', the crucial requirements being the natural and normal flow of the river and the permanency thereof.¹⁷⁷

However, recent events demand closer examination of the exact nature of the sandbar. During late February and early March of 1988, the Orange Free State experienced severe flooding as a result of heavy rainfall and extensive damage was caused along the lower reaches of the Orange River from Douglas to the sea. Floods of similar magnitude had occurred in 1925, 1936, 1943, 1957, 1974 and 1976. In anticipation of the flood waters, earth walls of 6m were constructed on both the north and south banks and the sandbar attached to the southern bank was mechanically breached in order to prevent flooding of the banks.¹⁷⁸

As expected, the heaviest attack by the flood waters occurred on the north bank due to current erosion and undercutting of the bank.¹⁷⁹ Aerial photographs revealed

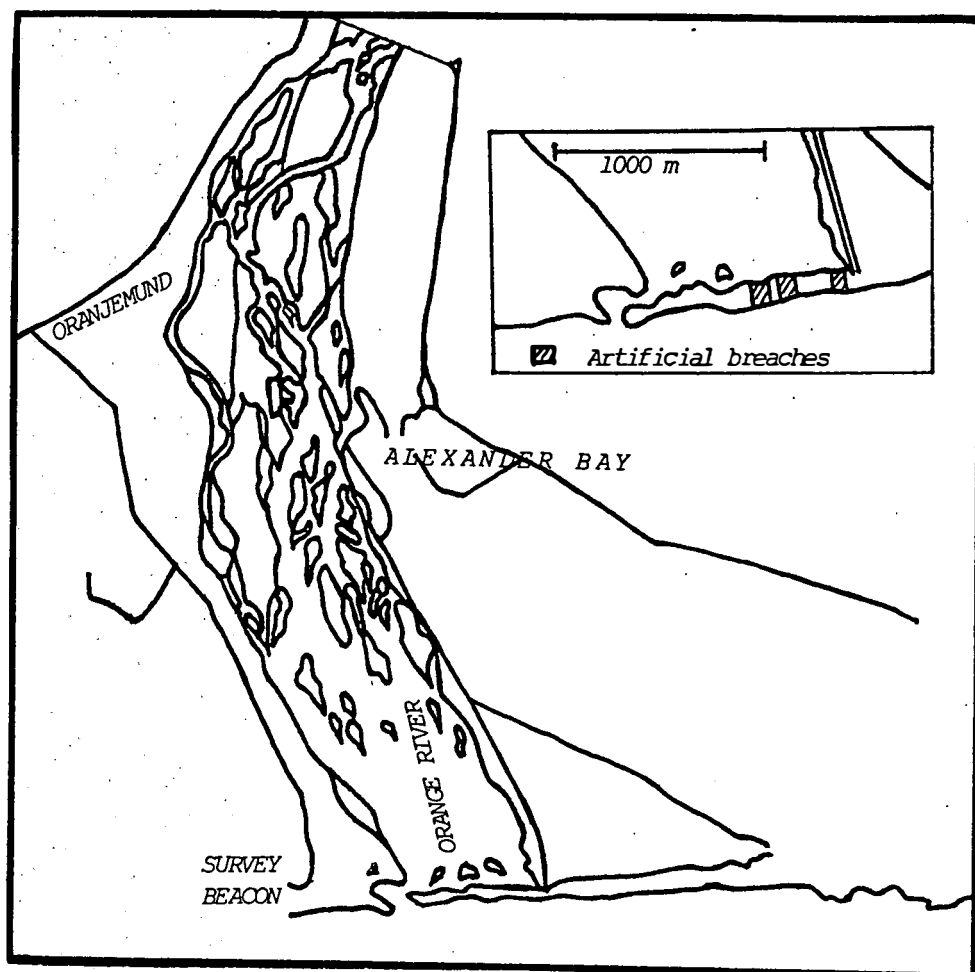
177 C G Hall and A P Burger Hall on Water Rights in South Africa (1974) 4ed 86. The authors are referring to Dig. 43.12.1,5.

178 D H Swart, P D Morant, J P Möller, J B Crowley, A de Wet 'A record of events at the Orange river mouth during the March 1988 flood' (1988) 84 SAJS 881. The measures taken were almost completely successful in preventing flooding.

179 Ibid. The openings of the breached spit were subsequently scoured and one of the so-called 'islands'

that the sandbar attached to the north bank had been washed away by the force of the flood waters.¹⁸⁰

D7



[Reproduced from Swart *et al* (n178) 882]. The diagram depicts the lower reaches of the Orange River. The inset shows the artificial breaches in the sandspit made prior to the March 1988 flood.

disappeared.

180 Ibid 885, 886.

The exact nature of this kind of flood requires analysis. Another sandbar will form due to current motion, attach itself to the north bank and be *episodically* inundated until the next severe flood possibly washes it away. The *frequency* of this kind of flood will obviously influence the permanence factor of the sandbar. According to Swart *et al*, it is now possible to attach a greater than 1-in-200 year recurrence interval to the March 1988 run-off; a more accurate interval would be a 1-in-30 year event.¹⁸¹ It should be noted that the construction of large storage dams such as the Vaal, Hendrik Verwoerd and PMK Le Roux in the upper reaches regulate the flow and have to a large degree eliminated the *seasonal* floods which occurred in former years. Thus, except for extraordinary floods capable of actually flushing the bar away, the sandbar is a relatively permanent feature. However, knowing of the likelihood of the spit being washed away again by run-off which is no longer only a once in a lifetime occurrence, the question arises as to whether the sandbar, as the entrance point to the mouth, is indeed an appropriate point from which both a terrestrial and maritime boundary can emanate.

The answer lies in identifying the purpose of establishing the location of the entrance to the mouth. It is quite clear that the purpose is to achieve *certainty* where uncertainty prevails, and the uncertainty exists because of non-demarcation of an ambiguous term, the 'north bank'.

According to available data the sandbar which will in time attach itself to the bank will not be identical to the previous one.¹⁸² To achieve certainty, the location of the mouth should be determined without taking the current sandbar or its potential successors into consideration. This will ensure that flood-induced changes in the position

181 Ibid 885.

182 See diagram D8.

of the sandbar do not lead to inconsistency between the *de facto* and *de lege* positions.

(iii) unstable river-mouth.

If the sandbar does shift position due to volume discharge, drifting sand and tidal action, it can lead to practical difficulties. For example, official charts could differ from the *de facto* position, making it possible for a coastal state to exercise sovereignty in the territory of the opposite state. Available data reveals that the width and length of each of the sandbars are not constant in time, confirming that the position of the mouth, if the sandbars are considered a permanent feature, is not static.¹⁸³ Viewed in a certain way, the sandbars are permanent, being inundated only during exceptional floods which exhibit no rigid pattern since they do not occur at fixed, or even predictable, intervals.¹⁸⁴ The stability of the river discharge as a result of the construction of large dams further upstream increases the overall stability and permanence of the sandbar.

However, cognizance must be taken of the fact that, aside from extraordinary floods (expected once in 30 years) capable of actually washing the spit away, ordinary processes such as volume of discharge and tidal action which take place continuously also produce shifts in the sandbars.

If the sandbars are not permanent enough to form part of the coastline, the mouth is still considered unstable. Major floods occurred in the hydrologic years 1936/37, 1943/44, 1957/58, 1975/76, 1988/89. Aerial photographs reveal that during a major flood, a new mouth is scoured along the north bank. Because most of the outflow is down the north side of

183 Ibid; I L Van Heerden 'Fluvial sedimentation in the ebb-dominated Orange Estuary' (1986) 82 SAJS 141 at 143, 145.

184 Erasmus and Hamman (n166) 54.

the mouth, scour is concentrated here during major floods and a new mouth opens up against the north bank, characterized as a confining topographic high.¹⁸⁵

This process was very evident during the 1976 flood when the lower reaches of the northern bank retreated almost 200 metres due to outflow concentration.¹⁸⁶ After creation of a new mouth, migration southwards is initiated - a process *which continues until the next major flood.*¹⁸⁷

Of importance is that the mouth migration produced by extraordinary floods sets in motion a *continuing* process of migration. The mouth is never static. Furthermore, mouth instability is not confined to flood-induced shifts but is also caused by ordinary wave refraction and flow around a bend in the channel of the mouth.¹⁸⁸

185 Van Heerden (n183) 145.

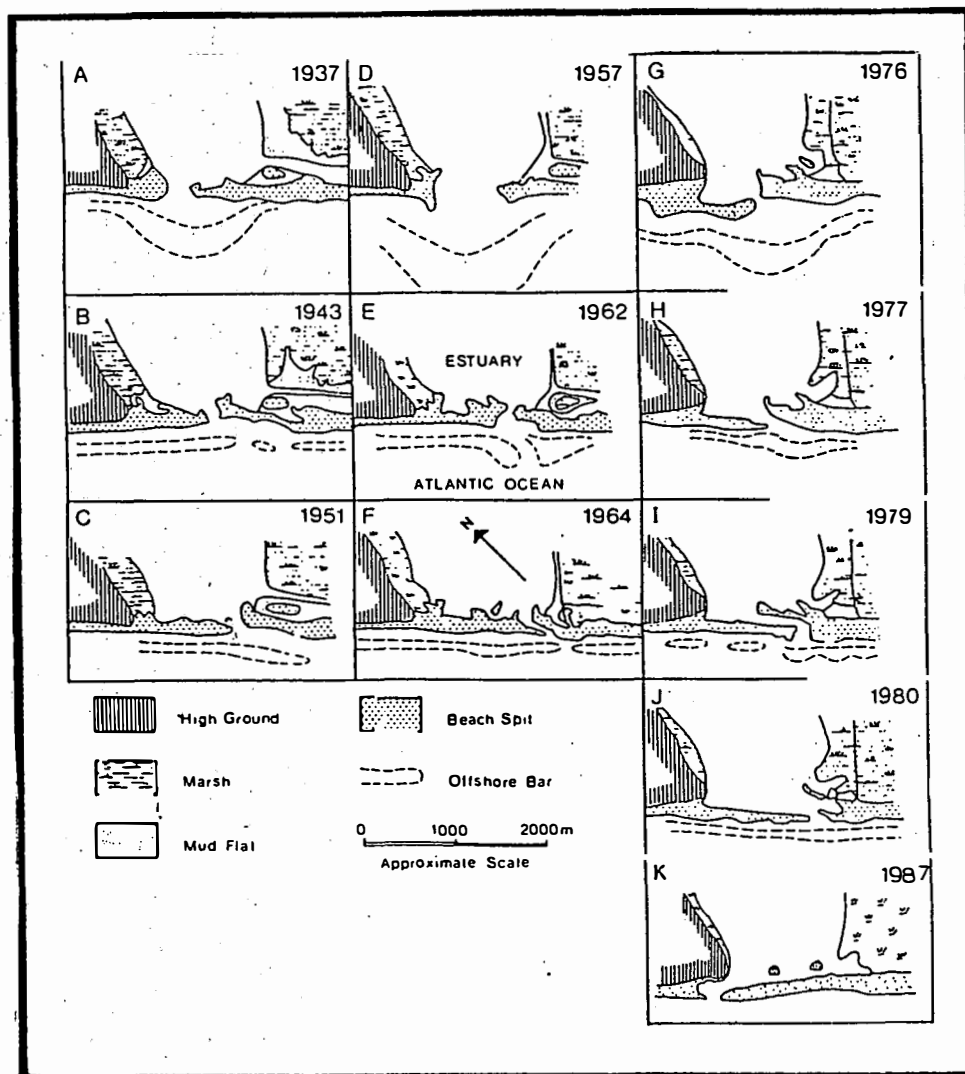
186 Ibid.

187 Ibid (*italics supplied*). According to the author, two factors define the most southerly limit of the mouth migration. The first appears to be the fine-grained consolidated south bank sediments which require strong currents to be eroded and the second may be that, at this southern limit, the northerly longshore currents predominate.

188 Ibid.

agie

D8 Location of the Mouth of the Orange River 1937-1987



[Reproduced from L van der Merwe 'River Mouth Surveys of the West and South West Cape Coast (Orange, Olifants, Berg, Diep, Palmiet and Klein River)' (1988) Data Report No 1 CSIR Report EMA/D 8802]. It is clear that the river-mouth migrates either northwest or southeast along the sandbar.

(e) *Quo vadis* Orange River mouth?

(i) Is it a bay?

A bay in international law is one with the area required by the semi-circle test. The indentation at the mouth of the Orange does not meet the test. If it did, it would validate the use of a straight baseline in order to close it off providing the line did not exceed 24 miles, the bay was not a shared one and on condition that straight baselines were not already being used in the area.¹⁸⁹

Hypothetically, if the Orange River mouth had a bay configuration, two possibilities emerge. If the northern boundary is the high-water mark on the north bank, the bay is enclosed by a single state, namely South Africa since its territory includes both entrance points to the bay. If the dividing line is the low-water mark, it could be described as a bay shared by two states, the territory between the high and low-water marks being Namibian territory. In this case, the baseline will be the normal baseline namely the low-water mark following the indentation. It should be noted that not all jurists are *ad idem* on the subject of shared bays being excluded from the closing off thereof by a straight baseline.¹⁹⁰

The theory that all river-mouths be treated as bays has never enjoyed significant support. To date, no suggestion has been made that the Orange River mouth is a bay in the legal sense, most debate relating to the issue of whether it constitutes an estuary or a mouth *stricto sensu*. Moreover, South Africa has not made use of straight baselines to close off *de facto* bays.¹⁹¹

189 Article 7 TSC; Article 10 LOSC.

190 Bouchez (n44) 166; Verzijl (n25) 594; see discussion (2) A (g)(i).

191 Sections 2 and 3 of the Territorial Waters Act 87 of 1963, as amended by Act 98 of 1977; Section 1 of the Marine Traffic Act 2 of 1981, as amended by Act 5 of 1983.

(ii) Is it a navigable river?

The common concept of navigability seems to have a commercial connotation and it is probably in this sense that the South African courts have declared the Orange River non-navigable.¹⁹² The non-navigability can be attributed to the non-perennial character of the Orange River.¹⁹³

(iii) Are provisions on low-tide elevations relevant?

Territorial seas can be claimed from low-tide elevations near the coast. A low-tide elevation stands above water at low tide and is submerged at high tide.¹⁹⁴ These features have traditionally been referred to as 'drying rocks' or 'banks'. Of interest here is whether these banks may be used as basepoints in constructing straight baselines.¹⁹⁵

Article 4(3) of TSC and Article 7(4) of LOSC state that low-tide elevations may not be used as basepoints for straight baselines unless lighthouses or similar installations permanently above sea level have been built on them or 'where the drawing of baselines to and from such elevations has received general international recognition'. If not, the bank or drying rock may still be used as points for the low-water mark but may not be used as basepoints for a straight line system.

The permanence of the sandbanks has been fully discussed. It is suggested that the sandbars are not appropriate as basepoints as they are at considerable risk of being washed away. It is unlikely that their characterization as possible low-tide elevations for the purpose of potential

192 Lange and Another v Minister of Lands 1957 (1) SA 297 (A) 299 G-H.

193 F J Potgieter Suid Afrika se Water (1970) 44.

194 Article 11 (1) TSC, Article 13(1) LOSC; Post Office v Estuary Radio Ltd (n40) 182, 183.

195 G Marston 'Low-tide Elevations and Straight Baselines' (1972-1973) 46 BYIL 405.

basepoints in a straight line system will be raised for the simple reason that a straight baseline can be used to close off a river-mouth anyway in terms of Article 13, LOSC.¹⁹⁶ The sandbars extend across the mouth neither indenting the area nor extending it to any appreciable degree. That being the case, provisions on low-tide elevations are not relevant at the Orange River mouth.

If the sandbars are considered permanent features due to the inconsistency of severe flood occurrences, no lighthouses or similar installations above sea level have, as yet, been constructed on them. Consequently, there is no evidence of international recognition of them as basepoints.

(iv) Is it a delta?

Deltas are formed when the sediment deposited at the mouth of a river fills that mouth and then continues that building process so that the newly formed land protrudes into the sea.¹⁹⁷ Geomorphologically, the Orange River has been described as a wave-dominated delta with sediment being discharged into the Atlantic Ocean via an orifice-valve.¹⁹⁸ This 'delta' is considered unique in that it lies on the poleward side of a west-coast sand sea.¹⁹⁹ According to Van Heerden, the process of rapid bar formation is similar to that which occurs in 'bay-head' deltas elsewhere in the world.²⁰⁰

196. Kühl (n5) 91, 92. Even if the river does not flow directly into the sea, it may be possible to use straight baselines on the grounds of an historic title, thus delimiting by means of a method other than the normal low-water mark. See discussion (2) B (e) (viii).

197. Prescott (n64) 302.

198. J Rogers 'Dispersal of Sediment from the Orange River along the Namib Desert Coast' (1979) 75 SAJS 567.

199. Ibid.

200. Van Heerden (n183) 143. This description is based on geomorphological conditions. In the following sentence, the author submits that the Orange estuary, as an elongated open body of water bounded by a spit,

Aside from a geomorphologic perspective, a delta has been defined as the lower stretches of a river which flows into the sea through different arms, one of which is designated as the real river boundary.²⁰¹ The Orange River's elongated sandbanks diminish in size and number about 4km from the mouth, leaving the river to flow through a single arm into the ocean.²⁰² It does not appear as though the mouth constitutes a geographic delta, there being a single arm of the river water meeting the sea.

If it could be argued that a delta exists, though this is not conceded, the provisions of Article (7(2)) of LOSC would apply. This provides for the selection of basepoints on the furthest seaward extent of the low-water line of the delta. Not only must the physical presence of the delta be established but also 'other natural conditions' contributing to a highly unstable coastline.²⁰³ The severe floods capable of washing away sandbars and scouring a new mouth each time may be one of these natural conditions. It remains an open question whether the flood-induced mouth instability qualifies as a (rapid) short-term fluctuation considering the 1-in-30 year predicted occurrence. The continuous wave-induced mouth migration can hardly be described as (rapid). State practice in this respect is at present non-existent, although some deltas are enclosed within straight baselines drawn on the basis of other criteria such as archipelagic baselines.²⁰⁴

could be considered a protected 'embayment' similar to small bays and lagoons along the Texas and Louisiana coasts of North America, the similarities being *inter alia* protection from ocean waves by a barrier and a shallow dispositional basin.

201 Verzijl (n25) 608.

202 See diagrams D6 and D7.

203 See discussion (2) A (d).

204 Churchill and Lowe (n12) 31; Prescott (n64) 305.

(v) Is it a river flowing directly into the sea?

'The Orange River sometimes flows directly into the Atlantic Ocean and sometimes its access to the sea is blocked by sand-bars - it is thus not a true estuary and is best termed a river-mouth'.²⁰⁵ If the Orange River maintains its stream shape, flowing directly into the sea, then Article 13 of TSC and Article 9 of LOSC permit the drawing of a straight baseline between points on the low-water line of its banks. No maximum limit is prescribed.

The river meanders across a flat coastal plain. A sinuous thalweg, typical of straight channels, characterizes most of the river's course during periods of low discharge.²⁰⁶ Thirty kilometers from the mouth, the channel straightens, broadens and changes again to a braided pattern - a change attributed to aggradation when the stream velocity is checked on approaching sea level.²⁰⁷ Four kilometres from the mouth, the elongated sandbanks of the braided channel diminish in size and number where the river reaches a final stretch of open water 2,5km long extending to the sandbars across the mouth entrance.²⁰⁸ It appears that the river could be described as flowing directly into the sea though it does widen at the mouth.

It has been suggested²⁰⁹ that it is the low-water mark on the north bank of the river which constitutes the terrestrial boundary between South Africa and Namibia.²⁰⁹ If this is

205 A J Williams 'Wetland birds at the Orange River mouth and their conservation significance' (1986) No 5 Bontebok 17.

206 B D Coward 'A Review of the Geology of the Cape West Coast (Orange River to Berg River)' (1981) CSIR Report T/SEA 8115 1 at 6.

207 Ibid.

208 Ibid. See diagram D7.

209 See discussion Chapter II (8). The Namibian attitude as represented by Article 1 (4) of the Namibian Constitution is that the southern boundary extends to the middle of the Orange River. See (n164) and (n173).

correct, the application of Articles 13 and 9 presents no practical difficulty. The straight baseline drawn across the mouth will meet the low-water mark on the north bank which mark is also the point at which the terrestrial boundary commences.

However, if South Africa maintains its viewpoint that the *high-water mark* denotes the frontier on the north bank then the straight baseline closing off the mouth must still terminate at the *low-water mark* on the north bank in order to comply with Articles 13 and 9. Between this point and the high-water mark on the bank, the baseline will be the normal baseline - the low-water mark following the sinuosities of the coast.²¹⁰ At present, as a result of the 1988 flood, the high and low-water marks are on the same vertical plane as the flood waters washed the sandbar away leaving a sheer mud cliff. This will in due course be levelled off by wave and current erosion.

The point at which the bank becomes the mouth can be described as the opening or headland of the river-mouth. The natural entrance points to bays are vague and Articles 13 and 9 are also silent as to characteristics of the headlands of a river-mouth. A coastal state would probably have to exaggerate the opening of the mouth before other states would object.

The risk of abuse in drawing an exceptionally long baseline across the mouth is negligible as the mouth is only about 2,5km long in comparison to the 120 mile closing line drawn across the mouth of the River Plate. The area enclosed by

210 An interesting example involving the absence of a low-water mark occurred in *United States v California* where it was held that certain piers had no low-water mark, the absence of which "... deprives the piers of a "normal baseline", and precludes them from falling within the ambit of Article 3' (1979-1986) 2 AILC (2nd series) 81 at 82.

the closing line becomes internal waters. The line must be represented on a chart of adequate scale to which due publicity must be given.²¹¹

The view of the United States that Article 13 of TSC only incorporates rivers which flow directly into the sea from the territory of a single state is not contradicted if the land boundary is the high-water mark on the north bank since it then flows into the ocean from a single territory, namely South Africa.²¹² However, if the low-water mark denotes the terrestrial boundary then the portion of the river between the high and low-water marks is Namibian territory, and it may be argued that the river then flows into the sea from the territory of more than one state. The same objection was made to the closing of a bay in terms of Article 7 TSC ie it was not possible if the bay was enclosed by more than one state.²¹³ Bouchez, commenting on Article 7, warns that though Article 7 (and by analogy Article 13) only relates to bays enclosed by a single state, this does not necessarily imply that bays, mouths or estuaries enclosed by more than one state are automatically excluded from the sovereignty of the coastal states.²¹⁴ The only conclusion to be drawn is that there is no *codified* rule of international law.²¹⁵ Churchill and Lowe state that Article 13 applies to all rivers flowing directly into the sea, whether from a single coastal state or otherwise.²¹⁶ So it is not contrary to international law to close off a river-mouth flowing directly into the sea by means of a straight line even if the river emerges from the territory of more than one state. Moreover, TSC and LOSC are both silent on the issue, so theoretically it is possible to close the mouth of a river

211 Article 16 LOSC.

212 See discussion (2) A (g)(i).

213 Ibid.

214 Bouchez (n44) 166.

215 Ibid.

216 Churchill and Lowe (n12) 39 (*italics supplied*).

flowing into the sea from the territory of more than one state using a straight line.

(vi) Is it an estuary?

Several basic facts emerge when identifying an estuary. Firstly, there is no general consensus on the definition of an estuary in the legal sense. Existing suggestions are based on factors such as salinity, current action or geographic configuration. Secondly, it is to be expected that jurists, cartographers, environmentalists, conservationists and geographers will advocate the definition most appropriate considering the particular interests at stake. Thirdly, description is not decisive. The Thames estuary was in fact a bay and treated as such.²¹⁷

Geographic definitions must obviously be treated cautiously but are of cardinal importance. Any legal definition will contain elements of a geographic definition since an estuary is essentially a geographic feature. The word is derived from the Latin *aestuarium* or tidal inlet of the sea. At the First International Conference on Estuaries held in Georgia in 1964, physicists proposed definitions based on current systems and salinity variations, geologists stressed the distribution of sediments while biologists were concerned with the nature of fauna and flora.²¹⁸ The important thing to emerge was that there was wide agreement that variable salinity is a predominant feature of all estuaries and the definition of an estuary as '...a semi-enclosed coastal body of water which has a free connection with the open sea and within which sea water is measurably diluted with fresh water derived from land drainage' proved most popular.²¹⁹ The essential feature seems to be a '...gradual transition

217 See discussion (2) A (c)(iii).

218 J H Day 'The nature, origin and classification of estuaries' *Estuarine Ecology* with particular reference to Southern Africa (Ed J H Day) (1981) 1.

219 Ibid.

in physical, chemical and biological characteristics from fresh water to sea water'.²²⁰

Tests conducted in the Orange River mouth revealed very little penetration of sea water into the 'estuary'. The tidal fluctuations near the mouth do not result from sea water inflow but are ascribed to the damming-up effect of fresh water at high tide.²²¹ It was found that the extent of penetration by sea water depends primarily on the flow conditions in the river, with tides playing a secondary role.²²² Though no general legal definition for an estuary exists, jurists do agree that the mere fact that a river broadens on approaching the sea does not automatically indicate the existence of an estuary. Bouchez defines an estuary as the tidal mouth of a river, the water area dominated by sea action.²²³ This description highlights the essential character of sea action. If the river flows into the sea in such a manner that the sea water does not integrate with fresh water in the mouth region, for example, where the river flow is too strong or where it is connected with the sea via several narrow channels, then no sea action is visible. In this case it is not an estuarine mouth but a river mouth *stricto sensu*.

The estuarine fauna in the Orange River mouth is extremely poor and lacks a true estuarine component.²²⁴ Components such as benthos do not last long enough to enable

220 A E F Heydorn 'Overview of Present Knowledge on South African Estuaries and Requirements for their Management' (1979) 75 SAJS 544.

221 G A Eagle and P D Bartlett 'Preliminary Chemical Studies in Four Cape Estuaries' (1984) CSIR Report T/SEA 8307 1 at 8.

222 Ibid 19.

223 Bouchez (n44) 21.

224 A C Brown 'The Ecology of South African Estuaries Part IX : Notes on the Estuary of the Orange River' (1958) 35 Transactions of the Royal Society of South Africa 463.

colonization of estuarine fauna such as mudprawns and mussels.²²⁵ The striking paucity of the fauna is attributed to the transient nature of the estuarine conditions, the water becoming fresh too soon. In fact, for long periods of time the Orange River possesses no true estuary. It is particularly short in winter and completely disappears in summer.²²⁶ It seems clear, both from the environmental conditions and the aquatic fauna that there is no real estuary ... it is thus classed as a river mouth and not as an estuary'.²²⁷

Thus it appears that *sea action* producing appreciable variation in salinity is the essential characteristic both from a geographical and legal point of view. Moreover, it has been established that estuarine life, dependent on sea water, is notably absent. There is no *sea action* at the mouth of the Orange River. There is therefore no true estuary.²²⁸

If this is not correct and the mouth is an estuary flowing into a gradually widening indentation meeting the area test for a bay, then bay provisions can be applied and a straight baseline used to close off the bay. The objection to a straight baseline method where the bay is enclosed by more than one state does not arise if the high-water mark is the boundary since the bay is then enclosed by South Africa alone, its land boundary extending to and including both entrance points to the 'bay'.

If the boundary is the low-water mark, it could be argued that the river flows into the sea from more than one state.

225 Personal interview P D Morant CSIR 7 November 1989.

226 Brown (n224) 463.

227 J H Day 'Summaries of current knowledge of 43 estuaries in southern Africa' in *Estuarine Ecology* with particular reference to Southern Africa (Ed J H Day) (1981) 324.

228 P D Morant (n225).

However, as discussed *supra*, international law is imprecise and there is considerable support for the theory that even if the river enters the sea from more than one state, it would not be contrary to international law to use a straight baseline. Thus, if the Namibian claim that the boundary extends to the middle of the river is valid, it is a two-state river and the aforementioned theory applies.²²⁹

Estuaries which are not bays have been left unregulated by the TSC and LOSC. In addition, the treatment of *all* estuaries as bays has been rejected. Therefore customary law must be resorted to which means that *all relevant factors* including geographical, historic and economic considerations must be taken into account.²³⁰ Of historic importance is the Anglo-German Treaty of 1890 with its exceptional designation of both banks to one state, indicating that the enclosed waters would probably be claimed and treated as internal waters by drawing a straight baseline across the mouth of the 'estuary'. From a geographical point of view, the waters of the 'estuary' would be *inter fauces terrarum*. Relevant economic factors such as alluvial diamond deposits on both banks will also be considered. If the conclusion to be drawn in the light of these historic, geographical and economic factors is that the 'estuary' exhibits features of internal waters, then it is suggested that a straight baseline may be drawn between the entrance points of the 'estuary', pushing the sea zones marginally out in a seaward direction and conferring the status of internal waters on the area of water within the entrance points of the 'estuary'.²³¹

229 See (n164) and (n173).

230 O'Connell (n15) 225 (*italics supplied*).

231 An example of an estuary sealed by sandbars in the mouth occurred at the mouth of the River Murray, South Australia. This estuary has been likened to the Bot River estuary in South Africa though some problems such as that of overlapping jurisdiction do not arise in the latter case - N Harvey 'Coastal Management Issues

South Africa has not attempted to close off estuaries with straight baselines. The Territorial Waters Act describes the low-water mark as the point from which territorial waters will be measured.²³² It has been suggested that all tidal estuaries should be treated as internal waters, the closing lines of which should constitute the baselines for the purpose of measuring the territorial sea and other maritime zones.²³³

(vii) Is it an unstable mouth?

Straight baselines may be used where the coastline is unstable due to the presence of a delta. Article 7 of LOSC deals with this new concept which was not part of customary law nor included in the TSC. The thrust of Article 7(2) is that if the coastline recedes, the original points selected on the low-water line and connected by straight lines can remain fixed.²³⁴ Normally deltas advance and, if so, the coastal state is not bound by the original delimitation. If an ordinary coast recedes, the coastal state would have to revise its points for joining the straight baselines.

for the Mouth of the River Murray, South Australia' (1988) 16 No 2 Coastal Management 139 at 144.

232 Act 87 of 1963 (as amended by Act 98 of 1977).

233 D J Devine 'Bays, baselines, passage and pollution in South African waters' (1986) 19 CILSA 85 at 89. The author suggests that South Africa may already be moving in that direction as some tidal lagoons, estuaries and rivers along the Natal coast are exempted from the Sea Fisheries Act 58 of 1973. This creates a category of internal waters though for a limited and specific purpose only. However, the author notes that the Draft Bill on Marine Matters (Schedule 3 GN 712/1985) has equated estuaries with rivers flowing directly into the sea which can be closed off by a straight baseline, but cautions that closing off of such rivers by a straight baseline does not necessarily achieve a closing off of estuarine river mouths (see 89 note 27).

234 Prescott (n64) 306.

State practice is at present scant and will remain so since most deltas advance. As previously discussed, the requirements appear to be cumulative. The mere presence of a delta but no other natural conditions contributing to the unstable coastline is insufficient. It is submitted that the mouth of the Orange is not deltaic, so the incidence of sandbars being washed away and a consistently migrating mouth as other natural contributors to the instability is irrelevant. However, it has been suggested that in view of the way that other provisions of LOSC have been 'stretched' it is conceivable that a state with an unstable but non-deltaic coastline will endeavour to give an extended interpretation to Article 7 so as to include unstable coastlines, whatever the natural cause.²³⁵ If this development materializes, the migrating mouth and sandbar shifts of the Orange River mouth may be relevant.

(viii) Do historical delimitation rights exist?

In the Fisheries Case, the United Kingdom challenged the validity of the Norwegian system of straight baselines from which Norway had established a 4 mile territorial sea zone.²³⁶ The zone was measured not from the low-water mark at every point along the coast as is the normal practice, but from straight baselines linking the outermost points of land along it. The mainland is bordered by the 'skærgaard' within which every island has its large and small bays, countless arms of sea, straits, channels and waterways which serve as a means of communication for the local population on both the islands and mainland.²³⁷ The court found that the coast of the mainland did not constitute a clear dividing line between land and sea, commenting that "... what really constitutes the Norwegian coast line, is the outer line of the 'skærgaard'".²³⁸ It was also observed

235 Ibid 313.

236 Fisheries Case (n3).

237 Ibid 127.

238 Ibid.

that the inhabitants of the coastal zone derived their livelihood essentially from fishing.²³⁹

Having taken cognizance of the geographic features of the coastline the court stated that 'Such are the realities which must be borne in mind in appraising the validity of the United Kingdom contention' and 'This solution is dictated by geographic realities'.²⁴⁰ The peculiar feature of the skærgaard was one of the reasons justifying the unusual method of using straight baselines. The economic factor and dependence of the Norwegian population on the exploitation of the sea was also referred to, the reality and importance of which were clearly evidenced by long usage, though not as a determining factor in the legal sense but merely in conjunction with other geographical aspects.²⁴¹ This means that where a straight baseline is warranted, the economic factor may be a guideline in deciding where to draw it.

Norway did not rely upon history to justify exceptional rights ie to claim areas of the sea which the general law would deny. It invoked history together with other factors to justify the way in which it applied the general law.²⁴²

The Norwegian government's view was that the rules of international law take into account the diversity of facts in order that the drawing of baselines be adaptable to special conditions.²⁴³ The court confirmed that the adaptation, consisting of a system characterized by the use of straight lines did not infringe the general law as it was an adaptation rendered necessary by local conditions.²⁴⁴

239 Ibid 128.

240 Ibid; J Evensen 'The Anglo-Norwegian Fisheries Case and its Legal Consequences' (1952) 46 AJIL 609 at 621.

241 Blum (n104) 285.

242 D J Harris Cases and Materials on International Law (1983) 3ed 293 (italics supplied).

243 Ibid.

244 Ibid 294, 295. The decision was a split one - see

The concept of historic bays had therefore spread to other water areas which seemed to fulfil requirements similar to those on which historic bays were founded.²⁴⁵ The novelty of the judgement is that the court recognized an historic right to certain waters deriving not from an historic claim to a certain area of water - as in claims to historic bays - but from an historic right to delimit territorial waters in a given manner.²⁴⁶ However, two facts must be identified. This historic right to delimit in a particular way must be supported by a constant and sufficiently long practice and by the attitudes of other governments.²⁴⁷ It may thus be said that claims to historic waters are actually claims to an historic right to *delimit* territorial waters using a method *other than the normal method*.²⁴⁸ This will occur when the coast, viewed as a whole, calls for a system of baselines which, within reasonable limits, may depart from the physical line of the coast. In addition, this occurrence is not limited to the concept of a bay. If a method of straight lines is admitted in certain cases, there is no valid reason to restrict it to bays as long as the area concerned is *inter fauces terrarum*.²⁴⁹

The reasonable limits refer to the legal conditions accompanying the use of straight baselines. Firstly, they must follow the general direction of the coast.²⁵⁰ Secondly, the waters on the landward side of the line must be suitable for the legal regime of internal waters, and this will be so if the area concerned is *inter fauces terrarum*.²⁵¹ These conditions, identified in the Fisheries

294, 295 notes 42 and 43.

245 Blum (n104) 281.

246 Ibid 284 (italics supplied).

247 Ibid.

248 Ibid 281 (italics supplied).

249 Ibid 291.

250 Fisheries Case (n3) 129, 133.

251 Ibid 133.

Case, were included in Articles 4 and 7 of TSC and LOSC respectively with the added proviso that a low-tide elevation can only be used as a basepoint in a straight line system if a lighthouse or similar construction above water at all times has been erected on it; that these lines may not cut off the territorial sea of another state; that economic interests may be taken into account and that adequate publicity must be forthcoming in the form of charts deposited with the Secretary-General of the United Nations. The ~~directional and suitability requirements~~ are part of the body of customary international law. The low-tide elevation qualification is currently evolving into customary law while the publicity requirement is at present merely a potential conventional obligation.²⁵²

State practice has revealed occasional abuse. Burma has a straight baseline 200 miles in length 75 miles from the coast, blatantly ignoring both the directional and suitability requirements. The Soviet Union has made use of straight lines on a smooth coastline while Canada's straight baseline claim around several Arctic islands is difficult to justify on the basis of fringing islands in the immediate vicinity of the mainland.²⁵³ The response is normally non-recognition, but abuse demands continuous vigilance in order to avoid implied consent. Though straight baselines may be the exception, they are nevertheless generally used with 82 countries presently using this system.²⁵⁴

252 Article 7(4) LOSC; Marston (n195) 419.

253 R W Smith 'Global Maritime Claims' (1989) 20 No 1 ODIL 83 at 90; Atlas of the Straight Baselines (1989) 2ed (Ed T Scovazzi, G Francalanci, D Romanò and S Mongardini) 93-95, 200, 202, 204.

254 Smith (n253) 87. Seventy of these straight baseline systems have been implemented with the publication of geographical co-ordinates for the baseline turning points.

If the Orange River mouth is not a legal bay, an estuary or an example of a river flowing directly into the sea, a straight baseline may yet be drawn across the expanse of water if it can be established that geographical, economic and other factors exist which justify a method of drawing baselines other than the normal method. The coastline is not a skærgaard type coastline. The geographic reality is that the entire water expanse is South African territory by virtue of treaty provisions.²⁵⁵ The economic reality is that alluvial diamond deposits occur on both banks and have been exploited for several decades.²⁵⁶ Nevertheless, it will be difficult to find support for the use of straight baselines in constant and sufficiently long state practice since South Africa has not made use of straight baselines, not even for enclosing legal bays.²⁵⁷ Section 2 of the Territorial Waters Act states that the territorial waters of the Republic include the sea within a distance of 12 nm from the low-water mark, confirming that the normal method of delimiting maritime zones has been used.²⁵⁸ In addition, the attitude of other states on the use of straight baselines in such an area is unknown, South Africa having administered the territory until the 21st March 1990.²⁵⁹

255 See (n164) and (n173).

256 Erasmus and Hamman (n166) 52; U Keyser 'The Occurrence of diamonds along the coast between the Orange River Estuary and the Port Nolloth Reserve' Bulletin 54 (Department of Mines) 1972 at 2, 16, 17; C Crowley 'Diamonds Then and Now' (1983) SWA Annual 65 at 65, 68-70.

257 Sections 2 and 3 of the Territorial Waters Act 87 of 1963 (as amended by Act 98 of 1977).

258 Ibid. Section 1 defines the low-water mark as the lowest line to which the water of the sea recedes during periods of ordinary spring tides. The exact position of the line will be decided on by the surveyor who will have to select the lengths of periods and give meaning to the word 'ordinary'. See Kühl (n5) 18-28.

259 The attitude of Namibia is of course no longer an unknown factor. See (n164) and (n173).

(f) Conclusions

Both the position and nature of the Orange River mouth point to the existence of a mouth *stricto sensu*. It is therefore a river which maintains its stream shape and flows directly into the sea. The provisions of Article 13 of LOSC enable South Africa to close off the mouth by means of an imaginary straight baseline irrespective of the location of the terrestrial boundary on the north bank ie either the low or high-water mark.²⁶⁰ The enclosed waters will naturally have the status of internal waters.

It is submitted that the exact points on the north and south banks to be connected by a straight baseline should be selected with the sole purpose of achieving a permanent and practical solution.

If as proposed, the low-water mark constitutes the land boundary on the north bank, the straight baseline will link this point to the low-water mark on the south bank of the mouth in accordance with Article 13.²⁶¹ If the high-water mark is the dividing line, the straight baseline must still connect the low-water marks on both banks. The baseline for that small portion of coastline between the low and high-water marks on the north bank will be the normal baseline, namely the low-water mark.

Not only has it been argued on legal grounds that the low-water mark on the north bank of the Orange River is the appropriate dividing line between the land territory of Namibia and South Africa, it is also an attractive solution since the point of the land boundary at the coast and the

260 It being a mouth *stricto sensu*, the rule for non-closure of two-state bays does not apply even if the Orange River mouth is a two-state mouth. See (n164) and (n173).

261 Ibid.

basepoint for the connective line will be identical.²⁶²

At present, the term 'baseline' is not used in the Territorial Waters Act. However, the Marine Traffic Act 2 of 1981 defines internal waters as 'waters on the landward side of the normal baseline from which the territorial waters are determined'. The baseline referred to is the low-water mark of the Territorial Waters Act.²⁶³ The low-water mark is therefore the baseline.²⁶⁴

The South African baseline, the low-water mark at ordinary spring tide, is a conservative choice as the LOSC allows the baseline to be established anywhere between spring tide low-water mark and neap tide low-water mark.²⁶⁵

If South Africa closed the mouth of the Orange River with a straight baseline, it would be a novel feature since straight baselines have not been used to close off the seven bays mentioned in the Marine Traffic Act. These bays, namely Walvis, Hout, Saldanha, False, Richards, Bay of Natal and the Knysna Lagoon are defined as a category of internal waters. The only internal waters defined by reference to the baseline are those which lie landward of the low-water mark.²⁶⁶

262 If this theory does not reflect the legal position and Section 1(4) of the Namibian Constitution represents the correct legal position, the boundary will be the middle of the river.

263 Devine (n233) 85.

264 Ibid.

265 Ibid 86. Article 5 of LOSC states that the low-water mark shall be marked on large-scale charts officially recognized by the coastal state. This amounts to a new obligation for states who ratify the Convention. Section 1 of the Territorial Sea and Exclusive Economic Zone of Namibia Act 3 of 1990 describes the low-water line as the line of lowest astronomical tide.

266 Devine (n233) 87. These bays meet the legal criteria for bays and could be closed off with a straight line. Since this is not the case, the internal waters and territorial sea overlap which means that the maximum

Article 16 of LOSC requires that these baselines be indicated on charts to which due publicity must be given and a copy deposited with the Secretary-General of the United Nations.

permissible territorial sea and other zones is forfeited. Devine points out (at 87) that most of these bays have narrow entrance points, so the loss is insignificant. False Bay is the exception since its natural entrance points are separated by a distance of 30km. In this case, several kilometres of territorial sea could be lost by calculating its breadth from the low-water mark at Cape Point and Hangklip instead of from a point half-way on a straight baseline joining the two Capes. In the case of more extensive zones such as the 200 mile exclusive fishing zone, the loss is small though even a small area may contain valuable resources. Closing off the bays would theoretically be possible in terms of the Draft Bill on Marine Matters (Schedule 3 GN 712/1985) but this Bill has, to date, not been enacted into law.

CHAPTER IV.

SPECIFIC MARITIME BOUNDARY. - SOUTH AFRICAN ISLANDS.

(1) HISTORICAL BACKGROUND.

The Republic of South Africa claims as its territory certain islands and rocks in the Atlantic Ocean opposite the coast of Namibia. The claim is based on title by annexation, but the process of annexation which began in 1861 was characterized by uncertainty and controversy which eventually led to a dispute as to which islands and/or rocks were effectively annexed. The events leading up to the dispute and the outcome thereof require discussion.

Portuguese seafarers, searching for a trading route between Europe and India in the 15th century, were the first Europeans to explore the Namibian coastline. However, lack of food, water and firewood, together with the hostile environment, made the area unattractive.¹ It was only in 1773 when American, French and British whale hunters established settlements at Walvis Bay and Angra Pequena (later Lüderitz) that the Netherlands, having established a refreshment station at the tip of Africa and fearing foreign occupation, took possession of Lüderitz Bay, Halifax Island and Walvis Bay or 'Bahia das Baleas'.² The occupation was shortlived since Great Britain assumed rule in the Cape in 1795, placing all the bays and landing places as far as Angola under its rule.³

From 1830 onwards, the area attracted the attention of traders and fortune seekers with the discovery of huge quantities of guano, rich fishing grounds, potential diamond deposits and the demand for seal hides. The exploitation of guano by foreigners led to a British government ordinance in

1 H Vedder Die Voorgeschiedenis van Suidwes-Afrika (1937) 2-7.

2 Ibid 17. The Portuguese named Walvis Bay 'Bahia das Baleas' because of the many whales sighted.

3 Ibid 18.

1845 whereby all guano deposits found on any island, rock or other place within the limits of the colony '...belong to and be in the lawful possession of Her Majesty the Queen'.⁴ At that point the position of the islands was uncertain. They were considered *terra nullius* since the United Kingdom had not formally annexed any territory north of the Orange River.⁵ De Pass, Spence and Company of Cape Town, in the business of exploiting the guano islands, urged the Cape government to annex these islands to the Cape Colony.⁶ In 1861 the Governor of the Colony of the Cape of Good Hope issued a proclamation which provided

'...that the sovereignty and dominion of Her said Britannic Majesty, Queen Victoria, shall be, and the same are hereby declared over the following Islands or Rocks adjacent to Ichaboe, that is to say, Hollamsbird, Mercury, Long Island, Seal Island, Penguin Island, Halifax, Possession, Albatross Rock, Pomona, Plumpudding and Roastbeef or Sinclair's Island. This Proclamation of Her Majesty's sovereignty and dominion to take effect forthwith, but to be subject to Her Majesty's gracious confirmation and disallowance.'⁷

For unknown reasons, the proclamation was not forwarded to London for the necessary confirmation and after an incident in 1863 involving the seizure of a British merchant vessel at Penguin Island by an American warship, the omission was

- 4 Ordinance 4 of 1844 of Cape of Good Hope, its title being the Ordinance for Declaring Certain Guano to be the Property of Her Majesty the Queen.
- 5 D S Prinsloo 'Walvis Bay and the Penguin Islands : Background and Status' Study Report (Foreign Affairs Association) No 8 Nov 1977 8; The History of the African Guano Trade, from Ichabo, and other parts of the African Coast, with the Proceedings of the Committee of Management (1845) 36.
- 6 E A Partington 'Walvis Bay and the Penguin Islands : The Validity of South Africa's Claims to Sovereignty' (1988) 16 No 2, 3 DJILP 247 at 254,255; A J Nathan 'The Great Guano Boom' (1990) August Lantern 37.
- 7 Proclamation 53 of 1861 Colony of the Cape of Good Hope Government Gazette 3277 of 1861. The geography recited in this Proclamation was not entirely accurate because Ichaboe is not adjacent to the other eleven islands spread along 400km of coast.

detected and the proclamation disallowed.⁸

A few years later in 1866, a Royal Navy officer landed on Penguin Island and proclaimed sovereignty over all the islands named in the abortive 1861 proclamation. The Governor, Sir Philip Wodehouse, then annexed the islands to the Colony of the Cape of Good Hope by way of proclamation.⁹ This proclamation was formally authorized on 27 February 1867 by Royal Letters Patent, thereby removing any doubt as to the validity of annexation by proclamation. The proclamation of 1866 was then confirmed in 1873 by an Act of Parliament of the Colony, passed in ignorance of the aforementioned Letters Patent and which was subsequently repealed.¹⁰

In terms of the Letters Patent, the Governor of the Cape Colony became Governor of the islands and was empowered to enforce rules and regulations, to issue new guano licences and to maintain existing contracts and licences. The Letters Patent also authorized the Cape Parliament to annex the islands as part of the Colony with the consequent application of all statutes of the Colony to the islands. In 1874 the Ichaboe and Penguin Islands Act was passed which not only repealed the unnecessary 1873 Act but also formally annexed the islands to the Cape Colony in terms of the Royal Letters Patent.¹¹

The position prior to the events of 1883 was that the United Kingdom had taken possession of the twelve islands in 1861 and exercised uncontested control without formal annexation. In 1874 the islands formally became part of the territory of

8 Partington (n6) 255,256.

9 Proclamation 66 of 1866, Colony of the Cape of Good Hope Government Gazette, 3814 of 1866.

10 Partington (n6) 256. The title of the 1873 Act was the Annexation of Ichaboe and Penguin Islands Act 1 of 1873.

11 67 BFSP, 554,557,558.

the Cape Colony and all acts of the latter were applied to the annexed islands. However, though the United Kingdom had placed all bays and landing areas including Lüderitz Bay under her control, no formal annexation of these areas had taken place.

Eighteen eighty three was an eventful year. A German trader, Lüderitz, purchased the bay of Angra Pequena and the surrounding area from a Hottentot captain, Josef Fredericks. Prior to this, an extensive exchange of notes between the United Kingdom and Germany relating to British sovereignty over areas north of the Orange River apart from the islands and Walvis Bay had taken place.¹² As a result of land purchases by Lüderitz and other German subjects, Germany declared a Protectorate over South West Africa (Namibia) between the north bank of the Orange River and the 26th meridian on 16th August 1884. Included in the proclamation establishing the Protectorate were 'the islands belonging thereto by Law of Nations'.¹³ This was formally confirmed by the German Consulate in Cape Town as including 'all the islands within gunshot distance from the mainland'.¹⁴ The stage was set for a potential dispute and both countries then established a Joint Commission to investigate the rights of British subjects in the Protectorate, Germany expressing particular interest in an enquiry as to which islands would be excluded from the Protectorate territory.¹⁵ Great Britain refused to discuss this aspect, insisting that the islands were part of the Cape Colony by virtue of the Letters Patent and eventually Germany conceded British sovereignty over the islands described in the Letters Patent.¹⁶

12 75 BFSP 528-538.

13 Ibid 546.

14 Ibid 545.

15 Ibid 552.

16 A J Hoffmann Die Regime van Eilande in die Internasionale Reg met Spesiale Verwysing na die Suid-

The Commission did examine the status of islands not identified in the Letters Patent. This was necessary because the British Governor had in 1869 concluded a 25 year lease with the British firm De Pass, Spence and Company regarding not only the islands designated in the Letters Patent but also 'Eighty Four Islands, Black Rock, Steeple Rock and Reef as well as all rocks and islets lying between Hollamsbird Island on the north, and Roast Beef (or Sinclair's Island) on the south, not herein specifically named....'.¹⁷

The German attitude was that the unnamed islands had never been annexed, hence the lease was invalid concerning those particular islands. The Commission remained undecided and the matter was referred to two other commissioners who produced the Protocol of Berlin on 15 July 1886, an agreement subsequently approved by both governments. The Protocol contained a clear distinction between the islands mentioned in the Letters Patent and unnamed islets and rocks, proclaiming the latter a part of the German Protectorate, though permitting the lease to run until its original expiry date as an interim solution.

The fourth paragraph of the Protocol stated

That Messrs. De Pass, Spence and Co., and their assigns, be free to make use, as they have hitherto done, of these islets and rocks, including Shark Island, without payment until expiry of their lease, that is to say, until 30th June, 1895; and if the British Government waive all claim to the sovereignty of these islands and rocks, and acknowledge the sovereignty of Germany over them, then that the latter Power should consent to confer no private rights over them to any persons other than the lessees for the time being of the twelve British islands named in the

Afrikaanse Eilande aan die Kus van Suidwes-Afrika/Namibië' Unpublished Thesis (1987) 125, 126.

17 Ibid.

Letters Patent of 27th February, 1867.

Thus British sovereignty over the twelve islands nominated in the Letters Patent was confirmed while Germany exercised authority over the remainder.¹⁸ Lüderitz eventually sold his land to the Deutsche Kolonial Gesellschaft fuer Suedwest-Afrika in 1885 which shortly afterwards leased certain islets and rocks to the Cape Colony, an agreement which expired at the end of 1912.¹⁹ A puzzling feature of the history of the islands is that the 1890 Anglo-German Treaty in which the respective spheres of influence in Africa and the joint colonial boundaries were fixed, fails to mention the Penguin Islands. Territory north of the Orange River was reserved to Germany with the exclusion of Walvis Bay.²⁰ If the Treaty was interpreted in isolation, then from the face of it one could conceivably argue that the Penguin Islands fell under the German sphere of influence.

In terms of the South Africa Act of 1909, the Penguin Islands were incorporated into the Union of South Africa as part of the Cape of Good Hope since the Act declared that the existing boundaries of the four provinces would remain unchanged.²¹ These islands had been annexed to the Cape Colony in 1874 and thus automatically became part of the Union. When the Union became a Republic in May 1961, the Constitution stated that the Republic of South Africa consisted of the four provinces of the Union as they existed prior to the commencement of the Constitution.²²

18 A review of the unpublished German Memorandum prepared for the negotiations which resulted in the Protocol as well as the unpublished British Memorandum in response confirms this allocation - Partington (n6) 260 note 73.

19 Hoffmann (n16) 128.

20 See discussion Chapter II (8).

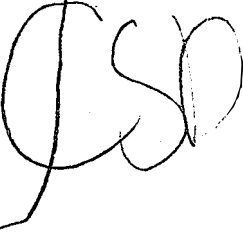
21 Sections 2, 6 South Africa Act 9 of 1909.

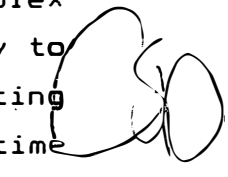
22 Section 1 Republic of South Africa Constitution Act 32 of 1961.

Summarized then, at the time of British annexation, the Penguin Islands were *terra nullius* and vulnerable to annexation. The Royal Letters Patent of 1867, the formal annexation to the Cape Colony in 1874 and the possession of the islands in 1886 establish conclusively that the United Kingdom exercised territorial sovereignty over the islands. 

It would be extremely difficult to draw any conclusion based on law other than that South Africa's claim to sovereignty over the Penguin Islands is valid. Since annexation in the last century, sovereignty over the islands by the British Empire and its successor, South Africa, has been continuous, effective and internationally recognized.²³ No action by South Africa has altered the position. There is therefore nothing to link the twelve Penguin Islands to Namibia other than their geographic proximity. 

Article 1(4) of the Constitution of Namibia states that

'The national territory of Namibia shall consist of the whole of the territory recognised by the international community through the organs of the United Nations as Namibia, including the enclave, harbour and port of Walvis Bay, as well as the off-shore islands of Namibia, and its southern boundary shall extend to the middle of the Orange River'. 

This territorial claim could complicate an already complex maritime delimitation since a delimitation is not likely to take place until questions relating to conflicting territorial claims are resolved. A potential maritime delimitation between the islands and the Namibian mainland will be considered on the assumption that South African sovereignty over the Penguin Islands continues to exist. Unilateral claims of this nature are considered political, rather than legal claims to sovereignty. 


23 Partington (n6) 288.

(2) LANDWARD DELIMITATION

(a) General

(i) Geographic reality

There are numerous islands situated off the Namibian coastline between Walvis Bay in the north and the mouth of the Orange River in the south. The sovereignty aspect has been discussed and the emphasis will be on the geographic location of the islands in order to propose an appropriate delimitation solution.

The islands involved are Hollamsbird, Mercury, Ichaboe, Penguin, Seal, Halifax, Long Islands, Possession, Albatross Rock, Pomona, Plumpudding and Sinclair (formerly Roastbeef). None of the islands is situated further than six nm from the coast, most being found within 2000 metres of the Namibian coast.

The land territories between which a delimitation is sought face each other across an expanse of ocean. The *landward* delimitation is therefore one between *opposite* states. All the islands lie within the breadth of the territorial sea of the mainland, namely 12 nm, so the landward delimitation only involves a territorial sea allocation, there being no continental shelf, exclusive economic zone (hereafter referred to as EEZ) or contiguous zone between the islands and the mainland coast.

There are other islands similar to the Penguin Islands which are located in or near the territorial waters of another state but which are an integral part of the nations to which they belong, for example the French Department of St. Pierre and Miquelon off the coast of Newfoundland, Canada. There are also numerous Greek islands in the Aegean Sea adjacent to Turkey and the Vietnamese island of Phu Quoc off the coast of Kampuchea.

Hollamsbird Island is the most northerly situated of the twelve Penguin Islands. It is located approximately 200km north of Lüderitz Bay some 9,7km from the mainland with an area of 1,1ha.²⁴

Mercury Island lies 90km south of Hollamsbird in the entrance to Spencer Bay approximately 1000m from the coastline with an area of 3ha with the highest point some 38m above sea level.²⁵

Ichaboe is situated 48km from Lüderitz opposite Douglas Bay, 1300m from the coast. It is a flattish island with an area of 6,5ha, its highest point a mere 12m above sea level.²⁶

Penguin and Seal Islands are positioned in Lüderitz Bay, with Seal Island 500m southeast of the northern entrance point with an area of 44,5ha and its highest point 43m above sea level.²⁷ Penguin Island is 800m south of Seal Island and has an area of 36,4ha with its highest point 49m above sea level.²⁸

Halifax Island is almost opposite the southern entrance point to Lüderitz Bay, only 46m from the mainland. It has a surface area of 8,1ha and a maximum height of 37m above sea level.²⁹

About 21km south of Lüderitz and 400m offshore, lie the Long Islands, described on charts as North Long Island and South

24 R W Rand 'The Biology of Guano-Producing Sea-birds' (1963) 46 Investigational Report (Department of Sea Fisheries) 9; 'The Coasts of South West Africa and the Republic of South Africa from the Kunene River to Cape Hangklip' SASD (1975) II 31.

25 Ibid 33.

26 Hoffmann (n16) 145; SASD (n24) 38.

27 Ibid 42; Rand (n24) 7.

28 SASD (24) 42.

29 Rand (n24) 7; SASD (n24) 55.

Long Island. "The Long Islands are considered as a single group known as 'Long Island' in the list of Proclaimed Guano Islands".³⁰

The largest of the islands, Possession, is found 42km south of Lüderitz and has a surface area of 90,3ha and maximum heights ranging between 11m and 20m above sea level. Albatross Rock is a further 12km south, 1km from the coast and located between Possession and Pomona, the latter a mere 137m from the mainland with a surface area of 3,2ha and a maximum height of only 13m above sea level.³¹

On the northern side of Baker Bay lies the tiny island of Plumpudding with an area of 0,8ha and its highest point 15m above sea level. A further 3km south is the most southerly of the Penguin Islands, namely Sinclair. It is situated 80m from the coast with a surface area of 3,2ha.³²

(ii) The significance of maps.

Maps are playing a greater role in international law today than ever before and the International Court of Justice has had several opportunities to comment on their significance in territorial dispute cases. In the Minquiers and Ecrehos Case involving the issue of sovereignty over some islets and rocks near the Channel Islands, the court was presented with evidence in the form of a French governmental map.³³ Only one judge commented on the map, noting that while maps were not always decisive in the settlement of legal questions concerning sovereignty, they could "...constitute proof that the occupation or exercise of sovereignty was well known".³⁴

30 Ibid; A J Clement 'Facts and Figures on the Islands off South West Africa' (1981) SWA Annual 73 at 74.

31 SASD (n24) 58, 61, 63.

32 Ibid 65.

33 The Minquiers and Ecrehos Case (France/United Kingdom 1953 ICJ Rep 47 at 66.

34 Ibid 105.

In the Case Concerning Sovereignty over Certain Frontier Land both states claimed two small plots of land which, if recognized as Belgian territory, would create an enclave surrounded by Netherlands territory.³⁵ A map signed by boundary commissioners in addition to Belgian military staff maps identified the plots as Belgian territory and the court considered the maps decisive.³⁶

In the Temple of Preah Vihear Case the court held that Thailand was precluded from challenging the map evidence and ruled in favour of Cambodia, thus deciding that the map line prevailed over the treaty line.³⁷

From the above, it would appear that maps produced or utilized by a state are going to be strong, if not conclusive evidence of boundaries or sovereignty described thereon. However, if the governmental agency which drew the map did so in the absence of authority to draw boundaries, the map would naturally not be accorded decisive weight for the purpose of ascertaining sovereign rights.³⁸

Turning to maps depicting the Penguin Islands, an uncertain picture emerges. The first South African map of the area, circa 1914, depicts Hollamsbird and Possession Island and they are not identified as South African territory.³⁹ In 1923, 1935, 1937, 1938 and 1940 other maps were published.

35 Case Concerning Sovereignty over Certain Frontier Land (Belgium v Netherlands). 1959 ICJ Rep 209.

36 Ibid 227.

37 Case Concerning the Temple Preah Vihear (Cambodia v. Thailand) 1962 ICJ Rep 6 at 32, 33.

38 The Indo-Pakistan Western Boundary (Rann of Kutch) Case (India v Pakistan). 50 ILR 2 at 484, 485; Partington (n6) 273; K T Chao 'East China Sea : Boundary Problems Relating to the Tiao-yu-t'ai Islands' (1982) 2 QYILA 45 at 57; S Akweenda 'The Legal Significance of Maps in Boundary Questions : A Reappraisal With Particular Emphasis on Namibia' (1989) 60 BYIL 205 at 219.

39 Partington (n6) 273.

The 1923 map shows none of the Penguin Islands while the remaining four indicate them all except Seal, Penguin and Long Islands. None of these maps identify the islands as South African territory.⁴⁰

Maps of the islands published in 1926 and 1927 represent all of the islands except Mercury and Long Islands. A 1963 map portrays all of the islands except Penguin, Seal and Long Islands.⁴¹ Subsequent maps dated 1950, 1955, and 1961 show only Possession Island. None of these maps identify or describe the islands as South African territory. However, the 1962 and 1965 maps show all of the Penguin Islands and specifically identify them as South African territory.⁴²

On German maps, both official and non-official published in 1892, 1894, 1896, 1899, 1904, 1909-11 and 1914, nearly all of the Penguin Islands are characterized as British territory.⁴³ Official German maps depicting the islands as British territory may be particularly influential as statements of the position as they could be evidence of declarations against self-interest.

Some commercially produced maps from the United Kingdom, South Africa and the United States of America depict the islands as German territory while others identify the formations as British territory. This inconsistency can be partially attributed to the failure of the 1890 Anglo-German Agreement to deal with the Penguin Islands issue, thereby

40 Ibid 274.

41 Ibid 275.

42 Ibid. The 1962 map showed fourteen islands as South African territory because Long Island is depicted as North and South Long Islands and Sinclair and Roastbeef are represented as separate islands. The 1965 map indicated Long Island as a single island and the separate Roastbeef Island was not described as South African territory. For a contrary view see Akweenda (n38) 252 note 212.

43 Ibid 276, 277.

possibly allocating them, by implication, to Germany.⁴⁴ However, both in Germany and South Africa, there appears to have been clarity that the islands remained British as part of the British Colony of the Cape of Good Hope and then became part of the British Dominion of the Union of South Africa.⁴⁵ Official United Nations maps of South West Africa/Namibia do not depict the Penguin Islands at all.

Although South Africa did not reinforce its claims to sovereignty on maps until 1962, the claim to sovereignty had been previously recognized and as long as Namibia was being administered by South Africa, it simply did not matter. Once the claim was asserted in 1962 it remained unchallenged for fifteen years until the issue was raised at the United Nations.⁴⁶

(iii) Islands can generate zones.

Up until 1930, it was accepted that not only a continental territory but also a formation of territory loosely described as an 'island' might generate jurisdictional zones. At the Hague Codification Conference in 1930, a vigorous attempt was made to define an island. With the advent of the continental shelf doctrine and the exclusive economic zone, the value of even the smallest and remotest insular territory did not go unnoticed.

The general assumption upon which international law principles are based is that there is no substantial difference between continental and all types of insular territories in generating zones, an attitude which prevailed at the First United Nations Conference on the Law of the Sea

44 See discussion *supra*.

45 Partington (n6) 278 note 181. The Cape Prime Minister in 1899 stated in the House of Assembly that the Penguin Islands were '... a valuable possession of the Colony', 1899 House of Assembly Debates, Colony of the Cape of Good Hope 280.

46 Partington (n6) 280.

at Geneva, 1958, where maritime zones of islands were not seen to present particular difficulties.⁴⁷ Article 10(2) of the Territorial Sea Convention, hereinafter TSC, made it clear that the criteria for the measurement of the territorial sea from land territory is essentially the same in the case of islands by stating that 'The territorial sea of an island is measured in accordance with the provisions of these articles'. Similarly, in the 1958 Convention on the Continental Shelf, hereinafter CSC, Article 1 defined the term 'continental shelf' for the purpose of the Convention as internationally referring to the seabed and subsoil of submarine areas 'adjacent to the coasts of islands'. Furthermore, in the North Sea Continental Shelf Cases, it was held that international customary law sanctions island continental shelves since the court found that Article 1 of CSC was declaratory of customary law and this article specifically defines the continental shelf as including areas adjacent to the coasts of islands.⁴⁸

Article 121(2) of LOSC mirrors the traditional viewpoint in not distinguishing between the potential maritime zones of continents and islands. Paragraph 2 states that

Except as provided for in paragraph 3, the territorial sea, the contiguous zone, the exclusive economic zone and the continental shelf of an island are determined in accordance with the provisions of this Convention applicable to other land territory.

The New Zealand draft articles on islands proposed that the territorial sea, economic zone and continental shelf of an island were to be established in accordance with the provisions 'applicable to other land territory' while the

47 C R Symmons The Maritime Zones of Islands in International Law (1979) 4.

48 North Sea Continental Shelf Cases (Federal Republic of Germany v Denmark; Federal Republic of Germany v Netherlands) 1969 ICJ Rep 1.

Greek draft emphasized that an island has a contiguous and economic zone on the same basis as the continental territory, the idea being to secure for the islands the same treatment with regard to sea space as for continental territory.⁴⁹ There was a significant body of opinion that the item on 'Régime of Islands' should not have been discussed as a separate item because maritime zones of both continents and islands could be discussed together and in the same terms.⁵⁰

Thus the traditional view, reinforced by LOSC, is one of equality of treatment regarding the maritime zones of islands and continents. The only novel feature to emerge from LOSC is Article 121(3) which seeks to limit the capacity of 'rocks' to generate an exclusive economic zone and a continental shelf. This will be discussed *infra*. An island, like a mainland, is entitled to internal waters, territorial seas, a contiguous and exclusive economic zone as well as a continental shelf. Though islands can in principle generate these zones, the extent of these spaces in particular cases depends on the delimitation as such.

Factors such as size, population and economic importance apply only to dependent islands. In contrast, however small it may be, an island state has, vis-à-vis its neighbours and other states, the full rights of a state as a part of its state. Not only is this view firmly established in theory and conventional law, it has also been endorsed in practice and recognized by the courts.

An opportunity to consider the matter of islands status arose in the Channel Islands Case.⁵¹ In order to determine

49 Symmons (n47) 7.

50 Ibid 8.

51 Arbitration between the United Kingdom of Great Britain and Northern Ireland and the French Republic on the Delimitation of the Continental Shelf (1979) 18 ILM 397.

the effect of the Channel Islands on the Anglo-French delimitation, the Court of Arbitration examined their political status and only after finding that they were dependent islands belonging to the United Kingdom and not 'separate states' did it adopt an enclave formula.⁵² In the Libya/Malta Case, the court, confirming that the claim to a continental shelf is the same for an island as for a mainland, commented that because Malta was independent, the relationship of its coasts with those of its neighbours was different from what it would be if it was a part of the territory of another state.⁵³

(iv) Are the formations islands?

Having found that islands are capable of generating the same maritime zones as mainland territory, it remains to establish whether the twelve Penguin Islands constitute legal islands. Article 121 of LOSC, which confirms the potential of islands to generate territorial seas, contiguous and exclusive economic zones as well as continental shelves, defines an island as a 'naturally formed area of land, surrounded by water, which is above water at high tide'.

From time to time, certain characteristics, despite their non-appearance in the official description, have been cited as being important elements in the concession of island status. One example is the strategic value of a formation, especially for defence purposes.⁵⁴ Hoffmann rejects the argument that this can strengthen a claim to island status though he does concede that it is an important aspect.⁵⁵ Nevertheless, the defence or security potential of an above-

52 Ibid 442 para 186, 442-443 para 190. The formula applied is discussed *infra*, Chapter IV C (b)(ii) 1.2.

53 Case Concerning the Continental Shelf (Libyan Arab Jamahiriya/Malta) (1985) 24 ILM 1189 at 1204 para 53.

54 Symmons (n47) 53.

55 Hoffmann (n16) 44.

surface feature has on occasion been considered an important element in bestowing insular qualities. In 1864 an official British reply to this particular question was that where possession of rocks, reefs or banks was necessary for the safe occupation and defence of a mainland, the waters between the mainland and the formations would be claimed irrespective of the distance between them and the mainland.⁵⁶ Even if the security or strategic factor did contribute to island status, the twelve formations can hardly be said to facilitate the defence of their mainland, the South African coast, considering their location at a considerable distance away, opposite the coast of another state.

Another non-definitional formation feature to emerge as a possible relevant factor is the size of the formation. Various attempts have been made to distinguish between rocks, islets, isles and islands according to a size criterion.⁵⁷ As recently as UNCLOS III, unsuccessful attempts were made by Malta, Rumania and several African states to introduce a size requirement for island status. A suggestion by Malta and Rumania emphasized that an island be at least one square kilometre in size, anything less would be an islet.⁵⁸ The Joint African proposal defined an island as a vast area of land, surrounded by water.⁵⁹ Prior to this, the Organization of African Unity had recommended that account should be taken of all relevant factors, including size.⁶⁰ However, it appeared that size was important for

56 Symmons (n47) 53. The author posits that the security aspect was the original reason for the United Kingdom's annexation of Rockall in 1955.

57 R D Hodgson 'Islands : Normal and Special Circumstances' in Law of the Sea : The Emerging Régime of the Oceans (1974) (Ed J K Gamble and G Pontecorvo) 137 at 150;151.

58 The Law of the Sea : Régime of Islands (1988) United Nations Publication No 15 at 40; Symmons (n47) 12, 39.

59 Ibid 39.

60 Ibid 38.

the amount of sea space generated and not as a vital element regarding the granting of island status *per se*. It seems as if size as such was abandoned as a feasible criterion but will remain indirectly relevant since the geological concept of a rock has been singled out for special treatment.⁶¹

Geographical configuration and geological structure were also mooted as appropriate factors for island definition at UNCLOS III. The Joint African proposal suggested that marine spaces of non-adjacent islands, ie those not situated in the proximity of the owner state, were to be delimited on the basis of equitable criteria. These were to relate *inter alia* to geographical configuration, geological and geomorphological structure.⁶² The Turkish draft stated clearly that an island situated in the economic zone or on the continental shelf of another state should have no shelf or economic zone of its own unless it made up 10% of the land area and population of the owner state.⁶³ If so, the South African formations, all within the territorial sea of the other state, would not qualify for island status or at the very least, ought to be ignored for delimitation purposes. This suggestion was met with strong opposition and the geographical and geological criteria were not absorbed into the definition.⁶⁴ In the end, the only respect in which geological criteria were utilized in a definitional sense was in respect of rocks.⁶⁵

The Argentinian delegate at UNCLOS III proposed that islands under foreign or colonial domination should not be entitled to maritime zones until independent.⁶⁶ The first political

61 Ibid 41; see discussion (3) C (b)(i) 1.2.2.

62 Symmons (n47) 54.

63 Ibid 55.

64 Ibid 55, 56; Hoffmann (n16) 47.

65 See discussion (3) C (b)(i) 1.2.2.

66 R Platzöder Third United Nations Conference on the Law of the Sea : Documents V. 418 para 43-45, 420 para 66; Hodgson (n57) 143,144; Symmons (n47) 57. It was

undertones on the question of the regime of islands had emerged. The immediate and obvious criticism hereof was that it made plundering of the marine resources around islands by foreign states possible, denying the inhabitants of the insular feature the advantage of exclusive or at least preferential rights of exploitation. This extraneous criterion was rejected, not only for the purposes of an island definition but also for the purposes of defining a rock.⁶⁷

Before 1958, doubt existed in international customary law as to whether a formation should be capable of effective occupation to be an island. The definitions in Article 10(1) TSC and 121(1) LOSC put the matter beyond doubt by ignoring such a qualification.⁶⁸

None of the extraneous characteristics discussed *supra* have any fundamental role to play in defining insular concepts. The elements for ascertaining island status are clearly listed in Article 10(1) TSC and its equivalent in LOSC,

predominantly Third World countries which were in favour of introducing this criterion as part of the island definition. See *The Law of the Sea : Régime of Islands* (n58) 45.

67 Hoffmann (n16) 49, 50. This particular point of criticism would naturally not arise if the island under colonial rule was uninhabited, as in the case of several of the twelve Penguin Islands. The plundering could occur, but not to the detriment of non-existent inhabitants. Moreover, annexation of the islands is not *colonialism* when there are no inhabitants. However, in the United Nations today, annexed islands would be under foreign domination. This classification is not important for the present discussion since the criterion has not been assimilated into the legal definition of an island. Hodgson is of the opinion that abstract and subjective criteria of this nature should not be applied to the analysis of islands anyway - Hodgson (n57) 143. See H W Jayewardene *The Régime of Islands in International Law* (1990) 16-20 for a detailed analysis.

68 Symmons (n74) 20.

Article 121(1). The formation must consist of an area of land. It can consist of land, rocks, organic material or a combination of them.⁶⁹ It must be attached to the bed of the sea, have the character of *terra firma* and display a degree of permanence.⁷⁰ All twelve South African formations consist of an 'area of land'. There is no size criterion, locational requirement in relation to the mainland or other particular geographical or special condition that must be present.⁷¹

Not only must the formation consist of an area of land, it must also be *naturally* formed which would automatically exclude technical installations and man-made islands. The Penguin Islands are clearly not man-made or artificial and each one displays the naturally formed trait.⁷²

Thirdly, the formation must be above water at high tide. Does this mean above water at high tide in normal circumstances or does it indicate that the formation must be above water at all times? The International Law Commission defined an island as being, under normal circumstances, permanently above water at high tide.⁷³ The USA pointed out that 'permanently' and 'under normal circumstances' were conflicting requirements and proposed an amendment with no qualification - simply above water at high tide.⁷⁴ The above-surface element for true insular formations would then require that the area of land should *normally* be above water at high tide, but would at the same time allow for exceptional or freak tides which could, on rare occasions, submerge the formation. Municipal legislation subsequent to

69 Hodgson (n57) 148.

70 Symmons (n47) 21.

71 Hodgson (n57) 148.

72 C Brand 'The Legal Relevance of the South African Insular Formations off the SWA/Namibian Coast' (1986) 4 *Sea Changes* 88 at 97.

73 Symmons (n47) 42.

74 Ibid 43.

the 1958 definition displays more than one interpretation of 'above water at high tide'. For example, the British Territorial Waters Order-in-Council of 1964 described an island as above water at mean high-water spring tides.⁷⁵ The British attitude was that the mean high-water spring tide was the criterion for determining island status under Article 10 of TSC and in terms of customary law, an interpretation supported by the practice of states.⁷⁶ The controversy remains, with significant support emerging for the interpretation of 'above water' to refer to mean high-water spring tides, this being consistent with the mean low-water spring tide criterion for establishing baselines for the measurement of zones.⁷⁷ This controversy does not affect the twelve formations under discussion since they are all above water not only at mean high-water spring tide but also in normal circumstances and permanently.⁷⁸

The fourth *essentialium* is that the formation must be surrounded by water at all times. Therefore if an 'island' is connected to the mainland by a sandbank or peninsula which is periodically exposed, it is part of the mainland and not an island.⁷⁹ Ten of the twelve formations are surrounded by water at all times. However, two formations, Sinclair and Pomona, require further discussion.

It has been alleged that every two or three years, as a result of sea backwash from north winds, Sinclair and Pomona are linked to the mainland by an exposed sandbar or sandspit.⁸⁰ When this occurs, it is possible at low tide to reach the 'islands' on foot without getting one's feet

75 Ibid.

76 *Channel Islands Case* (n51) 431 para 122, 432 para 127. The court did not find it necessary for the purposes of the judgement to comment on this vital aspect.

77 Symmons (n47) 44; Hoffmann (n16) 38.

78 See discussion *infra*.

79 Symmons (n47) 42.

80 L G Green *At Daybreak for the Isles* (1956) 23.

wet.⁸¹ Unfortunately, the existence of this phenomenon remains unconfirmed, and a recent inspection *in loco* of Sinclair at ordinary low tide revealed no visible signs of such a sandspit.⁸² It seems reasonable to assume that Sinclair and Pomona are also surrounded by water at all times. However, if it is established that a sandbank does emerge, albeit sporadically, then island status would be denied these two formations. They would then be part of the mainland and, as such, would in principle generate all recognized zones including an EEZ and continental shelf. Furthermore, restrictions contained in Articles 121(2) and (3) of LOSC would not apply because they deal exclusively with islands, the section being entitled 'Régime of Islands'. If Sinclair and/or Pomona are classified as mainland territory, they would still be South African territory creating South African maritime zones as they comply with the provisions of the Protocol of Berlin of 1886 which would still determine their status.⁸³ ✓

The use of 'non-definitional' or extraneous characteristics in defining insular concepts has not materialized. These features play no role in island status determination. On application of the definitional *essentialia* or criteria, each of the twelve South African formations lying opposite the Namibian mainland emerge as legal islands capable of generating the full spectrum of permissible maritime zones.

81 Department of Economic Affairs : South West Africa Administration 'Report on Conservation and Exploitation of SWA/Namibia's living marine resources' (1986) 102. This report was drafted by a panel of consultants appointed in terms of Cabinet Resolution 975/85 of 10 December 1985 under the chairmanship of Dr Jan David Jurgen (Jurgens Report).

82 Ibid; Hoffmann (n16) 154, 155.

83 Ibid 127; see discussion (1) *supra*.

(b) Relevant principles.

(i) Unilateral delimitation.

The motive for establishing maritime boundaries is usually that states wish to secure a clear and unchallenged title to parts of the earth which are valued either for the human or material resources they contain or for the strategic advantages they represent. To a lesser degree, states also wish to create lasting arrangements with their neighbours which will minimise the risk of friction between governments.

Islands can generate maritime spaces. The twelve formations are legal islands. South Africa has sovereignty over these islands. What procedure should South Africa follow in order to claim the zones to which its islands are entitled? The usual method whereby states create maritime zones around their territory is by unilateral act in the form of municipal legislation. In terms of the Territorial Waters Act 87 of 1963 and the Territorial Waters Amendment Act 98 of 1977 South Africa has claimed a territorial sea of 12 nm, a contiguous zone and a fishing zone of 200 nm as well as a continental shelf. Section 2 of the Territorial Waters Act states that

'The sea within a distance of twelve nautical miles from low-water mark shall be the territorial waters of the Republic...'

while Section 3 describes the fishing zone as

'The sea outside the territorial waters of the Republic, but within a distance of two hundred nautical miles from low-water mark, shall constitute a fishing zone...'

Section 4 describes the right to exercise any powers considered necessary to prevent contravention of any fiscal, customs, emigration, immigration or sanitary law in the zone as described in the previous section. Section 7 describes the continental shelf of the Republic as that area permitted by the 1958 CSC 'or as it may from time to time be defined by international convention accepted by the Republic'.

Section 2(1) of the Territorial Sea and Exclusive Economic Zone of Namibia Act 3 of 1990 describes the territorial sea as the sea within a distance of 12 nm measured from the low-water line. Section 4(1) determines that the sea outside the territorial sea of Namibia but within a distance of two hundred nm from the low-water line or any other base line shall constitute the exclusive economic zone of Namibia. Section 6(1) defines the shelf as that defined by 'Convention', the word 'Convention' referring to LOSC.

Naturally the extent of unilaterally proclaimed zones is not necessarily opposable *vis-a-vis* other states. For example, the breadth of a particular zone may be contested, selection of the method of delimitation or use of particular baselines may be disputed or abuse of treaty provisions may be alleged.⁸⁴ If South Africa's proclaimed zones are illegitimate, what entities could contest the validity? Until recently, Namibia was a Mandated Territory and the United Nations Council for Namibia would, according to many states, have had the necessary status to challenge the proclamation of zones.⁸⁵

The government of an independent Namibia, which became a reality on 21 March 1990, is generally recognized by the international community and has the necessary capacity to contest the extent to which South Africa has unilaterally

84 For example the Republic of South Africa has, in terms of the Territorial Waters Act 87 of 1963 (which came into operation on 12 July 1963 and was enacted as a result of South Africa's accession to all four 1958 Geneva Law of the Sea Conventions on 9 April 1963) declared a 200 nautical mile fishing zone. In Section 4 of the same Act, contiguous zone jurisdiction has been described for the 200 mile zone and not restricted to the internationally acceptable 24 nm. See discussion (3) B (c).

85 South Africa has consistently disputed the status of the Council for Namibia since it does not view the mandate as validly revoked. D J Devine 'Southern Africa and the Law of the Sea : Problems Common, Uncommon and Unique' (1986) *Acta Juridica* 29 at 37.

created maritime zones. This makes it unnecessary to comment on the status of a Namibia whose independence was not recognized *generally* but was recognized by South Africa.⁸⁶

Regarding other states, great difficulty would be experienced in establishing any legal interest in the delimitation of the maritime spaces between the South African islands and the Namibian mainland. The required interest belongs exclusively to the generally recognized government of an independent Namibia since it is only Namibia's sea spaces that can be limited or affected by unilaterally proclaimed South African maritime zones.⁸⁷

If the South African zones were to be disputed by the Namibian government, the matter could be settled by agreement or disposed of by submitting the dispute to a judicial tribunal or to arbitration procedures. The case could, for instance, be submitted to the International Court of Justice if the contestants were party to the Statute of the World Court and accepted the jurisdiction of the Court in accordance with the provisions of Article 36. Until then, legal uncertainty would prevail, making it difficult to explore and exploit the 'grey' areas where opposing claims overlap. Other alternatives include resorting to the dispute settlement procedures prescribed in Part XV of LOSC once the Convention comes into force and assuming that both states will be parties to LOSC. At present, the United Nations Council for Namibia has ratified LOSC on Namibia's

86. It is now an established fact that the independent State of Namibia does enjoy general international recognition by the community of states and participates in world affairs as an independent state. Namibia was admitted to the United Nations on 23 April 1990.

87. Other states could have contested the establishment of zones around Namibian territory by South Africa based on the argument of a legally revoked mandate. However, since Namibia is now an independent state, South Africa will not be proclaiming zones on its behalf.

behalf on 18 April 1983 while South Africa is a signatory having signed the Convention on 7 December 1984.⁸⁸

- 88 F M Luyt 'Signature and Ratification : A Brief Note' (1985) No 1 Sea Changes 124 at 127; D J Devine 'The Law of the Sea Convention : Signatories and Non-Signatories and the Alternative Track to Part XI' (1986-1987) 12 SAYIL 1 AT 26; (1985) No 1 Sea Changes 8, 9; P C Szasz 'Succession to Treaties under the Namibian Constitution' (1989-1990) 15 SAYIL 65.

Article 63(2)(d) of the Namibian Constitution states that the National Assembly shall have the power and function to consider and decide whether or not to succeed to such international agreements entered into prior to independence 'by administrations within Namibia'. LOSC was signed on behalf of Namibia by the UN Council for Namibia which may not be an 'administration within Namibia' as such. [Article 63(2)(e) further empowers the National Assembly to agree to the ratification of or accession to international agreements signed by the President in terms of Article 32(3)(e)]. Another aspect to be considered is whether this power applies to a treaty ratified before independence but coming into force *after* independence (*in casu* LOSC). Article 144 of the Namibian Constitution provides that international agreements binding on Namibia under its Constitution form part of the law of Namibia. Article 143 provides that 'All existing international agreements binding upon Namibia shall remain in force, unless and until the National Assembly acting under Article 63(2)(d) hereof otherwise decides'.

It appears that treaties are in principle, part of Namibian law. They do not have to be incorporated by legislation into Namibian law. Regarding pre-independence treaties, it would first have to be established whether the treaty had been concluded for Namibia by South Africa or by the UN Council for Namibia by applying the general international law rules relating to the formation and binding nature of treaties. Many of the rules contained in the Vienna Convention on the Law of Treaties 1969 are now part of international customary law. If a court found that a ~~treaty was binding on Namibia~~, it would be *prima facie* part of ~~Namibian law~~. However, it would have to be established that the National Assembly had not exercised its power to not succeed to the treaty in terms of Article 63(2)(d). A court would also have to confirm that the treaty was not in conflict with the Constitution or with an Act of the Namibian Parliament since Article 144 of the Constitution states that

If the dispute was submitted to judicial or arbitration settlement, the unilaterally created zones would not survive legal scrutiny if it could be established that the islands are not South African territory or that the correct method of delimitation has not been applied.

(ii) Bilateral agreement

An agreement allocating maritime zones should naturally be intended by the parties to operate as an international treaty since it would normally be designed to settle definitively, a potential international law dispute. Before Namibia gained independence, it would have been necessary to consider the effect of such an agreement or treaty between South Africa and a non-independent Namibian government (though no treaty of such a nature was ever concluded). It would also have been important to consider a treaty between South Africa and a non-independent Namibian government which later became the generally recognized government of the area, between South Africa and the non-independent government of Namibia which did not become the government of the independent state (there is no recorded agreement between South Africa and the South West African interim government) and between South Africa and the government of an *independent* Namibia which did *not* enjoy general recognition. As stated previously, the government elected for the territory is generally recognized and an agreement

'Unless otherwise provided by this Constitution or Act of Parliament' the general rules of public international law and international agreements are part of Namibian law. The status of ratification of LOSC by the UN Council for Namibia on 18 April 1983 will not have to be judged yet since LOSC is not yet in force. The question whether it binds Namibia or not and, if so, is part of Namibian law will not arise for the present. But it is worth posing the question whether Namibia (or any other state) can be a 'party' to a treaty not yet in force such as LOSC.

between South Africa and the government of Namibia would be the ideal way of settling the division of overlapping maritime zones since the capacity of the newly elected government to conclude dispositive treaties is in no way disputed. No degree of relative or limited capacity exists. The result would bind all future South African and Namibian governments. This would be so even if the solution agreed upon departed radically from accepted appropriate methods. International customary law rules and principles can be overridden by a valid treaty between the parties.⁸⁹

However, correct methods, rules and principles concerning delimitation would play an essential role in the negotiations preceding the agreement. They would enhance or detract from various negotiating positions and policies adopted by the parties depending on the extent to which the positions and attitudes accorded with or departed from these established rules and methods.

Agreement on delimitation issues is to be recommended. The consent of parties with full and recognized capacity would validate the solution *ergo omnes*. Alternatively, the parties could agree to submit the delimitation dispute to arbitration or judicial settlement, the award or judgement being equally final and binding.

89 G Schwarzenberger and E D Brown A Manual of International Law (1976) 6ed 25. Section 5 of the Territorial Sea and Exclusive Economic Zone of Namibia Act 3 of 1990 provides that delimitation of overlapping zones '...may be determined or altered by agreement with the state concerned'.

(iii) Treaty provisions

The major community policy at stake in delimiting the territorial sea between opposite states is that of achieving equitable apportionment, thereby avoiding potential disputes arising out of the use of a method of delimitation which does not respect the interests of both parties. The aim of allocating overlapping jurisdictional zones is to produce a mutually acceptable boundary.

Until 1958, boundary problems posed by the proximity of adjacent and opposite states were usually considered separately. At the Geneva Conference however, they were considered as one general problem since they were substantially the same and raised the same issues.⁹⁰

Article 12 of TSC (and Article 15 of LOSC) describes the procedures for territorial sea delimitation. The provision states that in the absence of historic title or where other special circumstances require a different solution, opposite and adjacent states may not, in the absence of agreement between them, extend their territorial seas beyond the median line, every point of which is equidistant from the nearest points on the baselines from which the breadth of the territorial seas of the two states are measured. The equidistance line is a line every point of which is equidistant from the nearest point or points on the opposite shores. However, several commentators are not convinced of its use for adjacent states and few lateral boundaries have made use of a strict equidistance line, one of the reasons being the ability of any small island to cause the line to

90 M S McDougal and W T Burke The Public Order of the Oceans (1962) 434. Article 12 of TSC and Article 15 of LOSC prescribe one formula in the case of both opposite and adjacent states. In practice, in the case of opposite states, the question of passage through straits often arises, though of course not all geographic straits are straits in law. The Continental Shelf Convention of 1958 deals with the delimitation of opposite and adjacent states in separate paragraphs - see discussion (3) C (b)(i) 1.1.

swerve, resulting in inequity due to a progressively distorting effect.⁹¹

According to the first sentence in Article 12, neither an opposite nor adjacent state may extend its territorial sea beyond the median line without the agreement of the other state. However, the following sentence could deprive the first sentence of much of its effect, for it states that the provision does not apply 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 with this provision'. The result appears to be that one of the states is entitled to insist upon extending its territorial sea beyond the median line, *irrespective of failure to reach agreement*, if 'special circumstances' make it necessary.⁹²

The most obvious defect associated with Article 12 is a failure to provide for arbitration of conflicting claims should the states disagree on the existence of special circumstances. McDougal and Burke suggest that this may have been intentional in order to permit each state to insist upon its own decision in order to promote eventual agreement, the logic being that by making the situation impossible, the necessity for agreement is inevitable.⁹³ The authors discount this theory, but observe that it is just as possible that in the event of a dispute, the failure to prescribe compulsory arbitration will promote decisions based on the current position of strength of the contending states.⁹⁴

91 S Rhee 'Sea Boundary Delimitation between States before World War II' (1982) 76 AJIL 555 at 588.

92 McDougal and Burke (n90) 435. The assumption is that an international tribunal would be available to adjudicate on the existence of historic title or special circumstances.

93 Ibid 436.

94 Ibid.

The second identifiable defect is that no guidance is offered as to what special circumstances would justify a departure from the use of the median line. Furthermore, it is not clear whether this departure is only permissible when the opposite or adjacent states agree thereto by treaty or whether it may be lawfully pressed by one of them upon the other.⁹⁵

If 'special circumstances' is to have the enlarged meaning it has acquired in the comparable provision concerning continental shelf delimitation where "it is the vehicle for the operation of the principle of 'equitable distribution'", then other possible solutions are available to some degree or other in almost every situation of controversy.⁹⁶ O'Connell concludes that the term has an extended meaning in Article 12, citing the delimitation of the lateral maritime boundary between Texas and Louisiana as evidence thereof.⁹⁷

The dispute involving Texas and Louisiana concerned the location of the geographic middle of the Sabine River, which divided into three passes between headlands on which jetties had been erected, and the position of the boundary from there. Louisiana argued that its own statutory line had established an historic boundary which extended the land boundary along a median which was an acceptable method of determining a boundary.⁹⁸ Texas urged that the boundary was to be fixed upon the basis of shorelines and the geographic middle of the Sabine as it existed in 1845-1848.⁹⁹ The United States' attitude, as evidenced in prior litigation,

95 D P O'Connell The International Law of the Sea (1984) Vol II 674.

96 Ibid 677, 678.

97 Texas v Louisiana 59 ILR 195.

98 Ibid 229, 230.

99 Ibid 231.

was that Article 12 was to be applied to the coast as it existed at the time of the decision and not at some prior date.¹⁰⁰

The case was referred to a Special Master who found the viewpoint of the United States to be the most equitable and, seeing that Article 12 was relevant, it was his duty to '...comply with the Convention and to do equity'.¹⁰¹ Equity played a consistent role in the discussion of special circumstances as presented in Article 12.¹⁰² The Louisiana argument was rejected because it resulted in a departure from the median line and because a unilateral delimitation is not binding on neighbouring states.¹⁰³ The Texas solution was rejected on the grounds that there was no lateral boundary in the Gulf in 1845 and also because of the existence of practical difficulties in implementing the solution.¹⁰⁴

The question of 'special circumstances' arose because of the existence of the jetties, which, if found to be part of the coastline, would produce a different boundary to the one that would occur if they were not present. The International Law Commission had cited as examples of special circumstances the existence of navigation channels and a water boundary which intersected a peninsula.¹⁰⁵ Moreover, the Geographer of the State Department had defined 'special circumstances' as 'any physical or geographic feature which can result in an inequitable division of the seabed'.¹⁰⁶

Texas alleged that a literal application of Article 12 would

100 Ibid 223-225.

101 Ibid 241.

102 O'Connell (n95) 678.

103 Texas v Louisiana (n97) 229.

104 Ibid 233, 235, 236.

105 Ibid 239; O'Connell (n95) 679.

106 Texas v Louisiana (n97) 239.

produce inequity. The Special Master held the opposite, but only by treating 'special circumstances' as '...part of a comprehensive rule, and not as a ground for vacating the rule in favour of some other solution'.¹⁰⁷ To that extent, the Special Master brought the construction of Article 12 substantially in line with the construction of the comparable provision in the Continental Shelf Convention of 1958.¹⁰⁸

Thus, although no definition for 'special circumstances' in Article 12 is provided, it was noted that certain circumstances were readily identifiable as such, for example, the existence of a navigable channel and complications caused by islands in the vicinity of mainland states.¹⁰⁹ In the final analysis, the burden of explaining the precise conditions which compose the special circumstances justifying a deviation from the use of the median line lies on the state claiming the alternative method.¹¹⁰ The answer as to what constitutes 'special circumstances' will eventually manifest itself in state practice.

Article 12 and its equivalent in LOSC, Article 15, are in substance simply a long-winded way of saying that states should *agree* on the common territorial sea boundaries. The introduction of the concepts of historical title and special circumstances could allow a country to introduce virtually any argument it wishes in an effort to gain the lion's share of the overlapping waters.¹¹¹ Nevertheless, both provisions are declaratory of international customary law which applies the equidistance-special circumstances rule and it is

107 O'Connell (n95) 679.

108 Ibid.

109 R Platzöder (n66) 476 para 19; McDougal and Burke (n90) 436, 437.

110 Ibid 437.

111 J R V Prescott Political Frontiers and Boundaries, (1987) 152.

irrelevant whether the states involved are party to TSC or LOSC, to both or to neither.¹¹²

How have states reacted to the requirement of agreement in Articles 12 and 15? Most agreements concluded up to 1980 contained elements of equidistance. An examination of distinct boundary sectors shows that opposite states drew forty four sectors which contained an element of equidistance, while six sectors had no such characteristic.¹¹³ Regarding adjacent states, it was found that twenty sectors possessed an element of equidistance and four were without it.¹¹⁴

Some agreements indicate that states have agreed to eliminate some points on a strict median line in order to create a smoother boundary line which facilitates navigation. The line can be drawn so that each party gains and loses equal areas of sea and seabed when the smoothed line is compared with the original median line. In other cases, states have consented to discount some feature which gives a material advantage to one of them.¹¹⁵

(iv) International customary law

The fundamental principle of sea boundary delimitation between states is that it should be based on rules of international law. Where contending states are not party to a convention containing rules on the subject, international customary law rules must suffice.

112 See discussion (n88).

113 Prescott (n111) 152.

114 Ibid. The term 'sector' is used to denote each discrete boundary. For example, the 1969 agreement between Indonesia and Malaysia defined three shelf boundaries with the first two sectors based on equidistance and the third constructed on another basis.

115 Ibid 154.

The International customary law rule applicable to territorial sea division is the equidistance - special circumstances rule, the starting point being that the delimitation should be based on an equidistance line. Neither party may extend its territorial waters beyond the median line unless an historic title or special circumstances render modification necessary.¹¹⁶

Do circumstances exist in the maritime zone between Namibia and the twelve South African islands which could result in relegating the equidistant line to an introductory principle only? According to Hoffmann, there is no historical title which would be relevant in motivating a departure.¹¹⁷

Turning to special circumstances, it is well established that islands adjacent to the coast can constitute a special feature, especially when the insular formations are adjacent to the coast of a *foreign* state as the twelve islands are.¹¹⁸ However, this is the case only when the delimitation is taking place between two mainlands *and the islands in question lie between them*. In the Namibian context, the Penguin Islands are not situated between two mainlands.

Is it possible that security interests could initiate a modification of the equidistance line? Security considerations have played an important role in delimitations between *adjacent* states where the aim is to allow each state control over maritime areas opposite its coast in its immediate vicinity. However, between *opposite* states, adjusting the median line will not normally enhance

116 Hoffmann (n16) 188. It makes no difference whether Namibia is a party to TSC or LOSC since Articles 12 and 15 respectively are declaratory of international customary law.

117 Ibid.

118 Ibid.

the security interests of either party.

The general configuration of the coast can constitute a special circumstance. Hoffmann concludes that there are no peculiar configurations relating to ten of the twelve offshore islands nor to the Namibian mainland which would require reconsideration of the equidistance line.¹¹⁹ The two islands situated *inter fauces terrarum*, namely Penguin and Seal Islands, require further discussion as they are potentially complicating factors.¹²⁰

(c) Complicating factors.

(i) Lüderitz Bay islands.

The general configuration of a coast can be a special feature on which to base an alternative solution. Regarding ten of the South African islands, no peculiar configuration presents itself and the same can be said of the Namibian mainland. However, two islands, Penguin and Seal, are situated within Lüderitz Bay necessitating discussion of the coastal configuration in relation thereto.

The delimitation between Penguin, Seal and the mainland remains in the category of delimitation between *opposite* states. Equidistance will apply unless special circumstances exist. Due to the location of the islands, two questions arise. Can Namibia draw a closing line across Lüderitz Bay enclosing the waters as internal waters and, if so, could it enclave the islands and their territorial waters within the internal waters of the bay?

Article 7(6) of LOSC prohibits the drawing of straight baselines which would seal off the territorial waters of another state from the high seas or exclusive economic zone. Clearly, closing off Lüderitz Bay with a straight baseline

119 Ibid 189.

120 See discussion (2) (c)(i).

would cut off the territorial waters of the two islands from the high seas beyond the bay because no right of innocent passage exists through *internal waters*.¹²¹ On examination of Article 7(6), it is clear that the provision deals with straight baselines drawn on deeply indented coasts, around fringing islands and deltas. No mention is made of straight baselines closing off bays. The prohibition embodied in the provision does not apply to straight baselines closing off bays, so Article 7(6) does not apply to the use of a straight baseline across the entrance to Lüderitz Bay.

Article 10(1) of LOSC states that

This article relates only to bays the coasts of which belong to a single State.

Clearly it applies to the closure of bays where the coast belongs to a *single* state only.¹²² Can it be said that the coast of Lüderitz Bay belongs to a single state? If 'coast' is interpreted restrictively to refer to the land connecting the entrance points to the bay then the 'coast' belongs exclusively to Namibia. If the term 'coast' in relation to a bay denotes the land within the bay as a whole (and not only to that part of the coastline between the entrance points to the bay), then the coast of Lüderitz is shared by two states, the mainland coast being Namibian territory and the two island coasts belonging to South Africa.¹²³ If so, a straight baseline may not be drawn across the mouth of Lüderitz Bay creating internal waters and possible enclavement of the territorial waters of Penguin and Seal.

However, if this extensive interpretation of Article 10 is inappropriate and the restrictive interpretation is applied, the closing off of Lüderitz Bay by a straight baseline will

121 R R Churchill and A V Lowe *The Law of the Sea*, (1988) 2ed 51.

122 *Ibid* 35, 38.

123 *Consolidated Diamond Mines of South West Africa Ltd v. Administrator, SWA and Another*, 1958 (4) SA 572(A) at 604, 605.

indeed be permissible. If this occurs, two possible outcomes emerge.

An equidistant delimitation between the islands and the mainland might allocate the former a passage or corridor of territorial waters extending beyond the closing line of Lüderitz Bay into Namibian territorial waters *outside the bay*. No enclavement would arise since the 'gap' in the closing line accommodating the territorial water corridor would prevent insulation of the islands. The outcome appears patently appropriate.

Alternatively, if a delimitation based on equidistance does insulate the islands and their territorial waters within the internal waters of Lüderitz Bay (ie no 'gap' in the closing line allowing the islands access to Namibian territorial waters beyond the closing line) then this insulation could constitute a special circumstance arising out of the particular geographical configuration of the coast. A departure from an equidistant delimitation in order to provide the islands with access to the sea beyond the closing line of the bay would be justified. Hence a navigable corridor or channel to the open sea might be included in the allocation of territorial waters to Penguin and Seal. This would naturally amount to a greater area of territorial waters than the usual 12 nm. Such an increase could be offset by proportionally decreasing the 12 mile band of territorial waters *around* the islands.

A delimitation between Penguin, Seal and the mainland ought to ensure access to the sea for these islands by means of a navigable corridor of territorial water belonging to the islands. Enclavement is to be avoided. If it is necessary to depart from equidistance in order to do so, then the departure is appropriate, it being based on the special circumstance of coastal configuration.

(ii) Black Sophie

As discussed *supra*, the British government explicitly waived all claims to sovereignty over islands or rocks other than the twelve mentioned in the Protocol of 1886. Black Sophie Rock was not one of the twelve annexed islands but is worthy of further discussion because it lies *within the territorial sea* of Plumpudding Island.

It could be argued that because low-tide elevations and islands may be used as basepoints for the measurement of the territorial sea of a mainland, so too may a low-tide elevation, providing it is located within the distance of the territorial sea of the island concerned, serve as a basepoint for the territorial sea belt of Plumpudding Island. Two questions arise. Is Black Sophie an island or a low-tide elevation? Is Black Sophie South African or Namibian territory?

Regarding the territorial feature, the position is not clear. South African municipal law disregards the existence of Black Sophie, neither treating it as an island nor as a low-tide elevation.¹²⁴ On the other hand, it does not treat it as a Namibian island either. Perhaps since South Africa took the trouble of promulgating municipal legislation, one could interpret the omission as an indication that it is indeed a Namibian island or rock. In this instance, equidistance could be applied where the territorial sea generated by Black Sophie overlaps with the territorial seas

124 For example, the Draft Bill on Marine Matters (GN 712/1985 Government Gazette 1:11:1985) in defining 'Republic' did not list Black Sophie as one of the islands in Schedules 1 nor 2 though the list is clearly not exhaustive as 'all other islands and rocks situated within the Republic's territorial waters' are included in the definition. Black Sophie lies within the territorial waters of the South African island of Plumpudding.

of the South African islands of Plumpudding and Sinclair.

It could also be argued that the explicit and unambiguous waiver by the British government of *all* sovereignty claims to *any other islands* made it clear that Black Sophie was German territory. It was not included in the annexation process and did not become part of the Republic of South Africa *via* state succession.¹²⁵ This theory would naturally apply to all other low-tide elevations within the territorial sea of any of the other annexed islands.¹²⁶

Is Black Sophie Rock an island or a low-tide elevation? The formation is a rock with water splashing over it. It is always wet and appears to be a low-tide elevation. According to Article 13 of LOSC, a low-tide elevation is a naturally formed area of land surrounded by and above water at low tide but submerged at high tide. Black Sophie is always visible. It is not submerged at high tide. It is therefore an island and, as suggested *supra*, a Namibian island capable of generating maritime zones of its own. If Black Sophie is a 'rock' in terms of Article 121(3) of LOSC, it will be restricted to a territorial sea zone and will not generate an exclusive economic zone or continental shelf if Article 121(3) is customary law. The subject of 'rocks' and the status of Article 121(3) will be discussed *infra*.

(iii) Long Island

The Long Islands lie approximately 21 kilometres south of Lüderitz Bay some 400m from the coast. The islands are

125 Partington (n6) 259. Black Sophie is a mere 3m high and approximately 50m long. A gruesome legend is linked to the origin of the name. In the 1860's a mummified body was found in the guano deposits on the rock and taken to Cape Town where it was sold to Mrs Sophia Nelson. She was known as 'Black Sophie' and kept a sailors boarding house in Bree Street, Cape Town, where she promptly displayed the body in the parlour. See SASD (n24) 65; Green (n80) 1, 2.

126 Jurgens Report (n81) 102.

described as follows : 'North Long Island, consists of two rocky ledges close together surrounded by a submerged reef. The channel between it and the mainland is only 1 cable wide. South Long Island is a small rocky ledge 4 cables S x E of the southern end of North Long Island'.¹²⁷

The South African claim to the Long Islands is only an issue insofar as sovereignty is claimed over two islands, North Long Island and South Long Island, two rockbanks lying next to each other. It appears that the formations are parts of the same reef, sticking up as islands. A further aspect concerns an insular formation south of Long Island South.

In order to gain clarity on the dispute surrounding the number of islands in the Long Island group over which South Africa exercises sovereignty, two questions must be answered. Firstly, what degree of importance must be attached to the descriptions in the early Proclamations of Annexation, the Royal Letters Patent, the formal British annexation in 1874 and the Berlin Protocol of 1886? Secondly, did effective occupation ever take place in relation to Long Island South, the smaller of the two islands and, if not, can South Africa then rely on prescription as the basis for title thereto?

A strict grammatical approach to the interpretation of the formal documents and Protocol could lead to the conclusion that since the word 'island' was repeatedly used and never in its plural form, only one island in the group was annexed. This interpretation could be reinforced by the rules of interpretation of statutes which provide *inter alia* that words are to be accorded their ordinary meaning. However, Section 6 of the Interpretation Act 33 of 1957 states that in every law, unless the contrary intention appears, '...words in the singular number include the

127 SASD (n24) 55.

plural, and words in the plural number include the singular'.

Another factor mitigating against a South African claim to Long Island South is the fact that the Letters Patent of 1867 deliberately stated that certain 'unnamed islands' were German territory.¹²⁸ Both the Letters Patent and formal Annexation Act 4 of 1874 only mentioned Long Island with no further detail. Unless the description in the documentation was a reference to the *unit* ie both islands, the interpretation most apposite to the documentation would be that Long Island South is one of the 'unnamed islands' to which Britain explicitly renounced its claim in the Protocol of 1886. If so, since the Protocol unambiguously provided for German sovereignty over all unnamed islands and rocks, Long Island South is today a Namibian island.¹²⁹

According to a report by the Department of Economic Affairs of the South West African Administration concerning the marine resources along the Namibian coast, effective occupation on Long Island South never took place, it being a known fact that no representative of either the British government, the Union or the Republic of South Africa ever lived on the formation or exercised any other form of appropriate occupation.¹³⁰ Furthermore, it is common knowledge that the only activity on the island was the annual seasonal hunting of seals by licence holders.¹³¹

The report, dealing with claims to Long Island South based on prescription, discounts the possibility for several reasons. The report notes the fact that the Deutsch Kolonial Gesellschaft für Südwest Afrika *leased* 'all the unnamed islets and rocks ...belonging to the lessors and

128 See discussion (1).

129 Jurgens Report (n81) 100.

130 Ibid.

131 Ibid.

mentioned as referred to in Article 4 of the Protocol' to the Government of the Cape Colony on 28 December 1897, an agreement ratified by the German government in Berlin and which expired on 31 December 1912.¹³²

Two aspects invite comment. Firstly, the unnamed islets were only *leased*, it being obvious that no waiver of sovereignty was envisaged. Secondly, any rights accorded expired at the end of 1912. Moreover, the islands had been the subject of a dispute between Germany and the United Kingdom as early as 1883. The status of the formation was not settled. Lastly, the report noted that South West Africa/Namibia was a Mandated Territory, administered by South Africa since 1919 and therefore not in a legal position to take action which would negate acquisitive prescription against it.¹³³ This incapacity would also discount claims to rights acquired by prescription based on the sporadic economic exploitation (seal hunting) of the island before the termination of the German administration.¹³⁴

Can the *geological formation* of the insulations determine whether the reference to Long Island was a reference to the unit or group known as Long Island or was the reference restricted to Long Island North? According to the report, no authority in international law material could be traced indicating the existence of a geological yardstick whereby various underwater rock formations or islands connected by the same structure underwater can be juridically joined to

132 See discussion (1).

133 Jurgens Report (n81) 101.

134 Ibid. The panel responsible for the report stressed the legal uncertainty surrounding the precise content and application of the rules of prescription in international law and made it clear that their comments on the subject in no way conceded acknowledgement of the existence or application thereof in international law.

form a single island.¹³⁵ Nevertheless, the geological information indicates that the two islands are connected to each other by an underwater reef. Are the two formations, by reason of the underwater link, one island? The answer appears to be no. Just as islands, though surrounded by water but connected underwater to the mainland are not *per se* part of the mainland, so too are these formations with their underwater *nexus* not one island.¹³⁶ As long as an island is surrounded by water and above water at high tide, it is an *independent* juridical entity.

Whether an island, due to its *geographic situation*, belongs to another island is a different question altogether. The presumption that rocks and islands within the territorial waters of the coastal state belong to the latter applies equally to rocks and islands within the territorial waters of an island over which sovereignty has been established. This rule does not apply where a foreign state validly acquires the rock or island. The United Kingdom did in all probability claim territorial waters around the Penguin Islands, but there are no indications as to the precise width. However, in the Territorial Waters Jurisdiction Act of 1878 it was stated that the jurisdiction of Her Majesty '...extends and has always extended over the open seas adjacent to the coasts of the United Kingdom ... to such a distance as is necessary for the defence and security of such dominions'.¹³⁷ A definitive distance for the width is absent, but in the British Instructions at the end of the 19th century regarding the capture of ships, it was stated that the power to capture '...may be exercised in any waters except the territorial sea of a neutral State. The territorial waters of a State are those within three miles

135 Ibid 100.

136 Hoffmann (n16) 137.

137 L. J. Bouchez *The Regime of Bays in International Law*, (1964) 48.

from low-water mark...'.¹³⁸ At the time, most claims involved a three mile territorial sea. If so, Long Island South would have been situated within the territorial sea of Long Island North, and the presumption that rocks and islands within the territorial sea of an island over which sovereignty has been established belong to that island applies. The United Kingdom's sovereignty over both islands is accounted for.

Two aspects could negate this presumption. Firstly, the presumption would be inapplicable if it was excluded by a treaty which could be interpreted as awarding the island in question to another state, *in casu* to Germany. This would be the case if Long Island South was classified as one of the 'unnamed islets and rocks'. Secondly, if the presumption did apply, it could be vigorously argued that Long Island South, being located in the territorial sea of the *mainland* too, belonged to the mainland state.

The official 1962 Government map shows Long Island as two islands, namely North and South Long Islands, only to be followed three years later by an official map depicting the two as one island again.¹³⁹ The South African authorities have always regarded North Long Island and South Long Island as a group known collectively as Long Island over which sovereignty has been exercised. Schedule I of the Sea Birds and Seals Protection Act 46 of 1973 refers to the 'Long Islands', thus including both North and South formations. Besides the use of the plural, Schedule I is not applicable to Namibian territory. Similarly, the signed English

138 Ibid.

139 Partington (n6) 288 note 228; Southern Africa 1962, Trigonometrical Survey, Government Printer, Pretoria (1 ed 1962) scale 1 : 2 500 000; Southern Africa 1965, Trigonometrical Survey, Government Printer, Pretoria (2 ed 1965) scale 1 : 2 500 000. Long Island is shown as North and South Long Island in the Readers Digest Atlas of Southern Africa (1984) 138, 196.

version of Schedule 2 No 40 of the Sea Fisheries Act 12 of 1988 also refers to the 'Long Islands'. The unsigned Afrikaans version uses the singular term.

It appears then that the two formations have been regarded as a unit known as Long Island which forms part of South African territory. Despite this, recent attempts have been launched to discredit the South African claim to the unit. In 1981 the General Assembly passed a resolution to the effect that the offshore islands are an integral part of Namibia and any claims to sovereignty by South Africa are illegal, null and void.¹⁴⁰ This is not a binding decision and would not have special significance for the Long Islands as it was a decision relevant to *all* the islands. The *de facto* treatment of the islands as a unit is supported by records of the historical events indicating a valid claim to sovereignty of the *unit*.

The insular formation south of Long Island South is joined underwater to the latter. The group of islands known as Long Island consist of formations making up parts of the same reef described as 'a group of three contiguous rocks lying close (a quarter of a mile) inshore between Wolf and Atlas Bays'.¹⁴¹

Does South Africa's title include this formation? The Marine Affairs Bill of 1985 referred to the Long Islands without clarifying whether the unit was made up of two or three islands. The possibility of a third island in the group has received very little attention. Once again, if the third formation is surrounded by water and not submerged at high tide, it is an independent juridical entity and the underwater connection is a geological phenomenon devoid of

140 G A Res (6 March 1981) 35/227 A. Article 1 of the Namibian Constitution repeats the claim. NB

141 Rand (n24) 7; Clement (n30)74; L Green Panther Head (1955) 85.

juridical relevance. As submitted *supra*, the islands have been treated as a unit. The practice is supported by historical events recording annexation of the unit. It is submitted that when the term 'Long Island' or 'Long Islands' is used in a statute (or Bill) it should be interpreted as applying to the two or three formations in the group.

(iv) Pomona and Sinclair.

When discussing the characteristics of a juristic island, sandbanks, which allegedly become exposed once every two to three years linking Pomona and Sinclair to the mainland enabling dry access to the latter, were mentioned.¹⁴² To date the emergence of the sandbanks remains unconfirmed, and it is not unreasonable to accept that Pomona and Sinclair are indeed surrounded by water at all times.

If it is confirmed that the two islands are part of the mainland due to the exposed sandbars, the formations would still generate maritime zones though not all round, as they are linked to the mainland. If a sandbar which dries out at low tide connects Pomona and Sinclair to the mainland, then the entities are no longer juridical islands.¹⁴³ However, the zones would be *South African* maritime zones because Pomona and Sinclair would remain South African territory having been specifically named in the Berlin Protocol of 1886.¹⁴⁴

(d) Conclusions.

The landward delimitation of the territorial sea between Namibia and the twelve South African islands is one between

142 See discussion (2) (a)(iv).

143 Symmons (n47) 41,42. This would presumably also apply to the building of a causeway from a formation otherwise permanently surrounded by water, even at low tide. This would deprive the entity of insular status since it would no longer be surrounded by water. It would be part of the mainland.

144 Hoffmann (n16) 127.

opposite states. That being so, both treaty law and international customary law rules prescribe, in the absence of agreement to the contrary, a delimitation based on equidistance unless special circumstances justify a modification thereof or use of an alternative method.

Except for the Lüderitz Bay islands, Penguin and Seal, no special circumstances can be identified. An equidistant or median line is therefore appropriate. As a result of the geographic location of Penguin and Seal, an equidistant delimitation could produce enclavement of these islands. Enclavement constitutes a special circumstance based on the particular geographic configuration of the coasts involved.¹⁴⁵ A departure from the equidistance line is therefore recommended in order to provide access for the islands to the open sea. This can be achieved by allocating a navigable corridor of territorial sea, an increase in the territorial sea zones, to Penguin and Seal which could be compensated for by subtracting a proportionate amount of territorial sea from around the islands themselves.

(3) Seaward delimitation

A Territorial sea

(a) General

(i) Geographic reality

One feature of a seaward delimitation is that it involves the classic case of two adjacent states having a common land boundary, the north bank of the Orange River. The more unusual feature is the seaward delimitation between the Namibian mainland and the South African islands north of the common land boundary, because both entities face *seawards* to an open maritime zone constituting the subject matter of the delimitation. They are not situated contiguous to each

145 Dispute Concerning Delimitation of the Maritime Boundary (Guinea/Guinea-Bissau), (1986) 25 ILM 251 at 294 para 102.

other. Is this a case of a delimitation between adjacent states?

(ii) Adjacent, opposite or casus omissus?

It is obvious that the delimitation of sea spaces on the seaward side of the islands cannot be one between opposite states as the areas to be allocated do not lie between the competing states.

The distinction between opposite and adjacent coasts has been a feature of the law of delimitation since its inception. Usually the distinction is applied in order to assess the suitability of the equidistance method. For example, a median line between opposite coasts is considered to be more frequently appropriate than a lateral equidistance line between adjacent coasts.¹⁴⁶ The reason for this was clearly explained in the North Sea Cases where it was noted that a lateral equidistant line can be pushed in one direction or another by convexity of the coastline or some other incidental feature such as an island. The divergence, slight at first, widens as the line proceeds seawards, so that '...a deviation of only 5 kilometres, at a distance of about 5 kilometres from the coast, will grow into one of over 30 at a distance of over 100 kilometres'.¹⁴⁷

This distortion does not occur in the case of a median between opposite coasts. Real significance was attached to the distinction because of the conclusion drawn from the judgement that, in the case of opposite states, an equidistant or median line would normally produce an equitable result while this would not necessarily be the

146 L A Willis 'From Precedent to Precedent : The Triumph of Pragmatism in the Law of Maritime Boundaries' (1986) 24 CYIL 3 at 46.

147 North Sea Cases, (n48) 18 para 8.

result in the case of adjacent states.¹⁴⁸

In the North Sea Cases, the court presented the geographic relationship of the Netherlands and Denmark as neither that of opposite nor adjacent states, giving rise to speculation about the existence of a third category. However, this was ruled out by the World Court. In fact, because of the presence of a third state lying between them and due to the unacceptability of boundaries cutting off the natural prolongation of a state in that situation, the Netherlands and Denmark simply did not lie in a relationship that permitted a delimitation between them.¹⁴⁹ The court also noted that a given equidistance line might '...partake in varying degree of the nature both of a median and of a lateral line' - the coasts might therefore at one point be opposite and at another adjacent.¹⁵⁰ There appears to be no reason why a delimitation cannot be one between opposite

¹⁴⁸ P B Beazley 'Maritime Boundaries : A Geographical and Technical Perspective' in *The UN Convention on the Law of the Sea* (1987)(Ed E D Brown and R R Churchill) 319 at 325. This presumption arose in the Channel Islands Case, but the court stressed that the reason for the normally equitable result in the case of opposite states arose not from the legal designation of the situation as one of 'opposite' states but from its actual geographical character as such. Similarly, the greater risk of inequity in cases of adjacent states arises from the actual geographical character as one involving laterally related coasts and not simply due to the legal designation as such - Channel Islands Case (n51) 453 para 239. This cautionary attitude reappeared in the Libya/Malta judgement where it was held that as firmly entrenched as the use of a median line may be in opposite coast situations, it does not amount to a compulsory rule or even a legal presumption - Libya/Malta Case (n53) 47 para 63. The impression must not be created that configurations such as concavity and convexity need only be examined when the method of equidistance is used. The configuration has to be examined whatever the method used, be it a line running parallel to one coast, a perpendicular line or any other line. See Willis (n146) 47.

¹⁴⁹ North Sea Cases (n48) 50 para 92.

¹⁵⁰ Ibid 17 para 6.

states on a particular part of the coast and between adjacent states on another part of the same coast.

The Court of Arbitration in the Channel Islands Case rejected the French argument that the Atlantic region of the area of dispute was neither an opposite nor an adjacent situation, instead confirming that no *casus omissus* exists, all cases falling into one of the two established categories, though the same states delimitation can be an opposite one in parts and adjacent in other parts.¹⁵¹

In the Gulf of Maine Case the chamber identified sectors of the coasts which were clearly either adjacent (the coast of Maine at the back of the Gulf and the coast of Nova Scotia extended by an imaginary line across the entrance to the Bay of Fundy) and those which were clearly opposite (the coast of Massachusetts and the coast of Nova Scotia southeast from Yarmouth).¹⁵² The chamber did not find it necessary to classify the third sector of the line southeast from the closing line of the Gulf, commenting that it was only in the northeastern sector of the Gulf that the prevailing relationship of the coasts was one of lateral adjacency.¹⁵³ Commentators have averred that this ought not to be interpreted as an indication that the third sector of the line must result from considerations of a *third*, but unspecified coastal relationship as the third sector in fact involved laterally related coasts too.¹⁵⁴

In the Guinea/Guinea-Bissau Case, the tribunal depicted the coasts as partially opposite and partially adjacent, but did

151 Channel Islands Case (n51) 426 para 94.

152 Case Concerning Delimitation of the Maritime Boundary in the Gulf of Maine Area (Canada/United States of America) (1984) 23 ILM 1197 at 1236, 1237 para 188, 189.

153 Ibid 1240 para 206.

154 Beazley (n148) 326.

not dwell on the point.¹⁵⁵ Therefore the distinction is not an absolute one. Bays and gulfs can be both opposite from and adjacent to one another in varying degrees.¹⁵⁶ It is also not always possible from a technical point of view to state unequivocally that one or other situation prevails.¹⁵⁷

(b) Relevant principles

(i) General

De Lapradelle identified two methods of delimiting the territorial sea of adjacent states, one being to project the land boundary seawards on a great circle line continuing the land boundary and the other consisting of a line perpendicular to the general direction of the coast.¹⁵⁸ Boggs rejected both methods, the first because the land boundary is usually accidental in direction and has no relation to the necessities of delimiting the water boundary and the second for the simple reason that it is not always possible to determine the general direction of the coast.¹⁵⁹ Boggs' own method involved taking a point five miles (the supposed extent of the territorial sea of both countries) from the nearest land of the two states and connecting that point to the boundary, a series of straight lines - the last of which should end at the high seas terminus - being used where a single straight line would not suffice.¹⁶⁰

This method is essentially that embodied in the principle of equidistance as represented by Article 12 of TSC and Article 15 of LOSC. The difference lies in the feature that the equidistance is related to the baseline of the territorial sea, accommodating the frequent use of straight baseline systems. When the standard baseline, the low-water mark, is

155 Guinea/Guinea-Bissau Case (n145) 290 para 91.

156 Rhee (n91) 559.

157 Beazley (n148) 326.

158 O'Connell (n95) 661.

159 S W Boggs International Boundaries : A Study of Boundary Functions and Problems. (1940) 189.

160 Ibid 192.

used, the seaward boundary is in effect calculated by the method Boggs outlined.¹⁶¹

When waters on either side of the median line so established are not equally navigable, the question arises whether the resulting inequity justifies a departure from the established rules. Does the notion of an equitable delimitation, employed in connection with the allocation of continental shelf areas and exclusive economic zones, apply to territorial sea delimitations? Article 15 of LOSC mirrors the content of Article 12 of TSC, not mentioning the requirement of an equitable solution although the reference to 'special circumstances' could permit the concept of equity to infiltrate the rule.¹⁶² It has been suggested that the need for consistency in the lateral direction of the territorial sea, continental shelf and exclusive economic zone boundaries will ensure that the concept of an equitable delimitation will play a role in territorial sea delimitation.¹⁶³

(ii) State practice

The *Grisbadarna Case* concerned the location of the boundary between Norway and Sweden from a point indicated on a chart and located on the shore, to the limit of the territorial sea.¹⁶⁴ The Permanent Court of Arbitration was required to determine if the frontier had been fixed by a prior treaty and, if not, to fix it according to the principles of international law. The court found that the treaty did not deal with the entire frontier, prompting Norway to claim that the median line was the appropriate method to delimit the balance since it was the dominant method at the time of

161 O'Connell (n95) 662.

162 Ibid.

163 Ibid.

164 1916 Hague Court Reports (Ed J B Scott) 121. The case was decided on 23 October 1909.

conclusion of the treaty.¹⁶⁵ The court held that there was no principle in international law to the effect that a frontier line traced in a certain direction on the waters adjacent to the coast must *necessarily* continue in the same direction to fix the remainder of the limits of the maritime space.¹⁶⁶ Moreover, if the conclusion was incorrect and such a rule did in fact exist, it would not automatically be applicable unless it was established that the section of existing delimitation had been fixed by proceeding in the direction of the sea towards the coast and not from the coast towards the sea.¹⁶⁷ The court then proceeded to settle the outstanding boundary using a line perpendicular to the general direction of the coast.¹⁶⁸

The Beagle Channel Arbitration revolved around the channel which constituted the boundary between Chile and Argentina towards the south of Tierra del Fuego. The existing boundary treaty of 1881 was interpreted differently by the two states, Chile advocating an interpretation upholding a median line division while Argentina relied on the line of greatest depth, analogous to the concept of the *thalweg*.¹⁶⁹ If Argentina's argument prevailed, the deepest channel would pass Picton and Richmond and not the Bay of Moat, whereas the Chilean viewpoint meant that the channel mouth was the Bay of Moat lying between the mainland and the two islands of Picton and Nueva.

The matter was referred to Queen Elizabeth II in terms of an arbitration treaty between the two countries and an arbitral tribunal, acting pursuant to this reference, awarded Picton, Nueva and Lennox Islands to Chile in 1977. Although the

165 Ibid 127.

166 Ibid 128.

167 Ibid.

168 Ibid 129.

169 Beagle Channel Arbitration (Argentina v Chile) (1978) 17 ILM 632 at 673 para 108-110.

decision did not involve the territorial sea of the two countries, it nevertheless had indirect implications therefor insofar as it excluded two of the possible channels between the islands.¹⁷⁰ The tribunal concluded that this result was indeed intended by the states party to the treaty of 1881. The treaty referred expressly to the Beagle Channel as the boundary, thereby indicating an intention that Argentine territory was to follow the northern coast of Tierra del Fuego, the islands to the south thus belonging to Chile.¹⁷¹

In several other treaties concluded prior to the 1958 Geneva Convention, consistent use had been made of the median or equidistant line to delimit the territorial sea. One example was the Treaty of Versailles which settled the boundary between Germany and Denmark in the North Sea.¹⁷²

The Treaty of Guadalupe-Hidalgo, dated 1848, provided that the boundary line between Mexico and Texas would commence in the Gulf of Mexico, three leagues from land opposite the mouth of the Rio Grande.¹⁷³ Mexico contended that the aim of the Treaty was to extend the territorial jurisdiction of the two states to a distance of nine nautical miles, and that this distance was the breadth of their respective territorial seas *vis-à-vis* each other.¹⁷⁴ The United States Supreme Court in *United States v. Louisiana* found that the effect of the Treaty was to separate the maritime territory of the United States and Mexico, thereby rejecting the contention of the United States government that the three league line only regulated certain types of extra-territorial jurisdiction and holding that the line was

170 O'Connell (n95) 666.

171 Beagle Channel Arbitration, (n169) 672 para 105.

172 O'Connell (n95) 667 note 37.

173 See discussion Chapter III (2) A (g)(vii).

174 A G Robles 'Notes and Comments' (1961) 55 AJIL 670.

intended to be a boundary.¹⁷⁵ Of interest on the subject of lateral delimitation was the decision that the expression 'opposite the mouth of the Rio Grande' referred to a projection of the line of direction of the *landward* boundary.¹⁷⁶

Although territorial sea boundaries between opposite and adjacent states tend to be short, the number of 'true' equidistant territorial sea boundaries which have been agreed upon and are currently in force are few.¹⁷⁷ Examples include those between Poland and the Soviet Union and between Indonesia and Malaysia.¹⁷⁸ A slight variant of the true equidistant sea boundary is to limit the seaward terminus at a point on the outer territorial limits which is equidistant from the basepoints on the two coasts, but to ignore many turning points on the boundary line between the coast and the terminus.¹⁷⁹

(iii) Treaty provisions.

These provisions, replicas of each other, appear to resolve the question of the criterion for delimitation between both opposite and adjacent states, in the absence of agreement to the contrary, in favour of the median line solution. The provisions develop the theme further by permitting delimitation at variance with Articles 12 and 15 where because of an historic title or the presence of other special circumstances, it appears necessary to do so.

175 United States v Louisiana, 4 AILC 191 at 249. The court noted that the nine mile limit was based on the three league provision of the Texas Boundary Act 1836 which itself denoted a territorial boundary.

176 Ibid 245 note 100.

177 L M Alexander 'Baseline Delimitations and Maritime Boundaries' (1983) 23 VJIL 503 at 523.

178 Ibid notes 130, 131.

179 Ibid 523.

Similar observations on the meaning of 'special circumstances' as were made on the subject of the delimitation between the *opposite* states of Namibia and the South African islands can be made here.¹⁸⁰

(c) Complicating factors.

(i) Adjacent states with different limits.

Where adjacent states claim different territorial sea limits, the correct solution is to project the boundary of the state with the greater limit according to the same principle, leaving the other state free to extend its territorial sea in the vacant area.¹⁸¹

This was the solution contained in a treaty between the Soviet Union and Norway where the boundary was a straight line linking a buoy which marked the end of the boundary in 1947, to the intersection of the territorial waters claimed by both countries, 4 miles in the case of Norway and 12 miles in the case of the Soviet Union.¹⁸² This scheme would appear to favour the Soviet Union. However, the Norwegian territorial sea is measured from a straight baseline which closes the mouth of the Varanger Fjord, an historic bay.¹⁸³

(ii) The effect of geographical changes.

As in rivers, geographical changes occur in the case of shorelines, affecting boundaries between adjacent states. Naturally, if an existing treaty defines the limits by reference to co-ordinates or lines established by terrestrial or astronomical fixing, then subsequent geographical changes are irrelevant.¹⁸⁴ However, if the median line is the limit agreed to, or it becomes the line

180 See discussion (2) (b) (iii).

181 O'Connell (n95) 681.

182 J R V Prescott *The Political Geography of the Oceans* (1975) 101.

183 Ibid.

184 O'Connell (n95) 682.

resulting from the application of Articles 12 of TSC and 15 of LOSC, the question arises as to whether the principles of river law apply on the occurrence of geographical changes. If so, a sudden change will not require modification of the maritime boundary as a necessary and immediate consequence whereas a gradual change in the shoreline will affect a delimitation based on the median line.¹⁸⁵

The application of river law to geographical changes is not unanimously accepted as relevant to the displacement of the baseline or basepoint used for measuring sea spaces. The view has been expressed that to apply river law on the topic would be inconsistent with the decision in the Grisbadarna Case where the frontiers were characterized as *immovable* although it has been suggested that the case was based essentially on the text of an existing treaty which represented the *intention of the parties* that the frontier should be *immovable*.¹⁸⁶ O'Connell concludes that there is insufficient state practice on the relevance of river law to coastal water problems to extract a definitive answer on the application thereof.¹⁸⁷

Be that as it may, there is no doubt that changes in the shoreline, irrespective of the speed and manner in which they occur, produce changes in the *baseline* from which sea zones are measured. If the baseline is displaced, it follows that the *actual* median line ought to apply, resulting in a logical displacement of the original boundary. The simplicity is deceptive. A practical problem arises because official charts and documents describing the lines prior to change become inconsistent with the geographic reality, an inconsistency which makes it difficult to apply and enforce the law. The simplest answer

185 Ibid. See discussion Chapter III (2) A (f).

186 O'Connell (n95) 683.

187 Ibid.

would be to allow the official records to prevail in order to eliminate uncertainty, but this could in effect permit the exercise of sovereignty in *foreign territory*. This possibility makes the alternative solution, rectification of the charts by the state whose baseline has altered, attractive.¹⁸⁸

The dilemma is theoretical in many cases because boundary treaties often provide a solution on the occurrence of geographical changes. The solutions vary. Some treaties prescribe a change in the existing boundary line while others deal with possible displacement of baselines in a pre-emptive fashion by requiring revision of the boundary at specified intervals. Because the mouth of the Rio Grande migrates, the United States and Mexico agreed that a fixed point would be taken as the centre of the mouth, as it existed on a specified date, by reference to co-ordinates.¹⁸⁹ As the mouth shifts, the short section of the boundary between the closest fixed point and the centre of the mouth will hinge about the fixed point.

The effect of coastline displacement on the lateral boundary in the territorial sea arose in *Texas v Louisiana*.¹⁹⁰ Confirming an earlier decision of the Supreme Court that the determination of the baseline of the territorial sea is to be made with reference to the *current* coastline and not to some point which may have existed at one time, the Special Master held that the location of the point from which the lateral boundary should emanate was governed by the notion of 'modern, ambulatory coastlines'.¹⁹¹ The United States argued that the limitation referred to the *existing*

188 Ibid 682.

189 See discussion Chapter III (2) A (g)(vii).

190 *Texas v Louisiana* (n97). See discussion Chapter III (2) A (f).

191 *Texas v Louisiana* (n97) 223, 240, 241.

coastline and not to the coastline as it existed in 1945.¹⁹² The court agreed that the point of reference was the *current* coastline as defined by the Convention on the Territorial Sea and Contiguous Zone.¹⁹³

(d) Adjacent territorial sea boundary between Namibia and South Africa.

Articles 12 of TSC, (15 of LOSC and international customary law prescribe the equidistance-special circumstances method for delimitation of the territorial sea between adjacent states. The lateral delimitation between Namibia and South Africa at the mouth of the Orange River is a classic example of neighbouring adjacent states, there being a common land boundary, the north bank of the river, ostensibly settled by treaty.¹⁹⁴

The first possible scenario is that Namibia and South Africa could conclude an agreement on the lateral delimitation of the territorial sea. States are free to agree on any method acceptable to both. For example, agreement on the dividing line corresponding with the *thalweg* is appropriate in cases where the preservation of equal rights to navigation is important. The immediate maritime area opposite the mouth of the Orange River is freely navigable. The risk of unequal navigation rights is negligible so the *thalweg* option is not a likely choice. The parties could agree to extend the land boundary out to sea. This is another 'straight line' method which involves prolonging the final segment of the land boundary. If the outcome of the uncertainty surrounding the precise location of the land boundary on the north bank is favourable to South Africa, ie the high-water mark, then the extension of this line out to sea would be an attractive option for South Africa. At the same time, Namibia is not likely to agree to an extended

192 Ibid 223.

193 Ibid 240.

194 See discussion Chapter III (2) B.

land boundary line if the location of the land frontier is unfavourable. An extended land boundary would appear more feasible to Namibia if the dividing line on the north bank is the low-water mark or middle of the river as set out in Article 1(4) of the Namibian Constitution. In that event, South Africa would probably be reluctant to agree to an extended land boundary if other methods could offer a more advantageous territorial sea dividing line.

The two adjacent states could opt for the method of a line perpendicular to the general direction of the coast. In theory, the perpendicular line appears simple and convenient but, in practice, it is sometimes inappropriate. In addition, it is often extremely difficult to determine the general direction of the coast. The significance of the *Grisbadarna* ruling is that the perpendicular line was considered unsuitable due to circumstances of fact, namely that such a line would sever the *Grisbadarna* bank. The tribunal adopted an equitable remedy which entailed tilting the perpendicular line by a degree in order to avoid severing the bank.¹⁹⁵

The perpendicular line for the purposes of allocation has been applied where the coast at the boundary terminus is relatively straight. For example, Albania and Yugoslavia signed an agreement which provided that '...the boundary... starting from the limit of the territorial waters in the Adriatic Sea follows first a straight line perpendicular to the general direction of the coast and ends up at the mouth of the principle arm of the Boyana'.¹⁹⁶

A perpendicular bisects an angle of 180° and can be regarded as a simplified equidistant line where the coast forms a straight line. In the *Gulf of Maine Case* it was

195 Rhee (n91) 571.

196 Ibid 579.

specifically stated that an essential condition for its use would be a reasonable stretch of rectilinear coast.¹⁹⁷ This condition was met on a micro-geographical level in the Tunisia/Libya Case and on a macro-geographical level for the seaward boundary in the Guinea/Guinea-Bissau Case.¹⁹⁸ However, most coastlines are irregular with indented coastal formations and scattered islands, and many states have expressed doubts about the general applicability of the perpendicular line.¹⁹⁹ The inherent difficulty in identifying the general direction of the coast has acted against widespread application of the method. The general trend or direction of the coast as a *baseline* was rejected by Geneva Convention draftsmen in 1958 as being too subjective a method of constructing boundaries, an objection echoed in *Texas v Louisiana* where it was noted that '... it is the methodology of the trend of the coast theory of boundary construction that is not trustworthy rather than any particular result'.²⁰⁰

The Namibian/South African coastline is relatively straight, complying with the essential condition of a reasonable section of rectilinear shoreline. There are no indentations in the area apart from the mouth itself. The islands scattered along the coastline are not situated near the mouth and cannot influence the angle of the perpendicular line. The hesitancy on the part of states to acknowledge the general applicability of the method is a factor which will make other options appear more attractive. Other straight line methods which can be agreed upon include the use of meridians and parallels, though they may also prove unsuitable in certain circumstances such as occurred in the Guinea/Guinea-Bissau Case where the court intimated its desire '...to find a method which does not have the

197 Gulf of Maine Case (n152) 1234 para 176.

198 Willis (n146) 51.

199 Rhee (n91) 579.

200 Texas v Louisiana (n97) 230.

drawbacks of the line of equidistance...'.²⁰¹

If no agreement is reached, the equidistance-special circumstances solution is compulsory. There is no fixed definition of 'special circumstances', though certain circumstances are readily identifiable as such, for example navigable channels and the presence of small islands in the vicinity of the coasts.²⁰² 'Given the infinite variety of geographical circumstances that exist, it must be assumed that there is an almost infinite variety ... or at least degree of special circumstances that may exist'.²⁰³ The most commonly cited are the presence of islands and rocks as well as the position of the land frontier in relation to the topography of the coastline.

The nature of legally recognized special circumstances appears to be predominantly *geographical*, though the unity of *deposits*, a non-geographical feature, has been tentatively referred to as a 'special circumstance' capable of influencing maritime boundaries *beyond* the territorial sea.²⁰⁴ If non-geographical features are to contribute to the categories of special circumstances, then two possible arguments emerge.²⁰⁵ It could be argued that the *discrepancy* uncertainty surrounding the boundary on the north bank of the Orange River (or middle of the river according to the Namibian Constitution) is a special circumstance prompting adjustment of a rigid equidistant line. An alternative argument could be that if the land boundary on the north bank is the high-water mark, then this extremely unusual though not unique situation constitutes a radical feature capable of initiating adaptation of the equidistant line

201 Guinea/Guinea-Bissau Case (n145) 296 para 107.

202 McDougal and Burke (n90) 436, 437.

203 Beazley (n148) 334.

204 Willis (n146) 55.

205 See discussion on special circumstances (3) C (b)(i) 1.1.

separating the adjacent maritime zones of the coastal neighbours.

However, it is submitted that identification of special features is more likely to be based on the fact of the migrating mouth of the Orange River though it has been suggested that the instability of the moving mouth be addressed by fixing the mouth at certain points which are to remain permanent.²⁰⁶ The baseline to which the line of equidistance will relate is the low-water mark, there being no deeply indented coastline, fringing islands or delta migration justifying the use of a set of straight baselines. If the mouth shifts, the bank is displaced and the actual low-water mark will move in response to the displacement. The fixing of the mouth at a point on the north bank or middle of the river is an appropriate adjustment in the circumstances. This means that the eventual or adjusted equidistant line will not always be at exactly equal distances from the nearest points on the coast on either side of it. However it will be equidistant from the selected fixed point on the north bank or elsewhere which will remain constant. One is left with a solution initiated by practical considerations of an unstable mouth, a geographical special circumstance capable of endorsing modification of the equidistant line.

In *Texas v Louisiana*, the lack of a definition of what constitutes 'special circumstances' was noted.²⁰⁷ The Special Master did however, accept that a special circumstance is generally considered to be any physical or geographic feature which can produce an inequitable division of the seabed.²⁰⁸ It is submitted that, like the existence of navigation channels in the area of a lateral boundary, so

206 See discussion Chapter III (2) B (d)(iii), (e)(vii).

207 *Texas v Louisiana* (n97) 239.

208 Ibid.

too is a migrating mouth a feature of special importance.

(e) Adjacent territorial sea boundary between Namibia and the South African Islands.

The delimitation is one between adjacent states. The land territories both face seawards towards an outer maritime zone beyond the islands towards the Atlantic Ocean. Thus the allocation of the zones is one between adjacent states firstly because the mainland and coasts of the islands are lateral and face *outwards* towards the zone to be delimited. Secondly, as discussed *supra*, all delimitations are either opposite or adjacent, and the delimitation is clearly not between opposite states, the zone of delimitation no longer lying between the islands and the mainland but located beyond the islands towards the open sea.

Treaty provisions contained in Article 12 of TSC and Article 15 of LOSC provide that

Where the coasts of the two States are opposite or adjacent to each other, neither of the two States is entitled, failing agreement between them to the contrary, to extend its territorial sea beyond the median line every point of which is equidistant from the nearest points on the baselines from which the breadth of the territorial seas of each of the two States is measured. The above provision does not apply, however, 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.

The solution is thus the equidistance-special circumstances rule.

International customary law dictates the application of the equidistance-special circumstances rule. The (Treaty) provisions are therefore declaratory of international customary law and it is irrelevant which of the states are

party to TSC, LOSC or both.²⁰⁹ ✓

The starting point is a line of equidistance, neither state being entitled to extend its territorial seas beyond a line which is at all points equidistant from the nearest points on the islands or Namibian mainland unless special circumstances can be identified.²¹⁰ ✓

Do special circumstances exist affecting the delimitation? If not, the equidistance rule will apply. Both the South African islands and Namibia will be entitled to a 12 nautical mile territorial sea. If the permitted spaces overlap, then the area of overlap should be divided on the basis of equidistance.

Firstly, no historical title exists which could affect the application of an orthodox equidistant line. The only remaining factor which could lead to a modified line is the identification of some special circumstance.

Islands situated opposite foreign coasts are not *per se* special circumstances. The general configuration of the coast can of course be a remarkable feature as was the case concerning Penguin and Seal Islands in Lüderitz Bay.²¹¹ As discussed, the remaining ten islands and the mainland do not boast a peculiar configuration which could constitute a special circumstance.

Security interests can qualify as a special feature and are usually pertinent in delimitations involving adjacent states where the aim is to allow each state to control maritime territories opposite its coast in its immediate vicinity. These security considerations feature less prominently in

209 O'Connell (n95) 662.

210 Hoffmann (n16) 188.

211 See discussion (2) (c)(i).

the landward or opposite delimitation but require further discussion in relation to the lateral delimitation between Namibia and the islands.

The security interests of some of the islands might be in jeopardy if an equidistant line of delimitation is adhered to. It appears that in the case of Mercury, Plumpudding and Sinclair, an equidistant line would produce a solution giving these islands a tiny area of territorial sea which would be enclaved by Namibian territorial seas. In that event, it cannot be said that the islands are able to control the maritime areas opposite their coasts, for they are, in effect, cut off from the sea by a maritime territory *controlled by another state*.

The security interests of Namibia could also be threatened by an equidistant line. In the case of Hollamsbird and Ichaboe, a division based on an equidistant line would mean that the mainland would be denied control over certain, admittedly limited, maritime areas opposite its coast. In the case of Halifax, Long, Possession, Albatross and Pomona, the aim of achieving control over immediate maritime territory is achieved by the equidistance method which allows both islands and mainland reasonable control over zones immediately opposite them.²¹²

The security interests of Mercury, Plumpudding and Sinclair are imperilled by adherence to an unmodified line of equidistance and constitute special circumstances. The line ought to be adjusted in order to accommodate these special interests. One solution would be to allocate a narrow corridor of island territorial sea in each case for a distance of 12 nm in a seaward direction from the islands.

212. P Bravender-Coyle 'The Emerging Legal Principles and Equitable Criteria Governing the Delimitation of Maritime Boundaries Between States' (1988) 19 ODIL 171 at 196. See diagram D1 *infra*.

This would give the islands access to the sea through their own territorial waters.

Similarly, the security interests of the Namibian mainland in the areas adjacent to Hollamsbird and Ichaboe also constitute a special feature vindicating adaptation of the line. The line ought to be adjusted in such a way that the mainland will possess as much territorial waters as is necessary to ensure reasonable control over maritime areas immediately opposite it.

On a practical note, the lateral delimitation between Hollamsbird, Ichaboe and the mainland should proceed from the line of equidistance. The islands should be allocated the usual 12 nautical mile territorial sea in a seaward direction. However, the hypothetical equidistant line to the north-west of Hollamsbird should move *substantially south* in order to accommodate mainland security interests. Similarly, the hypothetical equidistance line to the south-west of Hollamsbird should be moved *substantially north* in order to host mainland security interests. The equidistance line to the north-west of Ichaboe should move *marginally south* to oblige mainland security interests and the equidistance line south-west of Ichaboe should move *marginally north* for the same reason.²¹³

Regarding Mercury, Plumpudding and Sinclair, the delimitation should once again begin with a line of equidistance. Hypothetical lines to the north-west of these islands should be adjusted further *north* while those to the south-west of these three islands should move sufficiently further *south* to create a narrow corridor of territorial sea, in each case extending to 12 nm from the coast behind

213 Ibid; D J Devine 'Delimitation between the Penguin Islands and Namibia: Some Possible Principles' (1989-1990) 15 SAYIL 122 at 133.

the islands. This corridor would not only satisfy island security interests but would also prevent their enclavement by the mainland territorial waters.²¹⁴

The adjacent delimitation involving the mainland, Halifax, Long Islands, Possession, Albatross and Pomona should be accomplished using the equidistance method. The islands are entitled to a 12 nm territorial sea in a seaward direction. No modification of the line is necessary since there appear to be no special circumstances requiring adjustment of the line.

The special configuration of Penguin and Seal Islands requires no lateral delimitation and the allocation of appropriate sea spaces between them and the opposite mainland has already been dealt with.²¹⁵

(f) Conclusions.

Both treaty and international customary law prescribe the equidistance-special circumstances rule where adjacent states fail to reach agreement on delimitation. The lateral delimitation between the two mainlands can be settled by agreement. If an accord is not forthcoming, it is submitted that the existence of a special circumstance, the migrating mouth of the Orange River, justifies adjustment of the equidistance line. It is suggested that the modification take the form of selection of a fixed point for the mouth on the north bank of the Orange River.

The seaward delimitation between the Namibian mainland and the South African islands is also a lateral delimitation based on the equidistance-special circumstances rule.

214 Ibid; Jayewardene (n67) 362. It is possible that states today are less interested in the ocean for security reasons than they are for its economic opportunities.

215 See discussion (2) (c)(i); Devine (n213) 134,135.

Special circumstances arise in the form of security interests. The equidistance line ought to be adjusted in order to accommodate these special interests of both the Namibian mainland and certain islands.

B Contiguous Zone

(a) General

The theory of free ocean use outside the territorial sea became subject to certain recognized exceptions in a belt of water adjacent to, and extending seaward from, the territorial sea. Initially, during a time of war, a coastal state would stop and search vessels nearing its coast. This activity progressed to state enforcement of various other specific functions, giving birth to a special jurisdiction which was accepted. In fact, the contiguous zone was the first recognized zone of functional jurisdiction in the sea, a functional zone in which a coastal state can exercise a specific authority while not precluding other traditional uses.²¹⁶

The jurisdictional nature of the zone is uncertain as early claims included both legislative and enforcement jurisdiction whereas a literal interpretation of both Article 24 of TSC and its successor in LOSC indicates only enforcement jurisdiction.²¹⁷ Furthermore, action may only be taken in respect of offences committed within the territory or territorial sea of the coastal state, not in respect of anything done in the contiguous zone itself.²¹⁸ Article 19(5) of TSC and Article 27 of LOSC forbid the arrest of ships passing through the territorial sea for offences committed before they enter that zone. So if

216 K P Beauchamp 'The Management Function of Ocean Boundaries' (1986) 23 SDLR 611 at 634; J Symonides 'Origin and Legal Essence of the Contiguous Zone' (1989) 20 No2 ODIL 203.

217 Churchill and Lowe (n121) 116.

218 Ibid.

legislative jurisdiction exists in the contiguous zone, and ships committed an offence there, they would be able to achieve a greater degree of immunity from coastal state jurisdiction by fleeing to the territorial sea than by fleeing to the high seas or economic zone where they could be seized after hot pursuit.²¹⁹

State practice is inconsistent. Some states have not claimed a contiguous zone, others have adopted legislation consistent with the content of Article 24 while many have exceeded the *ratio materiae* by adding security to the list of protected interests.²²⁰ There are also states whose contiguous zone exceeds the maximum limit such as South Africa and others which claim both enforcement and legislative jurisdiction for certain purposes in extended maritime zones.²²¹ Even after LOSC was drafted, practice remained divergent with countries such as India and Pakistan claiming a contiguous zone but assuming security jurisdiction in addition to jurisdiction over customs, immigration, fiscal and sanitary matters.²²² This claim to extended jurisdiction appears to enjoy widespread acceptance as a matter of customary law despite being sanctioned neither by TSC nor LOSC. Official support for this broad view of jurisdiction emerged from the case of the *Taiyo Maru* where it was held that Article 24 of TSC was permissive only and not exhaustive, and that contiguous zones could be established to protect interests other than those listed wherein both legislative and enforcement jurisdiction could be exercised.²²³

Before the advent of the exclusive economic zone, the contiguous zone was a part of the high seas resulting in a

219 Ibid 117; Article 23 HSC and Article 111 LOSC.

220 Symonides (n216) 205; Churchill and Lowe (n121) 117.

221 Ibid 117, 350.

222 Ibid 347, 349.

223 Ibid 117.

presumption against coastal state jurisdiction over foreign ships. Coastal state rights were to be strictly construed. Nowadays, in terms of LOSC, the contiguous zone falls within the exclusive economic zone, eliminating the presumption. It is unclear what effect this change will have, but it is likely that the elaboration of protected interests and the inclusion of legislative jurisdiction may now be easier to defend than it was in the past.²²⁴

(b) Relevant principles.

Article 24(2) of TSC provides that the breadth of the contiguous zone is not to exceed 12 nautical miles from the baseline or, failing agreement to the contrary, not to extend further than the median line equidistant from the nearest points of their coasts where two states are opposite or adjacent to each other.²²⁵ Article 33 of LOSC sets the outer limit of the zone at twice the previous distance stating that

In a zone contiguous to the territorial sea, described as the contiguous zone, the coastal State may exercise the control necessary to prevent infringement of its customs, fiscal, immigration or sanitary laws and regulations within its territory or territorial sea.

The provision permits punishment of infringements of the aforementioned regulations. The following subarticle confirms that the contiguous zone's maximum breadth is 24 nautical miles from the baseline.

As far as *delimitation* of the contiguous zone is concerned, Article 24(3) provides that the zone may not, unless agreement to the contrary is achieved, exceed the median line equidistant from the nearest points of the states' coasts where the states are opposite or adjacent. The most

²²⁴ Ibid 118.

²²⁵ Article 24(3) TSC.

notable feature is the absence of a reference to 'special circumstances' permitting deviation from the equidistance method. The absence of a special circumstances exception does not appear to be a serious shortcoming. The contiguous zone regime is not as important to states as the territorial sea or shelf regimes. Important issues involving sovereignty and economic rights do not arise because it is a zone in which a state may only exercise specific jurisdiction. In essence it is a zone of the 'high seas'. If the contiguous zone is considered to be subsumed under the EEZ regime, then delimitation must also be effected in accordance therewith.

LOSC is silent on the subject of *delimitation* of the contiguous zone, the reason being in all probability that the EEZ delimitation would include contiguous zone delimitation in the area.

(c) Adjacent contiguous zone boundary between Namibia and South Africa.

Both TSC and LOSC prescribe a maximum belt for the contiguous zone, in the prior document 12 nm and in the latter, 24 nm. By what can only be presumed to be the result of an oversight, South Africa has claimed a contiguous zone of 200 nm in terms of the Territorial Waters Act 87 of 1963 as amended by the Territorial Waters Amendment Act 98 of 1977. Section 3 creates a fishing zone of two hundred miles from low-water mark. Section 4 provides that the Republic shall have the right to exercise in the fishing zone, ie in a 200 mile belt, *contiguous zone* capacities, namely the powers necessary to prevent contravention of any fiscal, customs, emigration, immigration or sanitary law. It is submitted that South Africa ought to tailor this contiguous zone claim in order to bring it into line with the 24 nm limit imposed by Article 33 of LOSC.

Regarding Namibia, Section 4(3)(b) of the Territorial Sea and EEZ Act of Namibia 3 of 1990 now provides

'Namibia shall have the right to exercise any powers which it may consider necessary to prevent the contravention of any fiscal law or any law relating to customs, immigration, health or the natural resources of the sea'.

Namibia creates this jurisdiction within its EEZ. It is clear however, that only natural resource jurisdiction is appropriate to EEZ jurisdiction. Article 33(1) of LOSC lists fiscal, customs, immigration and health jurisdiction as part of contiguous zone jurisdiction. It is beyond doubt that a state is not entitled to claim this kind of jurisdiction in its EEZ. International law, as represented by Article 33 of LOSC, does not permit contiguous zone jurisdiction beyond 24 nm from the baseline. As is the case with South Africa, it is suggested that Namibia might consider reducing its contiguous zone claim from 200 nm to the permissible 24 nm.

As discussed *supra*, only TSC makes provision for *delimitation* of the contiguous zone, prescribing use of the equidistant line in the absence of agreement to the contrary. The absence of a reference to special circumstances is notable. Article 33 of LOSC is silent on the topic since EEZ delimitation includes contiguous zone delimitation and the principles will be discussed under that heading *infra*.

- (d) Adjacent contiguous zone boundary between Namibia and the South African Islands.

The contiguous zone delimitation between the Penguin Islands and the Namibian mainland will depend on the exclusive economic zone delimitation. This means that the islands cannot have a contiguous zone which would overlap the

mainland's exclusive economic zone. As a result, the contiguous zone of the islands would be theoretical only in that it would be co-extensive with their territorial waters.

Namibia could of course claim a contiguous zone of maximum breadth, namely 24 nm from the baseline, excluding the territorial sea allotted to the islands. Where the islands interposed themselves, the Namibian contiguous zone would commence on the outer limit of the island territorial waters and would extend to a line 24 nm from the mainland baseline. This 'interrupted' strip of contiguous zone may not be contiguous to the territorial sea of the mainland as required by Article 33 of LOSC. It is submitted that though an interrupted strip of contiguous zone is unusual, the requirement of contiguity is not nullified thereby, there being a *continuous* strip, albeit narrower, where the territorial sea of the island must be accommodated.

The creation of the Namibian contiguous zone would not strictly be a matter of *delimitation* because once the spaces constituting the territorial sea, continental shelf and economic zone have been delimited, Namibia is entitled to create the contiguous zone unilaterally.

(e) Conclusions.

The equidistance line is the only principle regarding delimitation of the contiguous zone between adjacent states. Special circumstances do not authorize a modification of the line, the only alternative being agreement to the contrary.

LOSC is silent on this aspect, merely prescribing a maximum breadth of 24 nm. The delimitation of the contiguous zone between Namibia and South Africa will be included in the delimitation of the economic zones of the two states. It is submitted that neither Namibia nor South Africa's claims to a 200 nm contiguous zone is in harmony with the TSC or LOSC

and ought to be reduced to the prescribed limit of 24 nm.

The adjacent contiguous zone boundary between Namibia and the South African islands will depend on the exclusive economic zone delimitation between them. In principle, Namibia could claim the maximum breadth excluding the territorial sea allocated to the islands within that belt.

C Continental Shelf

(a) General

There are various sources of rules for the delimitation of the continental shelf including Article 6 of the Geneva Convention on the Continental Shelf (CSC), the provisions of LOSC and customary law as represented by state practice and the decisions of international tribunals. The exact extent to which the contents coincide or diverge is controversial.²²⁶

(b) Relevant principles

(i) Treaty provisions

1.1 Continental Shelf Convention (CSC)

Article 6 distinguishes delimitation between opposite and adjacent states. For opposite states, in the absence of agreement, the boundary is the median line unless another allocation is authorized due to features identified as special circumstances. Thus, as in territorial sea delimitation, the equidistance-special circumstances rule is applied.

In the case of adjacent states, Article 6 states that the boundary 'shall be determined utilizing a line equidistant from the nearest points on the baseline' unless an adjustment is made necessary due to the existence of special circumstances. As an equidistant line is less likely to produce appropriate proportions in the case of adjacent

²²⁶ O'Connell (n95) 684.

states than in the case of opposite states, the concept of 'special circumstances' requires further discussion.

Delimitation principles for opposite states on the one hand and for adjacent states on the other are not identical. O'Connell observes that the use of the word 'is' relating to opposite states and the words 'shall be determined' for adjacent states is relevant as it indicates the difference between a median line and a line of equidistance. A median line represents the half-way mark between opposite coasts whereas the equidistant line is a line running laterally at right angles to the baseline from which the territorial sea is measured.²²⁷

The dissimilar treatment of the two situations is evident in the term 'special circumstances'. According to O'Connell, the possible features qualifying as 'special' for shelf delimitation purposes are conceivably more numerous than those encountered for the purpose of territorial sea delimitation. Moreover, the potential special features are not as numerous for opposite state delimitation as they are for adjacent state delimitation of the shelf, the reason being that a median line division would normally yield appropriate proportions to opposite states anyway.²²⁸ Thus the expression 'special circumstances' does not have an identical content in the two paragraphs. If a median line between opposite states *per se* correctly yields appropriate proportions of the shelf to each party, then the corrective role of 'special circumstances' is a minor one.²²⁹ However, if an equidistant line between adjacent states carves the shelf up into inappropriate proportions, the corrective role of 'special circumstances' will be prominent.²³⁰

227 Ibid.

228 Ibid 685.

229 Ibid.

230 Ibid.

The lists of what may be special circumstances found in literature are no more than examples, such as coastline configuration, common mineral deposits, navigable channels, traditional fisheries, the presence of islands or rocks.²³¹ Many examples of special features relate to geographical circumstances, a wide concept including geological and geomorphological aspects.²³² The presence of islands, islets, low-tide elevations, potential cut-off effects, general direction of the coast as well as prospective delimitation lines with neighbouring third states have all been cited as special features capable of modifying a strict equidistance line.²³³ Navigation and fishing rights were specifically singled out at the Geneva Conference as examples, with cables, safety and defence requirements subsequently added to the list.²³⁴ Interesting examples such as historical background, the presence of offshore islands and common mineral deposits have emerged as remarkable features and will be discussed *infra*.

Historical factors as special circumstances are based on the theory that if a state has long enjoyed exclusive or particular benefits from an area, this fact could support its claim to the area in derogation of the standard rules. O'Connell observes that the difficulty associated herewith is that the shelf doctrine of 'inherency' is deliberately aimed against the operation of the ordinary rule on historic rights - what is excluded as a matter of *doctrine* cannot re-

231 Case Concerning the Continental Shelf (Tunisia/Libyan Arab Jamahiriya) 1982 ICJ Rep 18 at 75 para 102.

232 Ibid 57 para 66.

233 Ibid 62, 63 para 76,77; K Fu 'Equitable Considerations Taken into Account in International Ocean Boundary Delimitation Cases' (1986-1987) 6 CYILA 1 at 19. Bravender-Coyle divides special circumstances into Type 1 which includes islands, rocks and irregularities of coastlines and Type 2 circumstances, *inter alia* geology, geomorphology, economic interests, unity of deposits, security and defense. See (n212) 188-196.

234 O'Connell (n95) 704, 712, 713.

enter as an exception.²³⁵ This is the difficulty experienced with sedentary species. This appears to have been conceded by Tunisia in the Libya/Tunisia Case when it argued that no delimitation could encroach upon its historic rights regarding fisheries and sponges.²³⁶ The court confirmed that the continental shelf, in the legal sense, does not include the seabed areas landward of the outer limit of the territorial sea.²³⁷

A more settled example of an historical special circumstance is an existing treaty delimiting maritime spaces between contiguous states. An inconsistency between the line of equidistance and the technique of delimitation is a distinct possibility. If the territorial sea boundary is a projection of the land boundary or for any other reason departs from a right angle to the baseline at the point where the terrestrial boundary reaches the sea, there will be a discrepancy between the two lines. This cannot remain so, and it may well be a 'special circumstance' warranting the drawing of the line from the point where the territorial sea boundary reaches the outer limit of the territorial sea. It is not clear whether the definitive line will be one equidistant to the baseline or outer limit of the territorial sea or whether it will be a projection of the territorial sea boundary.²³⁸

Islands are not in themselves 'special circumstances'. Their location cannot be a special circumstance whereby they might be deprived of what would undeniably accrue to them. However, the locality might become a special feature if it distorts the line of equidistance, making restoration of rights to neighbouring states by means of adjustment the appropriate solution.

235 Ibid 713.

236 Libya/Tunisia Case (n231) 75 para 102.

237 O'Connell (n95) 713.

238 Ibid 714.

The problems created by the presence of islands usually arise when the formations straddle the median line, are on the 'wrong' side of the median or equidistant line or when they affect the axis of the equidistance line. There are four possible solutions. The islands can be ignored entirely and this generally occurs when they are very small and do not lie in a position where the boundary line would pass close to them. Alternatively, the islands can be semi-enclaved by deviating the boundary around them at a set distance such as the breadth of the territorial sea.²³⁹ Thirdly, the islands can be completely enclaved (usually with a 12 mile belt) when they lie too far on the 'wrong' side of the boundary as was the case in the Channel Islands Case.²⁴⁰ The enclave principle has been adopted in relation to the islands of northern Torres Strait which remain Australian territory with their territorial seas above a Papua New Guinean shelf.²⁴¹ However, unlike the Channel Arbitration, the uninhabited Australian islands which are enclaves in the Papua New Guinean seabed zone have been allocated only a 3 mile territorial sea and a shelf co-terminous with the territorial seabed.²⁴²

239 See discussion (2)(c)(i).

240 Channel Islands decision (n51). In this case, the fact that the islands were remote and disconnected from the coast of England was a special circumstance requiring qualification of the doctrine of natural prolongation. The case was subsequently criticized for the arbitrariness of the limit of 12 nm which the court drew around the islands - O'Connell (n95) 721. The court did however stress the peculiarities of the case, indicating that it may have made a difference if numerous islands were stretched out one after another long distances from the mainland. *In casu* the islands were practically in the arms of a gulf of another coast - 441 para 183.

241 R D Lumb 'Australia and the Law of the Sea : Recent Developments' (1980) 29 ICLQ 151 at 156.

242 Ibid 157. These allocations were agreed to in the Torres Strait Treaty signed in December 1978.

Fourthly, the islands can be given partial effect.²⁴³ The method of giving partial effect is used to determine the course of two strict equidistance lines, one of which takes the island into account and the other which does not. The partial effect line divides the area between the two lines in the desired proportion.²⁴⁴ Where the coasts are opposite each other, this produces a limited deviation of the boundary, but with adjacent coasts it results in an angular deviation which produces an increasing separation with distance.

Attempts have been made to establish objective criteria by which to assess the weight to be given to different islands in delimitation. This has not proved successful as there are simply too many variables such as size, location, population and economic importance. Lack of objective criteria coupled with the very wide divergence in state practice have so far defeated attempts to provide firm guidelines.²⁴⁵

Common mineral deposits have on various occasions been cited as special circumstances to be taken into account in delimitation disputes. In the North Sea Cases, the court described natural resources as a factor to be considered in the negotiations but did not go so far as to label them special circumstances.²⁴⁶ The judgement listed the natural resources of the continental shelf areas, *only so far as known or readily ascertainable*, as one of the factors to be taken into account.²⁴⁷ It is obvious that in the case of

243 Libya/Malta Case (n53) 1209 para 73.

244 Ibid; Beazley (n148) 335.

245 Ibid.

246 North Sea Continental Shelf Cases (n48) 54. In fact Judge Ammoun (at 149) stressed that if the preservation of the unity of a deposit was important to the parties, they were to make provision for this by voluntary agreement.

247 Ibid; S P Sharma 'The Relevance of Economic Factors to the Law of Maritime Delimitation Between Neighboring

adjacent states, unity of deposits is going to be an important factor.²⁴⁸ However, this was said because the court was addressing the *specific* situation which had arisen in the circumstances concerning exploration and exploitation licences granted by the parties in the area in dispute.²⁴⁹ It remains unclear whether the presence of cross-boundary deposits actually qualifies as a special circumstance.

According to O'Connell, the only occasion when mineral deposits could be regarded as special circumstances would be when interests in the resource have been established *independently* of the continental shelf doctrine.²⁵⁰ So if a state explores, discovers oil and opens a well in an area eventually found to be on the 'wrong' side of the equidistant line, it may have a claim to modification based on special circumstances. An even stronger case could be made out for deviation where the state had an established claim to sedentary fisheries, but in this case, 'special circumstances' is a mere paraphrase for 'vested rights' whose authenticity derives from other principles of law.²⁵¹

Common deposits have been dealt with in various ways such as providing for common ventures, joint exploitation with an equal sharing of income or a simple division of the recoverable oil. Another solution involves equitable sharing when part of the resource is irrecoverable in fluid form wholly or in part from one part of the divided area. Alternatively, provision has been made for exploitation to be subject to agreement with compulsory arbitration procedures to be followed where agreement is absent. These solutions actually avoid modification of the boundary and

States' in *The UN Convention on the Law of the Sea: Impact and Implementation* (1987) (Ed E D Brown and R R Churchill) 248 at 251, 252.

248 Beazley (n148) 329.

249 Ibid.

250 O'Connell (n95) 711.

251 Ibid.

therefore do not support the theory that common deposits are special circumstances as envisaged by customary law. Although it was accepted in the Libya/Tunisia Case that oil wells in the area of delimitation were an element to be taken into account in the process of weighing all relevant factors in order to achieve an equitable result, it was found that the specific dividing lines of the oil concessions represented an equitable solution anyway.²⁵² The court did however, highlight the potential relevance of the presence of natural resources to the delimitation process though no precise criterion was articulated to assess the degree of weight to be given to this factor independently or in relation to other factors.

Political, demographic and economic circumstances have thus far not been accepted as special circumstances. In the Libya/Tunisia Case, the court took the view, in response to Tunisia's pleading of its relative poverty compared with Libya, that economic factors could not be taken into account since they were variables which unpredictable factors might at any time cause to change.²⁵³ The chamber in the Gulf of Maine Case also dismissed socio-economic factors as not sufficiently special to determine the course of the line. Nevertheless, it was noted that economic dependence on a resource in the zone was relevant as an *ex post facto* test regarding the equitableness of the result but only to the extent that very severe economic dislocation might arise.²⁵⁴ The tribunal in the Guinea/Guinea-Bissau Case also rejected economics as a special circumstance. Both states were developing countries faced with immense economic and financial difficulties which an increase in ocean resources

252 Libya/Tunisia Case (n231) 77, 78 para 107.

253 Ibid 77, 78 para 106, 107; Beazley (n148) 330.

254 Gulf of Maine Case (n152) 1213 para 59, 1245 para 237; M D Evans 'Maritime Delimitation and Expanding Categories of Relevant Circumstances' (1991) 40 ICLQ 1 at 8,10,11,13,14,30.

could mitigate. The tribunal suggested that it would be unsafe to base a delimitation on such variable factors.²⁵⁵ Without doubt, the authorities have rejected economic factors *in general* as a matter to be noted in drawing an equitable boundary, but they may be used to evaluate the boundary as equitable or not. Account may be taken of certain more concrete factors like the existence of an oil well or an area that was habitually fished by one of the parties.²⁵⁶ This may be so because a concrete economic fact is less variable than an item as general as 'relative poverty'.

Another fairly recent example of a non-geographical factor considered relevant is state conduct. The allocation of a 12 mile shelf to the Channel Islands was based on prior French acceptance of a United Kingdom fishery zone.²⁵⁷ In the Libya/Tunisia Case, the court went even further by saying that conduct not even amounting to acquiescence could nonetheless be relevant as one of the 'indicia' of equity.²⁵⁸ This is one instance where a non-geographical factor had a role to play in the actual drawing of the line. Usually, it is the equity of the result which is tested in the light of any non-geographical factors. For example, in the Gulf of Maine decision it was solely as an *ex post facto* test that human and economic geography were considered.²⁵⁹

1.2 LOSC

1.2.1 Article 83(1)

The Law of the Sea Convention produced subsequent to UNCLOS III contains a fundamental change in the wording of the

255 Guinea/Guinea-Bissau Case (n145) 301 para 121, 302 para 122.

256 Beazley (n148) 330.

257 Channel Islands Case (n51) 434 para 143.

258 Libya/Tunisia Case (n231) 84 para 118.

259 Gulf of Maine Case (n152) 1244-1246 para 233-240. A similar approach was adopted in the Guinea/Guinea-Bissau Case (n145) 302 para 122.

formula for delimitation of the continental shelf. Article 83(1) provides

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

The International Court itself in 1982 commented that the new text of Article 83(1) excludes any indication of a specific criterion which could give guidance and noted that emphasis is placed on the equitable solution which has to be achieved. The principles and rules applicable to the delimitation of the continental shelf are those which are appropriate to bring about an equitable solution.²⁶⁰

What emerges is that delimitation is to be effected by agreement on the basis of international law as set out in Article 38 of the Statute of the World Court in order to achieve an equitable result. The content is notable firstly in stressing the requirement of an equitable solution and secondly because it confirms the existence of an obligation on the parties to a dispute to negotiate in good faith.

The settlement must produce an *equitable result*. No indication is given as to the factors to be considered in pursuing this equitable solution. No guidelines are offered as to the factors to be weighed in assessing whether a result is equitable or not. Article 83 excludes guidelines, describing only the kind of solution which has to be achieved. It does not spell out the principles and rules to be followed in order to achieve this kind of result. The

260 Libya/Tunisia Case (n231) 49 para 49; B H Oxman 'The Third United Nations Conference on the Law of the Sea: The Tenth Session (1981)' (1982) 76 AJIL 1 at 14, 15; J Symonides 'Delimitation of Maritime Areas between the States with Opposite or Adjacent Coasts' (1984) 13 PYIL 19 at 37 note 44.

goal is set, but Article 83 is silent as to the method to be followed. In fact, Article 83 does not even explicitly require that the matter be decided in accordance with equitable principles. The result must meet a quality standard and Article 83 embraces that requirement without indicating *how* it must be achieved. It is clear that detail on these silent issues must be sought in the decisions of courts and arbitral tribunals, in other words, in international customary law.²⁶¹

1.2.2 Article 121(3)

1.2.2.1 General

Article 121(2) confirms that islands are not treated any differently from mainland coastal states. Islands can generate exclusive economic zones and continental shelves just as land territory can. Subarticle (3) provides the exception stating that

Rocks which cannot sustain human habitation or economic life of their own shall have no exclusive economic zone or continental shelf.

The question whether the twelve South African islands were legal islands as defined in Article 121(1) has been discussed, and the conclusion reached was that all twelve offshore formations meet the requirements set, are thus islands in the legal sense and are in principle entitled to the full spectrum of sea spaces. The question now arises whether these islands are rocks within the meaning of Article 121(3) and whether this subarticle reflects customary law or not.

Though a formation may be an island, if it is also a rock it cannot have an exclusive economic zone or continental shelf of its own. To be a rock, negative characteristics must be established. Firstly, the rock must not be capable of

261 See discussion (3) C (b) (ii) *infra*.

sustaining human habitation and/or must be unable to support an economic life of its own. These aspects are not cumulative. One capacity saves the formation from being a 'rock'. For example, if the formation is capable of habitation but has no economic life of its own, it is not subject to the exception and it may claim all permissible maritime zones.

Unfortunately, the term 'rock' is not clearly defined, an omission which has invited criticism. Nevertheless, it would be fair to assume that because the term 'rock' is used and not the word 'island' as has been done in the preceding paragraphs, the concept of a rock must be different and more limited than the concept of an island. This means that an island which is not merely a rock can generate a shelf and economic zone even if it cannot sustain human habitation or an economic life of its own. An island does not become a rock merely because it is uninhabitable with no independent economic life. On the other hand, the incapacities do not deprive a rock of its insular status for purposes other than the claim to a shelf and EEZ. The rock remains entitled to the other recognized maritime zones.

A rock is more limited, something less than an island and its size (which played no role in achieving island status) will be important in assessing whether an island is also a rock or not.²⁶² Hodgson's definition of a rock as being less than 0,001 of a square mile may give some guidance.²⁶³ The author distinguishes between rocks, islets, isles and islands. The question he poses is whether islets (more than 0,001 but less than 1 square mile) and isles (larger than 1 square mile but less than 1000 square miles) would be rocks. It appears that this definition of a rock is that intended by Article 121(3). The isles and islands in excess of 1

262 Hoffmann (n16) 46; Symmons (n47) 41.

263 Hogdson (n57) 150, 151.

square mile would not normally be rocks. Islets larger than half a square mile would not be rocks whereas those closer in area to a rock size would probably be a rock.

Do geological criteria have any role to play in determining what a rock is for the purposes of the exception? An island must be land ie dirt, rock, organic matter or a combination thereof.²⁶⁴ Perhaps 'rock' ought to be interpreted in a broader sense than merely the geological one. The concept ought rather to be associated with the criteria of size and capacities.

The first capacity is the sustenance of human habitation. Various proposals on the topic emerged at UNCLOS III. The United Kingdom advocated a 'capacity for habitation' rather than the fact of habitation itself as the vital element, a suggestion which received favourable comment.²⁶⁵

The next step involves identifying a criterion for establishing potential habitability and one suggestion is the availability of an indigenous source of fresh water. On this topic, there may be doubt as to whether an island can sustain human habitation where, even though the formation may be manned all year round by meteorologists or people manning communications stations, they are '...dependent on the outside world for almost everything'.²⁶⁶ A water source would be a necessity if any longterm habitability was planned in the absence of providing other capital intensive

264 Ibid 148.

265 Symmons (n47) 49; Hoffmann (n16) 42; Brand (n72) 98; P M S Monteiro 'Marion and Prince Edward Islands : The Legal Regime of the Adjacent Maritime Zones' (1987) 5 Sea Changes 63 at 85; Y Ma 'The East Asian Seabed Controversy Revisited : Relevance (Or Irrelevance) of the Tiao-yu-t'ai (Senkaku) Islands Territorial Dispute' (1982) 2 CYILA 1 at 29, 30.

266 R R Churchill 'Maritime delimitation in the Jan Mayen area' (1985) 9 No 1 Marine Policy 16 at 20; Hodgson (n57) 146.

sources of water such as desalination plants.²⁶⁷ Hodgson notes that the Jarvis Islands of the United States of America cannot sustain a permanent population due to the lack of, *inter alia*, potable water. It appears then that an indigenous source of fresh water would indicate that an uninhabited island could sustain human habitation and therefore generate a continental shelf and EEZ.

What is the legal position of those islands which are inhabited where the means used to sustain human habitation are imported and require capital intensive expenditure? The formation may be inhabited but it is not able to sustain habitation itself, creating the need for artificial means at substantial and unnatural expense. Actual habitation does not *automatically* imply that the formation is capable of habitation.²⁶⁸ If the objective ability to sustain habitation cannot be established, then the fact of actual habitation will not be relevant for the purpose of establishing claims to a shelf and exclusive economic zone.

The second capacity an island must possess in order to avoid classification as a rock is an ability to sustain an economic life of its own. Once again, little guidance is evident from the subarticle itself as to the exact meaning thereof. The requirement 'of its own' indicates that the formation must have some economic significance apart from the state of which it forms a part. Furthermore, the economic significance must be that *of the formation itself* and not that of the surrounding zones it is trying to generate apart from the territorial sea. It would be contrary to the purpose of Article 121(3) to argue that it is the EEZ or continental shelf which enables the formation to claim an economic life of its own. If this was possible,

267 Monteiro (n265) 85; Ma (n265) 31, 32.

268 Ibid 32; Brand (n72) 98, 99; Hoffmann (n16) 41 does not agree.

every formation of whatever nature and size would have a potential economic life of its own if each time a 200 mile EEZ and shelf, with all their potential resources, were to be considered regardless of the formation's other resources.²⁶⁹

What consequences arise if the economic benefits of an uninhabited (but one capable of habitation) formation are reaped by the coastal state? Would the economic requirement be fulfilled? A plausible interpretation of the phrase 'of its own' is that the resource must at least be economically capable of exploitation by a permanent island population.²⁷⁰

Thus a formation with a potential economic life based on its own land-based resources or those of its surrounding territorial seas can, in principle, claim a continental shelf and EEZ. The question of resources based in the surrounding territorial seas is not an issue beyond doubt as the same argument as was applied to the shelf and economic zone of the formation could be applied in relation to the territorial sea. However, the thrust of subarticle (3) is to limit claims to the extensive 200 mile zones and not to require proof of economic and habitation potential in order to sanction claims to a territorial sea.

What constitutes economic life? What activities qualify as economically orientated? During negotiations at UNCLOS III,

²⁶⁹ Ibid 44; Symmons (n47) 52. Though it may be argued that a rock which can serve no function in the economics of the sea should therefore not be able to impose a regime upon it, this does not represent current international law - Symmons (n47) 51. The failure to define criteria such as 'habitability' and an 'economic life of its own' has been criticized - see H D Hedberg 'A Critique of Boundary Provisions in the Law of the Sea Treaty' (1983) 12 No 3, 4 ODIL 337 at 340, 341.

²⁷⁰ J M van Dyke and R A Brooks 'Uninhabited Islands: Their Impact on the Ownership of the Oceans' Resources' (1982-1983) 12 ODIL 265 at 286, 287; Brand (n72) 100.

Turkey proposed that the presence of lighthouses, military or police installations did not give sufficient economic life to a formation.²⁷¹ It is submitted that these installations are not economically orientated at all, much less that they have the potential to serve such purposes. They are not economic resources. There cannot be any 'export' from the formation which might enable it to support economic life for an island population. Their presence simply does not indicate any economic viability on the part of the formation. The installations do not give the formation the required economic life of its own and an economic zone and shelf cannot be claimed on the basis of the presence of installations of this nature. A stronger case for economic viability arises when the installation is supported by the presence of service industries.

In a similar vein, the mere availability of natural resources at one time or another such as guano deposits or living marine resources, is not, on its own, sufficient to meet the economic requirement. 'Of its own' implies the presence of a resource in such quantities, capable of renewal in such a manner as to be capable of generating economic activity on an on-going basis. The mere fact that the resource has been harvested at one time and is capable of that activity in the future is hardly an on-going economic activity.

1.2.2.2 The South African Islands and Article 121(3)

Hollamsbird has been described as uninhabited, inaccessible and consisting entirely of loose blocks of red brown granite, basalt and lava piled on one another, the highest points 40 feet above the sea.²⁷² The island is extremely small with an area of 1,1 ha.²⁷³ According to this

271 Hoffmann (n16) 43.

272 Green (n80) 139.

273 Hoffmann (n16) 143.

description, Hollamsbird appears to be a rock; geologically speaking too since it consists of the tips of rock reefs sticking out of the sea. The size of the formation also adds to its rocklike qualities. It is thus a rock as envisaged by Article 121(3).

Can Hollamsbird sustain human habitation? The requirement refers to capacity. The fact that it is uninhabited is not relevant, though some commentators suggest that the fact confirms the capacity.²⁷⁴ This rock has been described as one of the most inaccessible 'islets' in the world mainly due to the dangerous surf, gives no shelter worth mentioning and offers no indigenous supply of water or food.²⁷⁵ The minuscule size also casts doubt on the capacity to support human habitation. The factors pointing to absence of this capacity far outweigh factors to the contrary such as the presence of a watertank which, in any case, may have been 'imported', thus maintaining habitation unnaturally, though this conclusion has been disputed.²⁷⁶

Can Hollamsbird sustain an economic life of its own? This capacity must emanate from the rock itself or its surrounding territorial seas. The rock is a seal-breeding habitat with some guano deposits while the fishing resources in the 12 mile zone are an undisputed economic asset since the waters of the West Coast abound with marine life.²⁷⁷

274 Ibid 155, 156.

275 Ibid 143, 144, 156.

276 Ibid 156.

277 Ibid 143; Ma (n265) 29, 30, 33; Jurgens Report (n81). According to statistics in South African Shipping News and Fishing Industry Review (1989) 44 No 3 at 38, the 1988 Namibian handline and small net catch totalled 881 tons while the trawl catch amounted to 29 710 tons. Van Dyke and Brooks, discussing French claims to an EEZ and shelf around Clipperton Island, note that "...it would be difficult to show that the island has in fact sustained a population and an economic life of its own from its guano. Very small communities lived together in uncertain conditions. The island does not appear to

Potential diamond, oil and gas deposits exist. However, the guano resources are limited, diamond, oil and gas resources merely speculative. The fishing resources occur in a limited area and are not sufficiently substantial to support a claim to an economic life of its own.

The rock meets all the requirements of Article 121(3) and is not entitled to a continental shelf or EEZ.

From the description 'like a tip of a mountain sticking out of the sea', Mercury appears to be a rock.²⁷⁸ No soil is found there and human mobility is limited to some 30 feet in one flat space, the entire island being 3 hectares in area. Mercury is therefore a rock.

Though formerly inhabited, the island is now only occasionally inhabited by guano collectors, the only structures being watertanks and two houses.²⁷⁹ The fact of habitation is not definitive as it may be sustained unnaturally. This is the case with Mercury, so the capacity as such is absent.

Has Mercury an economic life of its own? The average annual guano harvest is 470 tons, the fishing resource in the 12 mile territorial sea and the potential oil, gas and diamond deposits are economically orientated. There are two substantial and existing resources of note, namely the fishing potential (particularly rock-lobster) and the guano. In theory, Mercury appears able to support an economic life of its own. This entails the support of a permanent and stable population. However, there is only an area of 30 feet flat enough for this purpose. No more than a few

have 'an economic life of [its] own' today, and it is doubtful whether anyone ever made any profit from its guano". See (n270) 287.

278 Hoffmann (n16) 144.

279 Ibid 145.

people could live there. Though Mercury has the potential to support a population based on its resources, in practice there would be no population to be so supported.

Mercury is a rock, incapable of sustaining human habitation or of having an economic life of its own. The maritime zones generated by this rock do not include an EEZ or continental shelf.

The area of Ichaboe island is 6,5 ha and the island is made up of slate, stone and quartz. It is therefore a rock within the meaning of subarticle (3).

Ichaboe is permanently inhabited by an overseer and seasonally inhabited by large numbers of guano workers.²⁸⁰ There are several houses and storerooms clustered together. Other than that, very little shelter is offered and accessibility is limited because of adverse geological conditions.²⁸¹ In these conditions, human habitation can only be maintained artificially and at considerable expense since there is no indigenous source of fresh water. Though Ichaboe appears more hospitable than Hollamsbird or Mercury, the capacity to sustain human habitation cannot be firmly established.

Ichaboe yields 2000 tons of guano annually which is as much as all the other islands together and recent guano concessions have been granted, giving the activity an ongoing quality.²⁸² Rock-lobster are found in the territorial sea as well as potential oil, gas and diamond resources.

280 Ibid 146, 147; Nathan (n6) 38, 39; Annual Report (1986) No 54 Chief Directorate Marine Development (Department of Environment Affairs) 29,30.

281 Green (n80) 78; Green (n141) 86.

282 Hoffmann (n16) 146; The History of the African Guano Trade, from Ichabo, and other parts of the African Coast, with the Proceedings of the Committee of Management (n5) 6; Annual Report (n280) 29,30.

Ichaboe has substantial, existing resources which give it an economic life of its own. Article 121(3) does not apply and Ichaboe may claim the full spectrum of maritime zones, including an EEZ and continental shelf.

Penguin Island lies approximately 800m south of Seal Island and has a surface area of 36,4 ha.²⁸³ It consists of whitened boulders and is described as a bleak place without much birdlife.²⁸⁴ In view of its size it is a rock for the purposes of Article 121(3).

Penguin Island was at one time inhabited as evidenced by usable water tanks. It has a boat harbour and sheds and lies in the accessible waters of Lüderitz Bay. Human habitation can however only be maintained by artificial means as there is no natural supply of fresh water. Naturally, being so close to Lüderitz Bay reduces the expense of artificial maintenance but the fact remains that the rock itself cannot support human habitation.

The guano takings from Penguin and Seal together average a mere 40 tons and have not been harvested since 1984.²⁸⁵ The island is located in Lüderitz Bay, and it has been suggested that the territorial waters of Penguin Island include a corridor of territorial sea leading to the open sea in order to avoid enclavement. It was also submitted that the increase in territorial sea needed to create this corridor be offset by an appropriate decrease of the territorial sea band on the opposite side of the island. The fishing resource in these limited waters is meagre. Sporadic scientific activities on the island are not economically orientated. In view of the limited resources, it cannot be said that Penguin Island generates an economic life of its

283 Hoffmann (n16) 147.

284 SASD (n24) 42.

285 Hoffmann (n16) 148 note 444; Annual Report (n280) 29.

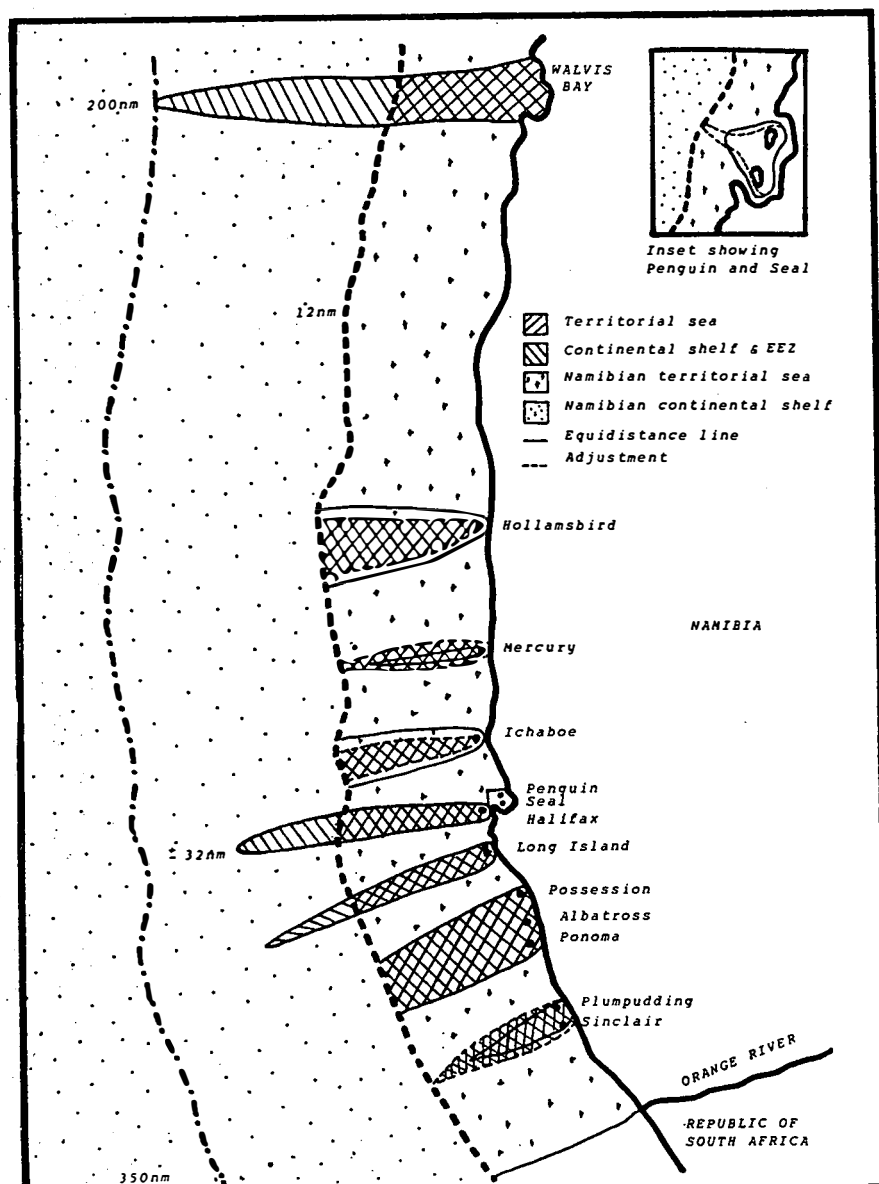
own.

Penguin Island is a rock, and neither of the two capacities can be established. No EEZ or continental shelf can be claimed as permissible zones. Moreover, Penguin Island is an enclave surrounded by Namibian territorial waters. It can, on these grounds too, have no claim to zonal extensions beyond its own territorial sea.

The island alongside Penguin Island in Lüderitz Bay is Seal Island. As it comprises 44,5 ha it is a 'rock' and its potential to generate extended zones must be examined. The island is uninhabited though there are water tanks.²⁸⁶ Human habitation is only possible using artificial means as there is no fresh water supply. This rock does not fulfil the habitation requirement.

Seal Island has an insignificant guano resource and a limited fishing resource in its territorial waters. It does not appear to have an economic life of its own. As is the case with Penguin, it is an enclave surrounded by Namibian territorial waters and it cannot extend its own maritime space beyond its territorial waters. The extended zones of the continental shelf and economic zone are not possible extensions here.

D1



[D1 is not drawn to scale and has no geographic relevance.]

The fact that Halifax is only 8,1 ha and has no plant life makes it unquestionably a 'rock'.²⁸⁷ It was inhabited at some time, a small house and wooden shacks in a derelict state bearing testimony to that. However, no fresh water supply is available and human existence could only be possible by artificial means.

287 Ibid 148.

The annual guano harvest averages 600 tons.²⁸⁸ Fish resources in the territorial sea are available and potential diamond, oil and gas deposits exist. The cumulative effect of available economic resources lead to the conclusion that Halifax Island is able to sustain an economic life of its own. This island may be a rock, but it displays positive characteristics of habitation and economic resources and is therefore entitled to an EEZ and a continental shelf.

The group of Long Islands has been described as 'low rocky ledges' and as a group of 'continuous rocks'.²⁸⁹ These islands are rocks within the context of Article 121(3). There are no huts or shacks on the islands and watchmen have had to live in a boat. Human habitation is clearly not possible.²⁹⁰

Sealing is the main economic activity, the quantity of sea-birds being small. In 1985 the seal quota was fixed at 6150 though fewer were harvested.²⁹¹ Even taken together with possible fishing resources in the territorial sea, it would not suffice to give the islands the ability to sustain an economic life of their own. Even if the scant resources could do so, no stable population could exist on these islands to be supported by these resources. Even if they could sustain an economic life of their own, in practice the requirement would not be met.

Long Island 'rocks' display both negative characteristics. There can be no legitimate claim to an economic zone or continental shelf according to Article 121(3).

288 Ibid 148, 149.

289 SASD (n24) 55; Rand (n24) 7.

290 Green (n80) 169.

291 Annual Report (1985) No 53 Chief Directorate Marine Development (Department of Environment Affairs) 23. In fact only 250 cows were harvested. There was no pup harvest owing to the lack of a market for the pelts.

Possession Island is the largest of the twelve South African islands with an area of 90,3 ha.²⁹² Though inhospitable, it does have a plant life - there are isolated bushes scattered about the sandy barren terrain.²⁹³ It can be distinguished from the other islands discussed so far. It alone boasts a plant life and its size is substantial. It is submitted that this island is not a mere 'rock' and it is entitled to an economic zone and continental shelf as all islands are in terms of Article 121(2).

Albatross Rock has been described as a 'ridge of volcanic islets and above-water rocks'.²⁹⁴ The area is small and it can reasonably be termed a 'rock' within the scope of Article 121(3). This rock has never been inhabited; there are no buildings.²⁹⁵ Albatross cannot sustain human habitation.

The resources consist of limited sealing and potential fishing resources in the territorial sea.²⁹⁶ Other potential resources include diamond, oil and gas deposits. However, the *existing* resources cannot create the capacity to sustain an economic life. As in the case of Mercury and the Long Islands, even if it was theoretically possible to do so, in practice it would not materialize for the simple reason that no permanent or stable population could live on Albatross Rock to be supported by the limited economic resources. Thus the exception applies, and Albatross Rock

292 Hoffmann (n16) 150.

293 Rand (n24) 6. Tenders for guano concessions for Mercury, Ichaboe, Penguin and Seal were invited by the Director of State Purchases and were awarded for a period of five years. The previous concessions expired on 31 December 1985. Possession Island was not included in order to allow the gannet population to recover after an alarming decline in numbers - Report (n291) 24.

294 SASD (n24) 63.

295 Hoffmann (n16) 152.

296 According to the Annual Report (n291) the seal quota for 1985 was fixed at 2660.

will be limited to a territorial sea zone only.

In view of Pomona's extremely small size, namely 32 ha and its nature - a collection of rocktypes, Pomona can be identified as a 'rock'. There is one building on the entire island. The size indicates that human habitation is not possible.

Concrete walls have been erected to protect the penguin breeding grounds and the resulting guano deposits. There are also fishing resources in the territorial sea. Thirdly, the surrounding sea is diamondiferous and there exists a possibility of oil and gas deposits. The existing resources of guano and fish give the rock an economic life of its own, but the size of the rock would negate the possibility of sustaining this economic aspect as no stable or permanent population could ever exist to be supported by the resources. Practically speaking, it cannot be said that Pomona meets the economic life requirements. The permissible maritime zones are internal waters and the 12 nm territorial sea.

Plumpudding has been represented as the 'rocky little island where it is impossible to excavate a grave'.²⁹⁷ The size alone, a mere 0,8 ha, makes it a 'rock'. Despite its minuscule size, it was inhabited at one time, but all that remains is a single, dilapidated building on an equally neglected landing stage. Plumpudding does not have the capacity to sustain human habitation.

Three economic resources can be identified. The seabirds provide guano but concessions are not being actively exercised due to research activities.²⁹⁸ Secondly, there

297 Green (n8)) 56; L G Green Islands Time Forgot, (1962) 28, 29.

298 Hoffmann (n16) 153, 154.

are fishing prospects in the territorial sea. Thirdly, the surrounding sea is diamondiferous. The *existing* resources give Plumpudding the required capacity but, due to the absence of a stable population, in practice this capacity cannot be manifested.

Plumpudding is a rock, incapable of sustaining human habitation in practice, though perhaps not in theory, incapable of supporting an economic life of its own. There will be no continental shelf or economic zone surrounding Plumpudding.

Sinclair Island is a 'rock only eight hundred yards long and about two hundred yards broad'.²⁹⁹ This description and the size, 2,2 ha, places it in the rock category according to LOSC. There is accommodation for a small, temporary staff but the rock is uninhabited. As a result, and because of its limited size, sustenance of human habitation is not possible.

Seal harvesting is an important economic activity with a seal quota of 5100 in 1985.³⁰⁰ The fishing resources in the territorial sea are limited. Diamond, gas and oil discoveries are possible. In theory, the *existing* resources could provide Sinclair with an economic life of its own but, as was concluded in the cases of Pomona, Mercury, Long Islands and Plumpudding, the theoretical situation cannot materialize in practice for no permanent or stable population exists to be supported by the resources.

Both negative requirements set out in Article 121(3) are evident. Sinclair's maritime zones will not include an economic zone or continental shelf.

299 Green (n80) 23.

300 Annual Report (n291).

1.2.2.3 Does Article 121(3) represent customary law?

If the provision reflects customary law then the islands classified as 'rocks' are not entitled to EEZ's and continental shelves irrespective of whether the states are party to LOSC or not. Before a rule establishes itself as one of general customary law, two characteristics must be identified. Firstly, the rule must manifest itself in the general practice of states. Secondly, the states which act in accordance with the general practice must do so in the belief that they are legally obliged or permitted to do so, the *opinio juris sive necessitatis*.

In 1976 Mexico passed domestic legislation declaring a 200 nm EEZ for its mainland and islands, excluding those islands incapable of maintaining human habitation or those which did not have an economic life of their own.³⁰¹ This is in harmony with Article 121(3). However, Mexico has used many minuscule islets in the Gulf of Mexico and Pacific Ocean to produce great bulges of EEZ additional to that generated by the mainland, the most extreme example being the Isla Clarion which pushes the Mexican Gulf EEZ out in a full 200 mile semi-circle seawards.

The British claim to a 200 nm fishery zone around Rockall, an uninhabited bare rock incapable of sustaining an economic life of its own, has been disputed by Iceland, Ireland and Denmark. The fact that this action has met with objection is further evidence of state practice in accordance with Article 121(3) though there are a number of cases indicating opposition to the adoption of such a general practice.

Rockall measures 80 feet x 100 feet at its base, is 70 feet in height and is situated in the Atlantic west of the Outer

301 Article 51 of Decree on The Federal Law of the Sea (1986) 25 ILM 899 at 896. Mexico ratified LOSC on 18 March 1983.

Hebrides which are off the Scottish mainland. It is uninhabited and incapable of sustaining an economic life of its own. The United Kingdom, which is neither a party nor signatory to LOSC, claims a 200 mile exclusive fishing zone around the formation, clearly at variance with Article 121(3) and an indication that the provision does not represent a general practice.³⁰²

The Rockall dispute has been partially resolved through negotiation with the signature of an agreement between the United Kingdom and the Republic of Ireland in November 1988.³⁰³ The continental shelf boundary in the vicinity of Rockall runs far closer to the formation than to any point on the Irish coast. This would suggest that Rockall has been discounted, largely or wholly, as a basepoint for the purposes of the shelf boundary delimitation.

Aves Island, a Caribbean atoll, consists of two protruberances joined by a sandspit and is a mere 3 metres at its highest point. It temporarily accommodates a small scientific research team. It has been used by Venezuela, a

302 E D Brown 'Rockall and the limits of national jurisdiction of the UK' (1978) 2 No 3, 4 Marine Policy 181 at 208-211, 275 at 289, 302, 303; C R Symmons 'The Outstanding Maritime Boundary Problems Between Ireland and the United Kingdom' in The UN Convention on the Law of the Sea : Impact and Implementation' (1987) (Ed E D Brown and R R Churchill) at 238, 239, 241.

303 'Current Developments' (Ed A V Lowe and C Warbrick) (1989) 38 ICLQ 413. The Agreement only deals with the shelf and is of course not binding on Denmark or Iceland. There is thus still the need for a boundary between the 200 mile fishing zones of Ireland and the United Kingdom which, at present, overlap in places. This boundary is important for enforcement measures undertaken by individual member states of the European Community's Common Fisheries Policy. It might be that the shelf boundary will come to be regarded as the fishing zone extent too, though it could be found that the 'stepped' (ie mostly following the outline of designated stocks on the shelf) boundary is inappropriate for a fisheries enforcement zone - *ibid* 416.

non-signatory to LOSC, to generate an EEZ in the Caribbean. The United States of America and France, by virtue of their sovereignty over areas in the region, have given tacit recognition to this claim. This example illustrates practice contrary to Article 121(3). S

Another example of acquiescence of a practice contrary to Article 121(3) involves Clipperton Island, a barren coral atoll about 1,6 km in area and situated 600 miles south of Acapulco in the South Pacific. Although it is not clear whether Clipperton Island is a 'rock' as envisaged by LOSC, it is doubtful whether it can support human habitation or maintain an economic life of its own. Nevertheless, France has declared a 200 nm EEZ around the island. France, like South Africa, is at present only a signatory to LOSC. If Clipperton Island is a 'rock' then acquiescence by other states represents state practice contrary to Article 121(3). S

Other examples of states declaring extended zones around islands which are arguably rocks include New Zealand which intends using all its islands to generate their own EEZ's. This gives New Zealand one of the largest EEZ's in the world as it involves distant islets south and west of the mainland such as Campbell Island and Bounty Island. Canada has extended its exclusive fishery limits to 200 miles using the uninhabited islet called Sable Island (which is no more than a long sandspit) as a basepoint from which to calculate the maximum distance.³⁰⁴

304 Symmons (n47) 127, 128. It is interesting to note that the Conciliation Commission did find that Article 121 represents customary law in the Icelandic-Norway Conciliation of May 1980 which dealt with delimitation of the Norwegian Island of Jan Mayen. See J Briscoe 'Islands in Maritime Boundary Delimitation' (1988) 7 Ocean Yearbook (Ed E M Borgese, N Ginsburg and J R Morgan) 14 at 36. S!

Before the Jan Mayen island dispute was solved by way of conciliation, it was argued by Iceland that Article 121(3) applied to Jan Mayen since its provisions had already become part of international law. The eventual agreement made no mention of this contention, confirming the view that state practice does not support the theory that the provisions of Article 121(3) have progressed beyond the status of treaty detail. S

Several observations can be made. Firstly, examples of state practice in conformity with Article 121(3) are too minor in the global context to constitute a general state practice. Secondly, an examination of general state practice indicates a tendency to contradict the rule laid down in subarticle 3. Thirdly, states do not consider themselves legally obliged to uphold the rule. Therefore Article 121(3) does not mirror international customary law since neither criterion, namely, a general practice of states nor *opinio juris* can be identified. S

In conclusion, it can be said that, at present, international customary law does not impose restrictions on the kind of island capable of claiming an EEZ and shelf. In fact, international customary law does not distinguish between islands and mainlands for this purpose. All islands, irrespective of size and capacity, can generate the internationally recognized maritime zones. The currently accepted definition of an island adopted by the 1958 Geneva Conference and by LOSC itself is declaratory of customary law and factors such as size, habitability and economic resources are at present not relevant in customary law. S

1.2.2.4 Conclusions

All twelve formations are islands as defined by Article 121(1).³⁰⁵ Nine of the islands were found to be 'rocks', CSD

305 If Pomona and Sinclair are not islands due to the CSD

'rock' being determined according to size, barrenness and inhospitability. All nine found to be rocks are without the capacity to sustain human habitation by natural means and/or incapable of supporting an economic life, in theory and in practice, of their own. In the case of Pomona, Mercury, Long Islands, Plumpudding and Sinclair, the incapacity to sustain an economic life is not evident in theory but emerges in practice. The resources must therefore support a stable community of people who use the ocean space.³⁰⁶ In the case of Seal, Penguin, Hollamsbird and Albatross, the inability exists both in practice and in theory.

Ichaboe, Halifax and Possession do not display the features necessary for implementation of the exception to the rule that islands are entitled to the same maritime spaces as a mainland. Possession is not a rock, making it unnecessary to apply Article 121(3). Halifax can support an economic life of its own. Ichaboe, with its prolific seabird population and considerable guano deposits, together with established crayfish resources within the territorial sea, is also capable of sustaining an economic life of its own.

Only with respect to Ichaboe, Halifax and Possession can the extended zones, namely, the exclusive economic zone and continental shelf be claimed. All the other islands, being rocks and displaying both incapacities, are restricted by narrower maritime spaces.³⁰⁷ This conclusion is based on the assumption that though Article 121(3) is not at present customary law, South Africa, as a signatory to LOSC, will not promote claims contrary to provisions contained in LOSC

presence of sandbanks they are mainland territory and the provisions of Article 121 are not relevant. See discussion (2)(c)(iv).

306 Brand (n72) 100.

307 These opinions are based on the physical and economic characteristics of the twelve Penguin islands as described in available literature and not on personal observations of the author.

while the Convention is not yet in force.

(ii) International customary law.

There have been six major judicial or arbitral decisions and awards on maritime boundaries beyond the territorial sea since 1969, decisions which have, by international standards, produced a substantial body of jurisprudence.

Article 6 of the 1958 Geneva Convention favoured the objective of legal precision by prescribing the use of the equidistance line unless an alternative method could be justified on the grounds of special circumstances. This rule was questioned in the first of the six major judgements, the North Sea Continental Shelf Cases of 1969 where the International Court of Justice denied it customary law status, advocating in its place a loosely defined framework of 'equitable principles'. Eventually, the 1982 LOSC replaced the equidistance-special circumstances rule with a vague provision calling for an 'equitable solution'.³⁰⁸ Recent decisions have confirmed that the law of maritime boundaries is essentially a matter of applying 'equitable criteria' of an open-ended character, none of them mandatory or universal.³⁰⁹ This approach has been criticized for manifesting an excessive degree of judicial discretion based upon a conception of equity that varies from case to case in '...accordance with whatever the judge may choose to dub an equitable result'.³¹⁰ However, in defence of the trend, Willis suggests that this lack of precision has been neither arbitrary nor accidental, stemming rather from a pragmatic recognition that the undisciplined vagaries of geography cannot be ordered readily by the law, much less reduced to some formula universally applicable.³¹¹ The reason for the fluidity is

308 Article 74, 83.

309 Gulf of Maine Case, (n152) 1219 para 81.

310 Willis (n146) 5.

311 Ibid.

simply that geographical phenomena cannot be forced into a set of predetermined rules.

1.1 North Sea Continental Shelf Cases. (hereinafter referred to as the North Sea Cases)³¹²

The dispute involved the delimitation of the continental shelf between the German Federal Republic and its neighbouring states, Denmark and the Netherlands. An equidistant line produced an unacceptable result because the concavity of the German coast drew the boundary lines on either side towards the coast of Germany, confining the area of the shelf to a relatively small triangle created by the convergence of the two lines.

The court recommended the adoption of an 'equitable' method of delimitation that would give effect to the natural prolongation of Germany's land territory out into the open waters of the North Sea. The legal basis for this approach emanated from customary international law, Germany not being a party to the 1958 Convention on the Continental Shelf.³¹³

The thrust of the decision is based on a divergence, perhaps conflict, between the equidistance-special circumstances rule embodied in Article 6 of CSC and customary law on the topic.³¹⁴ The overall effect of the decision was to postulate the existence of two contending systems of delimitation, creating a false dichotomy between the notions of equity and equidistance thereby contributing to the long and mostly unproductive debates between the 'equidistance'

312 North Sea Cases, (n48).

313 Ibid 25 para 26.

314 This view has been criticized because, in doing this, the court gave an unduly restrictive interpretation to the equidistance-special circumstances rule, focusing almost exclusively on the equidistance component and virtually ignoring the special circumstances feature which is, in fact, complementary according to Willis (n146) 8.

and 'equitable principles' camps at UNCLOS III.³¹⁵ (↓)

The court found that the shelf between opposite states can be claimed by each as a natural prolongation of its territory, and must be divided by a median should areas of overlap arise.³¹⁶ Furthermore, any islets, rocks and minor coastal projections were to be discounted in order to eliminate distorting effects.³¹⁷ Thirdly, the court confirmed the existence of obligations on the parties to enter into delimitation negotiations, to consider all relevant circumstances and to apply equitable principles for which purpose equidistance and other methods could be used.³¹⁸ Lastly, the shelf area as a natural prolongation of one state was not to encroach on the natural prolongation of the territory of another state.³¹⁹ SCOP JS

Several observations can be made. It would appear that the court found that the median line delimitation described in Article 6 is not prescribed for *adjacent* states by international customary law as it is for opposite states, the reason being the requirement that the median line must effect an *equal* division of the particular area. This kind of division will arise in the case of opposite states whereas it might not occur in the case of adjacent states in which event it will depend on the particular geographical circumstances.³²⁰ The court also gave directions regarding the factors to be taken account of in achieving the solution. These included the general configuration of the coasts, special or unusual features, physical and geological structure, natural resources and a degree of proportionality between shelf areas and coastline lengths.³²¹ In *casu*, a

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315 Ibid.

316 North Sea Cases (n48) 36 para 57.

317 Ibid.

318 Ibid 47 para 85.

319 Ibid.

320 O'Connell (n95) 685, 702.

321 North Sea Cases (n48) 54 para 101.

special circumstance justifying deviation from the median line was the presence of minor coastal projections.³²² Most importantly, the court concluded that Article 1 of CSC was declaratory of international customary law, and since the continental shelf is described as including areas adjacent to the coasts of islands it can be argued that, in terms of customary law, islands have continental shelves.³²³ SD

1.2 Arbitration between the United Kingdom of Great Britain and Northern Ireland and the French Republic on the Delimitation of the Continental Shelf (hereinafter referred to as the Channel Islands Case)³²⁴

A specially constituted Court of Arbitration was set up to delimit the continental shelf boundary between France and the United Kingdom, the complications being the presence of the Channel and Scilly islands. An allocation based on equidistance giving full effect to both groups of islands would clearly have prejudiced France. Both states were party to CSC.

The award was notable in that it represented a reconciliation between the conventional and customary law of delimitation since the tribunal concluded that the rules of customary law would, in the particular circumstances of the case, produce much the same result as Article 6 would.³²⁵ Both have the same object - the delimitation of the boundary in accordance with equitable principles.³²⁶ At the same time, the tribunal gave the equidistance-special circumstances a new lease of life, ascribing to it the meaning that delimitation must be equitable. In other words, equity and special circumstances refer to the same thing. Thus Article 6 and customary law are *ad idem* on this point.³²⁷ ↓
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322 Ibid 36 para 57; O'Connell (n95) 709.

323 Ibid 714.

324 Channel Islands Case (n51).

325 Ibid 420 para 65.

326 Ibid 422 para 75.

327 Ibid 421 para 70.

The tribunal accepted that delimitation was to be achieved by applying equitable principles, a concept identified as a fundamental norm. Furthermore, all the relevant circumstances were to be considered in assessing the appropriateness of any method *en route* to an equitable delimitation, emphasis being placed on the geographical circumstances, it being one of the means of evaluating an equidistance solution as equitable.³²⁸

The location of the Channel and Scilly islands constituted 'special circumstances' because of the effect their situation would have on the equitableness of an equidistance approach. In particular, the proximity of the Channel Islands to the French coast was sufficiently special to initiate modification of the equidistance method. Eventually, to avoid substantial diminution of the area which would otherwise have accrued to France, the Channel Islands were not given full effect.³²⁹ Without flinching, the tribunal denied the Channel Islands a natural prolongation (despite acknowledging the dominance of the aspect) on the grounds that the islands were situated close to another state and were remote and disconnected from the English coast.³³⁰ This was a 'circumstance creative of inequity' - a special circumstance in the language of Article 6, capable of qualifying the doctrine of natural prolongation.³³¹

The Channel Islands were not ignored altogether for delimitation purposes. A 12 mile continental shelf was

328 Ibid 424-425 para 87, 426 para 97.

329 Ibid 443, 444 para 195-197.

330 The tribunal did say that the concept of natural prolongation still applied to islands stretched out one after another at long distances from the mainland, but not to islands like the Channel Islands which were located practically within the arms of a gulf of another state. See 444 para 199.

331 Ibid 443 para 194; 444 para 197.

allocated to them, though it was made clear that this might not have been the case had the islands been independent.³³² ! ?

The tribunal, in dealing with the Scilly Isles, once again found that the median line, giving full effect to the islands, would be inequitable since the effect would be to deflect the equidistance line to the southwest, creating a degree of distortion.³³³ The presence of these isles were special circumstances, and the adjustment of the line took the form of abatement, the islands being given half effect.³³⁴ This means that two equidistance lines, one of which took the islands into account and one which ignored them, were drawn and the partial effect line was the one dividing the area between the two lines.³³⁵ >

The most outstanding feature of the award was the substantial assimilation of rules of customary law with the approach embodied in conventional law as contained in Article 6 CSC. S

1.3 Case Concerning the Continental Shelf (Tunisia/Libyan Arab Jamahiriya) (hereinafter referred to as the Libya/Tunisia Case.)³³⁶

The Libya/Tunisia Case of 1982 involved a continental shelf boundary dispute between two adjacent states, neither party to the 1958 CSC. The case was thus governed by rules of customary law. The problem was the location of the Kerkennah Islands off the coast of Tunisia which, if given

332 Ibid 442 para 186; 444, 445 para 202. This approach has been criticized as being arbitrary since it was settled at this distance on the grounds that this was the limit of fisheries jurisdiction. Treating the islands differently on the grounds of a temporary political situation, namely non-independence has also invited objections. See O'Connell (n95) 721, 722. X

333 Channel Islands Case (n51) 454 para 243, 244.

334 Ibid 455 para 249-251, 456 para 253.

335 Beazley (n148) 335.

336 Libya/Tunisia Case (n231). ✓

full effect, would have favoured Tunisia at the expense of Libya, it being alleged that the islands would have a disproportionately distorting effect on the median line. ↓

The court confirmed that equitable principles and relevant circumstances represented international customary law on the subject of delimitation of the continental shelf.³³⁷ Much discussion took place on the issue of the equidistance method, the viewpoint emerging that it is not a mandatory legal principle in international law for adjacent states, that it has no privileged status in comparison to other methods and that it may only be used if it leads to an equitable solution.³³⁸ } CSD
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The court then turned its attention to the concept of equity* after downplaying the role of natural prolongation, holding that the notion can relate to the means employed in achieving a result or that it can refer to the result itself. According to the court, it is the equity of the result which governs the process. The principles are therefore subordinate to the goal.³³⁹ The means only acquire an equitable character if the result is equitable. 750
It was also noted that a combination of boundary lines, some based on equidistance and others not, could be used to achieve this equitable result. C

The exact hierarchy of relevant circumstances which governed the solution was not revealed. The court took account of both geographical and historical factors, both being relevant from the point of view of equity.³⁴⁰ Cognizance was taken of factors such as the presence of islands, islets, low-tide elevations, bathymetric curves, potential cut-off effects, coastline irregularity, general direction S 72

337 Ibid 37, 38 para 23, 24.

338 Ibid 79 para 110.

339 Ibid 59 para 70.

340 Ibid 57 para 66.

of the coasts and future delimitations with third states.³⁴¹ However, economic circumstances were discounted, so Tunisia's relative poverty as against Libya was irrelevant.³⁴² CSD

Finally, half effect was given to the Kerkennah Islands by drawing a line parallel to the bisector of the angle formed by the lines representing the direction of the mainland Tunisian coast and the islands respectively.³⁴³ (+)

1.4 Case Concerning Delimitation of the Maritime Boundary in the Gulf of Maine Area (Canada v USA) (hereinafter referred to as the Gulf of Maine Case)³⁴⁴

This was the first case involving a single maritime boundary (SMB) for the economic zone and continental shelf. The area of delimitation was the Georges Bank, a resource-rich area lying just outside the Gulf of Maine. Both states were party to the 1958 CSC, and if the matter related exclusively to the continental shelf boundary, Article 6 would be mandatory and its equidistance-special circumstances rule would apply. However, the delimitation involved an SMB delimitation, ie one fixing a maritime boundary for all purposes such as a seabed and superjacent waters division. As the Convention made no provision for this situation, the solution was to emanate from customary international law.³⁴⁵ CSD
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341 Ibid 62,63 para 76, 77.

342 Ibid 77, 78 para 106, 107; Sharma (n247) 256.

343 Libya/Tunisia Case (n231) 67 para 88; 67-68 para 89, 89 para 129; L L Herman 'The Court Giveth and the Court Taketh Away : An Analysis of the *Tunisia-Libya Continental Shelf Case*' (1984) 33 ICLQ 825 at 830-832; D R Christie 'From the Shoals of Ras Kaboudia to the Shores of Tripoli : The Tunisia/Libya Continental Shelf Boundary Delimitation' (1983) 13 GJICL 1 at 28.

344 Gulf of Maine Case (n152).

345 Ibid 1219 para 81, 1226 para 125, 126. It was also noted that Articles 12 and 24 of TSC dealing with territorial waters and the contiguous zone could not be extended by analogy to apply to a 200 mile fishing zone and shelf. See 1225 para 120.

International customary law rests on a few basic legal principles which embody the guidelines to be followed in achieving an equitable result. The equitable criteria and methods to be used in pursuit of this kind of result are not specified, leading the chamber to state '...delimitation is to be effected by the application of equitable criteria and by the use of practical methods capable of ensuring ... an equitable result'.³⁴⁶

The parties agreed that an SMB ought to be determined by a fundamental norm which represents the legal conviction of the parties.³⁴⁷ This fundamental norm consists of a number of rules: no unilateral delimitation, negotiations in good faith to achieve agreement, recourse to third party on failure of agreement and the pursuit of an equitable result after considering the relevant circumstances, especially geographical factors.³⁴⁸

Once again, equidistance was not acknowledged as a customary law rule.³⁴⁹ The chamber concentrated on the feature of the SMB, finding no customary rules requiring the preservation of existing fishing patterns or the optimum conservation and management of living resources, nor that an SMB should exclude potential future disputes, nor that it should ensure non-encroachment on the coast of the other state.³⁵⁰ Though not identified as *rules*, it was conceded that the aforementioned factors could be equitable criteria.³⁵¹

The chamber's task therefore, was to examine the equitable criteria and practical methods and to select those which would propagate an equitable result. In theory, different

346 Ibid 1224 para 112.

347 Ibid para 111.

348 Ibid para 112.

349 Ibid 1226 para 124.

350 Ibid 1223, 1224 para 110.

351 Ibid.

methods could be used for the various zones as well as varying combinations of methods for different segments of the same line.³⁵² However, *in casu*, seeing it was the aim of an SMB to settle one boundary for two different zones, it was necessary to exclude any criterion exclusively bound up with only one of the areas, for example ecological management.³⁵³ Preference was to be given to neutral criteria appropriate for multi-purpose delimitation.³⁵⁴ Having said that, the chamber then singled out geographical criteria as being the most important, the purpose being the equal division of overlapping areas.³⁵⁵ The difference between the respective coast lengths, clearly geographical, was a relevant factor though it did not necessarily mean that the sea space at stake was to be divided directly in proportion to these coast lengths. The important point was to avoid disproportion.³⁵⁶

Finally, the task fell to the chamber of evaluating the equitableness of the result. In doing so, the chamber was not restricted to the circumstances which were equitable criteria, but could have recourse to new circumstances such as data drawn from economic and human geography.³⁵⁷ It was held that a result which yielded catastrophic repercussions for the livelihood or economic well-being of the population would be an inequitable one.³⁵⁸ This would be the case if the entire Georges Bank was allocated to one of the parties.³⁵⁹ The final boundary therefore, provided both states with sufficient opportunity to prospect the resources.

352 Ibid 1232 para 163.

353 Ibid 1233 para 168, 1237 para 193.

354 Ibid 1238 para 194.

355 Ibid 1238 para 195, 197.

356 Ibid 1236 para 185.

357 Ibid 1244 para 232.

358 Ibid 1245 para 237, 1246 para 238.

359 Ibid 1246 para 238.

1.5 Case Concerning the Continental Shelf (Libyan Arab Jamahiriya v Malta) (hereinafter referred to as the Libya/Malta Case)³⁶⁰

This dispute involved the delimitation of a very short coast in a perfectly opposite relationship with a very long one, the two being separated by nearly 200 miles of open sea. The question raised by this configuration was whether the ensuing disproportion justified redress of the median line favoured by Malta and, if so, to what extent.

The problems raised were numerous and included the distorting effect of the Maltese Islands lying south of the continental mass, the distorting effect of the Maltese island of Filfa situated south of Malta and the geographical feature that the shelf was interrupted by a rift zone lying nearer to Malta than to Libya. A division based on equidistance would clearly have favoured Malta.

Because Libya was not a party to the 1958 CSC, Article 6 was not applicable. Instead, the rules of customary law, including those provisions of LOSC already representative thereof, were to provide the legal framework from which the solution would evolve.³⁶¹ This initiated comment on Article 83 of LOSC, which emphasizes the kind of solution to be achieved and not the pertinent principles and rules. Article 83 sets the goal but is silent as to the method to be followed. Notwithstanding the fact that the article does not specifically state that the matter should be settled in accordance with equitable principles, the court had already found in the Libya/Tunisia Case that it was, in fact, bound to do so.³⁶² The parties agreed that whatever the actual status of Article 83, equitable principles were to be applied in the search for an equitable solution.³⁶³

360 Libya/Malta Case (n53).

361 Ibid 1197 para 26.

362 Ibid 1198 para 28, 1202 para 45.

363 Ibid 1198 para 29, 1202 para 45.

The coalescence of the EEZ and the continental shelf was discussed, the two institutions being 'linked' in modern law.³⁶⁴ Therefore the extent of the EEZ was to be reckoned with. It was stressed that the shelf is not absorbed into the EEZ as such, but that greater importance must be attributed to elements common to both zones, such as distance from the coasts.³⁶⁵ Furthermore, the concept of the EEZ was already established in customary law making it possible for a state to have a shelf without an EEZ but not the converse.³⁶⁶

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The court developed the theme of the complementary nature of the distance criterion and the doctrine of natural prolongation, noting that within a distance of 200 miles from the coast, shelf title is exclusively dependent on distance.³⁶⁷

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Attention was then focused on the equidistance line, which was once again found not to be obligatory even as a preliminary first step in drawing a tentative line - not even between opposite states.³⁶⁸

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As in the Gulf of Maine Case, it was the goal that was the primary element to be effected by the application of equitable principles. These are expressed generally by means of a list of examples, but there is no *numerus clausus*.³⁶⁹ Some circumstances do not qualify as 'special' such as the relative economic position of the two states.³⁷⁰

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364 Ibid 1199 para 33.

365 Ibid.

366 Ibid 1199 para 34.

367 Ibid 1199 para 34, 1200 para 39, 1210 para 77.

368 Despite evidence of at least 70 delimitations based on equidistance, the court found that this fell short of proving that equidistance exists as a customary rule - 1202 para 44.

369 Ibid 1202 para 46.

370 Ibid 1203 para 50.

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However, the natural resources of the continental shelf, as far as is readily ascertainable, can constitute relevant circumstances, as can security and defence interests.³⁷¹ Proportionality was identified as a relevant circumstance but not a method. This means that delimitation cannot refashion nature; the method must remain faithful to the actual geographical situation.³⁷² Using actual ratios of coastal lengths goes far beyond proportionality. Only significant differences in length may be taken into account as a relevant circumstance.³⁷³

The court proposed that the median line (since opposite states were involved) should be drawn as a provisional step only.³⁷⁴ Thereafter, all relevant circumstances were to be scrutinized in order to evaluate the result as, hopefully, equitable.

In casu, the first circumstance to be examined was the presence of the Maltese Islands. Their geographical location south of the general seaboard was a relevant circumstance.³⁷⁵ Thus a line closer to Malta than the tentative equidistance line should be selected. If Malta was a part of Italy and the delimitation was one between Italy and Libya, the boundary would have to take account of Malta and would be south of a median line between Sicily and Libya. Malta, as an independent state, could not be worse off than it would be as a dependent state.³⁷⁶

The median line between Sicily and Libya was postulated as the maximum seaward extension of Libya - its *nec plus ultra* even in the absence of the Maltese Islands, while the

371 Ibid 1204 para 51.

372 Ibid 1205 para 57.

373 Ibid 1205, 1206 para 58.

374 Ibid 1206 para 62-63, 1208 para 72.

375 Ibid 1207 para 67, 1209 para 73.

376 Ibid 1208 para 72, 1209 para 73, 74.

extreme north/south limits of the possible boundaries were fixed as the Libya/Sicily median line to the north and the Malta/Libya median to the south.³⁷⁷ In locating the Malta/Libya median, Filfla was discounted. The use of the 'sliding-median' technique involves establishing a true meridian between two opposite coasts followed by a shifting away of this line from the equidistant point to reflect a disparity in the lengths of the coasts.

1.6 Dispute Concerning Delimitation of the Maritime Boundary (Guinea/Guinea-Bissau) (hereinafter referred to as the Guinea/Guinea-Bissau Case)³⁷⁸

As in the Gulf of Maine Case, the issue here involved the determination of an SMB between two adjacent states. In contrast to the Gulf of Maine decision, the area comprised not only an EEZ and shelf area, but territorial waters too. The geographical reality was that the coasts of the disputants and that of Sierra Leone were entirely concave. Within this curve, the coast of Guinea-Bissau was convex and that of Guinea, concave. An equidistance line would produce enclavement to the obvious disadvantage of Guinea. Particular features included numerous offshore islands as well as the length of the respective coastlines.

The tribunal confirmed the goal to be one of an equitable solution.³⁷⁹ The factors to be considered in attaining a solution of this nature result from the circumstances of each case, and these factors are not obligatory nor restricted in number.³⁸⁰

Any delimitation intended to generate an equitable result cannot, according to the tribunal, ignore existing delimitations in the region, the so-called 'macro-

377 Ibid 1208, 1209 para 72.

378 Guinea/Guinea-Bissau Case (n145).

379 Ibid 289 para 88.

380 Ibid para 89.

geographic approach.³⁸¹ Furthermore, unless conclusive evidence was produced to prove coastline length, the states were assumed to have coastlines of the same length.³⁸² ①

Equidistance was identified as a method among many which may be used with no obligation on parties to do so.³⁸³ However, the intrinsic value of the method due to its scientific character and relative ease of application was noted.³⁸⁴ SUD
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In the circumstances, an equidistance line would enclave the middle country where the entire adjacent coasts of Guinea, Guinea-Bissau and Sierra Leone are concave. The correct approach was to view the West African region as a whole and to seek a solution taking the region's overall configuration into account.³⁸⁵ The outcome of the delimitation should be integrated into the present and future delimitations of the region as a whole. }

For the seaward portion of the boundary, the tribunal found it necessary to adopt the macro-geographic approach. What made this continental perspective necessary was the potential impact of a whole series of delimitations with and between third states up and down the West African littoral.³⁸⁶ A boundary line which failed to acknowledge the likely outcome of these future delimitations might end up seriously out of alignment and therefore inequitable.³⁸⁷ }

The potential of third party delimitations had previously been recognized as a relevant factor. It was decisive in the North Sea Cases, because of the combined effect of two separate equidistance lines and it played a major role in }

381 Ibid 291 para 93, 94.

382 Ibid 293 para 97.

383 Ibid 294 para 102.

384 Ibid.

385 Ibid 297 para 108.

386 Willis (n146) 28.

387 Guinea/Guinea-Bissau Case (n145) 297 para 108.

the Libya/Malta Case.³⁸⁸

Economic problems were not relevant circumstances because of their potentially temporary nature.³⁸⁹ Security and defence aspects were acknowledged as special circumstances though the shelf and economic zones were not strictly zones of sovereignty. In the end, the proposed solution did give each state control over maritime zones opposite its coast and in its immediate vicinity.

(iii) Summary of international customary law principles

What the six leading cases have established is that international customary law requires an equitable solution to be achieved by taking all relevant circumstances into account. Concerning the relationship between customary law and conventional law, it emerges that Article 6 of CSC, the equidistance-special circumstances rule, is declaratory of customary law in delimitations between opposite and adjacent states. This equidistance-special circumstances rule means that an equitable delimitation must be propagated. Hence Article 6 and customary law lead to the same result. Article 83 of LOSC, which also prescribes an equitable solution, is therefore already part of the corpus of customary international law.

Many factors, relevant in the search for an equitable solution, have been commented on and these comments can be categorised into rules, criteria, methods and results. The rules (sometimes called 'principles') are actual rules of international customary law to be applied in order to furnish an equitable solution. The principle of natural prolongation is based on the idea that a continental shelf is deemed to be the natural prolongation of a state's

388 Willis (n146) 29.

389 Guinea/Guinea-Bissau Case (n145) 302 para 122; Bravender-Coyle (n212) 194.

territory which means that the starting point for a shelf is the coast. This rule applies to islands too, although the Channel Islands were held to have no exclusive natural prolongation of continental shelf.³⁹⁰ The principle itself is impractical for it gives no clear guidance in arriving at the solution.

The distance principle in customary law refers to the maximum breadth of 200 nm for the EEZ. This distance criterion also applies to the continental shelf as, in this respect, it is also a principle of customary law. It follows then that geological and geophysical factors play no role in determining the shelf area within 200 nm from the baseline. The title depends solely on distance. Important though it may be, the distance factor does not have priority over the natural prolongation principle. The latter is not superceded by distance. Nevertheless, it is acknowledged that within 200 miles of the baseline, natural prolongation is defined in terms of distance.

Other rules include the principles that, in the same delimitation, the coasts can be opposite in some places and adjacent in others; that respective landmasses do not influence shelf delimitation; that the rift-zone argument - ie a break in the shelf terminates it - is invalid; that neither economic, human, geographical nor current socio-economic factors are to be considered due to their temporary nature.

Equitable criteria (also termed 'principles', 'factors' and 'special circumstances') must be taken into account for the purpose of arriving at an equitable solution. As to their nature, these criteria are not *per se* equitable. They only acquire that description if they generate an equitable result. There is no *numerus clausus* and these criteria are

390 Channel Islands Case (n51) 444, 445 para 202.

not obligatory since they do not reflect international customary rules in themselves. In addition, the relevant criteria vary from case to case, necessitating selection of only the *most* equitable or pertinent. It also emerges from the cases discussed that long-distance delimitation may demand wider choices of criteria than short-distance delimitation.

As to the specific categories of criteria, those extracted all appear to be geographical in nature, such as geographical situation, general coastline configuration, concavity and convexity, physical and geological structure, unusual features, variation in coastline length and the presence of islands. Other criteria selected are rooted in *economic* geography such as the natural resources of the continental shelf. Others⁽ⁱⁱ⁾ originate in *political* geography. For example, security and defence considerations can play a role when delimitation is sought near the coast, and the political independence or otherwise of an island can be contemplated.

The third category of comments, the methods or 'means', relates to the methods employed in fixing the shelf boundary once the equitable criteria have been selected and considered. There are no legally preferred methods, a recurring theme ever since the North Sea Cases. The courts and tribunals have been vigilant in affirming their freedom of selection of method. However, in a certain sense, the choice is constrained. In the Gulf of Maine Case it was stressed that the method chosen must be consistent with the 'equitable criteria' identified by the court as decisive in the circumstances of the particular case - the methods must be chosen which are suitable for giving effect to the criteria.³⁹¹

391 Willis (n146) 49; Gulf of Maine Case (n152) 1239 para 199; D Pharand 'Delimitation of Maritime Boundaries : D

Guidelines for the selection of the appropriate method call for selection of the most practical method or methods in the particular case and emphasize the necessity of a wider choice of methods for long-distance delimitation than in the case of short-distance delimitation.

Specific methods include the method of apportionment. This method deals with equal division of the general area and is inherently equitable where marine spaces overlap and is often appropriate in delimitations between opposite states.

No other method has invited the judicial and academic comment that equidistance has. Equidistance has, via the cases, emerged as simply another method which, like any other method, can only be applied if it leads to an equitable solution. It is not a mandatory method or 'rule', and does not have privileged status over any other methods, not even in the first provisional step of tentative

Continental Shelf and Exclusive Economic Zone in Light of the Gulf of Maine Case, Canada v U.S.A.(1984)' (1985) 16 RGD 363 at 385, 386.

delimitation. Whether equidistance is equitable depends on the geographic situation. It can of course be used in conjunction with other methods (if) the end result is an equitable solution. Equidistance's intrinsic worth lies in its scientific value and ease of application, responding as it does in a scientifically predictable manner to configuration of the coasts. CCCSD
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The method or means of proportionality is based on the notion of allocating the shelf in proportion to the respective coast lengths, landmasses being irrelevant.³⁹² Proportionality is not a rule of law in the sense of being obligatory. It is not really a *method* in its own right.³⁹³ Proportionality is not a mathematical concept. It is legal proportionality which simply means that *disproportion* is to be avoided. Only substantial and significant differences in coastal lengths can possibly lead to disproportion and anything less can be discounted. Both the Libya/Malta and the Gulf of Maine decisions use the term 'proportionality' to illustrate the technical operation of applying it as an *ex post facto* test of the result produced. The Libya/Malta Case also provides an example of the equity of the dividing line, the court stating

'Since ... the essential aspect of the criterion of proportionality is simply that one must compare like with like... This result, taking into account all the relevant circumstances, seems to the Court to meet the requirements of the test of proportionality as an aspect of equity'.³⁹⁴

392 Differences in coastal lengths is the relevant point and if the lengths cannot be established they are deemed to be the same. See Guinea/Guinea-Bissau Case (n145) 292, 293 para 97; Bravender-Coyle (n212) 185; Devine (n213) 136.

393 Willis (n146) 44; Herman (n348) 846-848. The shape and direction of the line are determined by other factors while proportionality is invoked for the purpose of determining the position of the line so devised.

394 Libya/Tunisia Case (n231) 91 para 130, 131.

Even those who argue that proportionality ought not to be confined to an *ex post facto* test of the result concede that, since it is not a method by itself, if it is to feature as a relevant circumstance in drawing the initial line, it must be applied in conjunction with some other method.³⁹⁵ It is in this sense that coastal length, and hence proportion, was described as an 'auxiliary criterion' in the Gulf of Maine Case, and as a 'corrective' in the Libya/Malta Case.³⁹⁶ The initial shape and direction of the line are determined by other factors, in particular the configuration of the coasts, while proportionality is invoked for the purpose of establishing the *position* of the line so devised.³⁹⁷ Thus the most recent cases have mentioned a two-stage operation, the first being a provisional delimitation and the second a correction.³⁹⁸

The method of abatement consists of eliminating the distorting effect of rocks, islets and minor coastal projections. Substantial diminution of coastal shelf areas as a result of the presence of islands is to be avoided by applying 'reduced effect' techniques. These techniques involve the attribution of half (or less) effect to an island or promontory in constructing an equidistant line and were first applied in the Channel Islands Case to the Scilly Isles. Subsequent practice, eg Kerkennah Islands in the Libya/Tunisia judgement, confirms that the technique can be

395 Willis (n146) 44.

396 Gulf of Maine Case (n152) 1242 para 218; Libya/Malta Case (n53) 1205 para 58.

397 Willis (n146) 44. It is often difficult to determine what seaward limit is to be used, and the proportionality test is best used in clearly defined closed areas. Recent decisions have used a variation when dealing with open areas. After the ratio of the relevant coastlines is calculated, linear measurements have been used to assess the appropriateness of the line under consideration. See J I Charney 'The Delimitation of Ocean Boundaries' (1987) 18 ODIL 497 at 515, 516.

398 Gulf of Maine Case (n152) 1241 para 215.

used in connection with other methods and, taken to the extreme, it could mean that a particular island is ignored altogether. 'Half-effect' and 'no effect' are by no means the only techniques available for reducing the effect of a geographical feature. Another alternative is the enclave approach followed in regard to the Channel Islands where a belt of water was created around the islands. The 'sliding meridian' is another technique used to effect abatement, as was done in the Gulf of Maine Case and the Libya/Malta decision discussed *supra*.

The fourth category of comments, the results or 'goal', involves an assessment or evaluation of the solution. In evaluating the result, account may be taken of equitable criteria based on physical, economic and political geography. However, the equitableness of the result may also be examined using other criteria or tests which can *only* be used for this evaluation and may not be used as 'relevant' circumstances.

Considerations founded on economic and human geography may be used to judge the equitableness of the result. If the result, for example, produces serious economic repercussions for one of the states it will be an inequitable solution. The inequity would naturally be even more obvious if the result is accompanied by catastrophic repercussions for the livelihood or economic well-being of a population.

Proportionality in relation to coast length may be used to gauge the equitableness of a solution. If a state is denied control of maritime areas opposite its coast, the result may be inequitable from a security point of view. Similarly, a solution resulting in enclavement is not an equitable one. An equitable result is one which has been reached after existing delimitations in the region have been considered.

(iv) Comment on summary.

The law as stated in the recent decisions of the World Court and various tribunals may lack *precision*. Nevertheless, when the cases are examined, it becomes clear that the 'factors', made up of rules, criteria, methods and results that have motivated the decisions are legal in character and that the range of outcomes has been kept within reasonable bounds.³⁹⁹ There has not been a wholesale abandonment of legal standards. The law has not dissolved into an arbitrary and subjective exercise of *ad hoc* discretion, nor has it produced a definite body of precise rules.⁴⁰⁰ The reality lies somewhere between these two extremes.

The jurisprudence has kept its foothold in the law because the concept of *title* is the crux. In other words, the discretion exercised by the courts has been confined and guided by the notion of *title*.⁴⁰¹ Secondly, a fair number of specific criteria giving the law some degree of substantive content and predictability has emerged from the decisions. But that is far from saying that the goals of consistency and a substantial degree of predictability have been achieved. Firstly, there are no prescribed or even legally preferred methods. Secondly, the rejection of equidistance as a first choice method has left a gap in the law, giving rise to the opinion that the three World Court judgements in the 80's were *ad hoc* improvisations worked out in the face of this gap.⁴⁰²

399 F Orrego Vicuña 'The Contribution of the Exclusive Economic Zone to the Law of Maritime Delimitation' (1988) 31 CYIL 120 at 137; Evans (n254) 18-24; Willis (146) 5.

400 Ibid 58; T J Trendl "Maritime Delimitation and the Gulf of Maine Case : A Guide for the Future or Merely 'Slicing the Pie?'" (1988) 12, SIULJ 599 at 649, 650.

401 Willis (n146) 5.

402 Ibid 58.

Thus at present there is a body of law whose principles are fluid. One of the important consequences of this fluidity is that the application of this law involves a broad measure of judicial discretion which must be exercised on *equitable principles*, that being what the fundamental norm requires.

(c) Adjacent continental shelf boundary between Namibia and South Africa

(i) Nature and extent of the continental shelf.

Article 76 of LOSC permits states to claim an extended continental shelf, providing that

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

It would be reasonable to expect both Namibia and South Africa to be interested in claiming an extended continental shelf, Namibia having ratified the LOSC and South Africa being a signatory thereto. If Article 76 is customary law, then both states will be entitled to an extended shelf notwithstanding their positions *re* LOSC.

(ii) Applicable law.

Article 6(2) of the CSC of 1958 provides that the boundary of the continental shelf shall be determined by *agreement* between the states concerned. Failing agreement, and unless some other boundary line is justified by special circumstances, the boundary shall be determined by application of the principle of equidistance. This provision represents a rule of treaty law binding only

states party to the Convention.⁴⁰³ Many continental shelf boundaries have in fact been settled by agreement.

In the Channel Islands Case, this equidistance-special circumstances rule was interpreted to mean that, in the absence of agreement, the boundary between states abutting on the same continental shelf is to be determined by *equitable principles*. The court held that the objective of *both* conventional rules and customary international law was to achieve an equitable delimitation.⁴⁰⁴ The court thus took cognizance of customary rules when considering the CSC provisions to which both the United Kingdom and France were party.

Article 83(1) of LOSC provides that the delimitation of the continental shelf between opposite and adjacent states shall be established by agreement, on the basis of international law in order to achieve an equitable solution. Emphasis is thus on the solution which has to be achieved and the rules applicable are those which bring about an equitable result.⁴⁰⁵ The object of Article 83(1) is to settle shelf delimitations on the basis of equitable principles.

For non-parties to the Conventions discussed *supra*, customary law is applicable. Customary law does not prescribe the line of equidistance for adjacent states though for opposite states the median line is applicable since it represents the point at which the shelves overlap.

Delimitation of the shelf between *adjacent* states is more complicated as the line of equidistance may not yield an equitable division. What emerges from a summary of the case law as discussed in detail *supra* is a shift away from

403 North Sea Cases (n48) 45 para 81.

404 Channel Islands Case (n51) 422 para 75.

405 Libya/Tunisia Case (n231) 59 para 70.

equidistance and a migration towards the principle of equity which amounts to reasonableness in all the circumstances.⁴⁰⁶ The object of Article 83(1) appears to be delimitation based on *equitable principles* and, if so, customary law principles and conventional law principles are substantially the same.⁴⁰⁷

The LOSC has been ratified on behalf of Namibia. South Africa is a signatory thereto. Article 83(1) of LOSC requires delimitation of the shelf boundary by *agreement* on the basis of international law with a view to achieving an equitable solution. An equitable solution will be achieved by applying equitable principles as part of international law and a weighing up of various factors regarded as relevant in the circumstances to engender an equitable result.⁴⁰⁸ LOSC is not yet in force, but both Article 83(1) and customary law prescribe an equitable solution.

Are these relevant factors the equivalent of 'special circumstances'? Neither customary law nor Article 83(1) prescribe the equidistance-special circumstances rule for delimitation of the shelf between adjacent states. Both require an *equitable solution* produced by a weighing up of relevant factors. No definition accompanies the concept of 'relevant factors'.

If 'relevant factors' are synonymous with 'special circumstances' then the following observations can be made. Both coastlines can be described as extended. Proportionality in order to avoid disproportion is not likely to cause dissensus. Furthermore, according to present surveys, geomorphological discontinuities will not

406 G Erasmus and D Hamman 'Where is the Orange River Mouth? The Demarcation of the South African/Namibian Maritime Boundary' (1987-1988) 13 SAYIL 49 at 67.

407 Ibid.

408 O'Connell (n95) 699.

contribute to the lateral shelf delimitation between Namibia and South Africa.⁴⁰⁹ There are no identifiable offshore features such as islands or rocks liable to exacerbate disagreement. The coastlines are not characterized by phenomena such as concavity or convexity.

The one feature which does invite comment is the discovery of the Kudu gasfield, Kudu-9A1, 125 km due west of Oranjemund opposite the mouth of the Orange River. The field is of sufficient magnitude that a shelf boundary emanating from the point where the land boundary meets the coast could straddle the deposit. Exploration was started by the Chevron Oil Exploration Company in 1973 and finished by SOECOR in 1974 after Chevron's withdrawal from Namibia.⁴¹⁰

Is a common deposit a special circumstance or relevant factor? In the North Sea Cases, natural resources were identified as a factor to be considered in negotiations but were not clearly identified as 'special circumstances'.⁴¹¹

409 Erasmus and Hamman (n406) 69.

410 Financial Mail 22 May 1987 62. At the time of the discovery, the pressure of the gas was so great it could not be measured with the available equipment. Another field, Kudu-9A2, approximately 7 km north northwest of Kudu-9A1 and 213km southwest of Lüderitz was discovered in 1987, generating much interest, it being estimated that this field could supply up to 65% of Namibia's fossil fuel requirements. (Op Rekord 30.3.87-13.4.87 at 7 quoting from 'Koedoe lok die grootste bore' Die Republikein 3/4/87V). Experts have estimated the size to be four times that of the Mossel Bay gasfields, with a gas reserve of two billion cubic metres and an exploitation life of at least 30 years. Foreign aid is envisaged in exploiting this field to its maximum potential with a view to exporting excess oil to other countries (Financial Mail 'Rich strike ahead?' 22.5.1987). Kudu-9A2 is north of potential shelf boundary lines and will be located on a Namibian continental shelf.

411 North Sea Cases (n48) 54 para 101.

Moreover, natural resources on the shelf were limited to those *so far known or readily ascertainable*.⁴¹²

According to O'Connell, the only occasion when mineral deposits can be regarded as 'special circumstances' would be when interests in the resource have been established *independently* of the continental shelf doctrine. He concludes the brief discussion with the observation that it remains unclear whether the presence of cross-boundary deposits constitute special circumstances or not.⁴¹³ Solutions such as joint exploitation with equal sharing of income or a division of the recoverable oil appear to avoid modification of the boundary and do not support the theory that common deposits are special features. The most recent jurisprudence considered oil wells in the area of delimitation an element to be taken into account in the process of weighing factors *en route* to an equitable result.⁴¹⁴ Common deposits have yet to be positively identified as 'special circumstances'.

On the assumption that a relevant factor is a special circumstance, and if cross-boundary deposits are special circumstances, then given that Kudu-9A1 will probably straddle any suggested shelf boundary, various solutions are possible. The proposed line could be shifted north, leaving the entire field situated on the South African shelf. The *quid pro quo* for the adjustment could be compensation in the form of an agreement permitting Namibia access to the field for exploitation purposes. Alternatively, the proposed line

412 Ibid 51 para 97.

413 O'Connell (n95) 711.

414 *Libya/Tunisia Case* (n231) 77, 78 para 107. The 1988 Agreement between the United Kingdom, Northern Ireland and the Republic of Ireland deals with the continental shelf, *inter alia*, in the vicinity of Rockall. Regarding shared hydrocarbon deposits, Article 3 states that the governments 'shall make determined efforts to reach agreement as to the exploitation' of these cross-boundary fields - (n303) 415, 416.

could be moved south to a location leaving the entire field north of the line, thus on Namibian shelf area. ✓
Compensation could take the form of an agreement providing access for South Africa in order to exploit the resource. A

Alternatively, if 'relevant factor' as an equitable principle is not the equivalent of 'special circumstances' in a shelf delimitation context, what is the significance of that observation and are common deposits relevant factors?

Article 83(1) of LOSC and customary law do not prescribe the equidistance-special circumstances rule for adjacent shelf delimitation. What is required is an *equitable solution* by applying equitable principles. This involves the weighing up of relevant factors in order to arrive at an equitable result. Thus it can be argued that a feature need not be a recognized special circumstance before it merits consideration. The uncertainty surrounding common deposits as special circumstances is then not an issue.

To date, the world jurisprudence has not alluded to natural resources such as a common deposit as a 'special circumstance' justifying deviation from a delimitation based on geographic features. Nevertheless, all relevant factors must be weighed in order to produce an equitable result. This is now firmly established as a matter of a rule of law. It is clear that the presence of a common deposit cannot be of *decisive* value in the delimitation process but it is relevant in the assessment of the equitable character of the result since the outcome is inequitable if serious economic repercussions arise for any of the parties. If grave economic disruption is identified, then it can be argued that an economic factor such as a shared deposit can force an adjustment of the original line. According to Sharma, the contribution of the Gulf of Maine decision was that the chamber was willing to consider not only 'known' or

'readily' ascertainable resources but also the potential relevance of the exploration of mineral resources or prospecting activities in the areas of overlap.⁴¹⁵ (S/D) ✓

Is a common deposit a relevant factor? In the North Sea Cases it was expressly stated that in the case of *adjacent* states, the unity of deposits was an *important factor*, and thus a factor to be considered in the negotiations.⁴¹⁶ It is submitted that Kudu-9A1 is a relevant factor and must be taken into account in order for the negotiations to yield an equitable solution. S/D

Another possible relevant factor could arise with respect to established claims to sedentary fisheries. According to O'Connell, a strong case can be presented for recognition of this factor as a 'special circumstance', let alone a relevant factor.⁴¹⁷ The crayfish resources could therefore be a factor which must be considered in pursuit of an equitable solution. If this is not the case, it may yet play a role if a proposed line, granting the resource exclusively to one party, produces catastrophic repercussions for the livelihood or economic well-being of the population concerned.⁴¹⁸ A solution of this nature is clearly inequitable. Neither the requirements of Article 83(1) nor customary law will have been met. The boundary line will have to be renegotiated or, at the very least, adjusted to avoid these consequences. S/D
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If Namibia and South Africa agree that the common deposit will not influence the delimitation as such, the practical matter of exploiting the cross-boundary field will still have to be addressed. Because of the fluid nature of a gas deposit, the resource may be tapped from anywhere on its (S/D)

415 Sharma (n247) 254.

416 North Sea Cases (n48) 51 para 97; (n246) *supra*.

417 O'Connell (n95) 711.

418 Gulf of Maine Case (n152) 1245 para 237.

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perimeter, creating the possibility of depletion by one party. Yet it frequently occurs that the same deposit lies on both sides of the line dividing a continental shelf between two states, and since it is possible to exploit such a deposit from either side, a problem immediately arises on account of the risk of prejudicial or wasteful exploitation by one or other of the states concerned.⁴¹⁹

Today most states conclude agreements providing for co-operative or unitized exploitation of shared deposits, the old common law 'rule of capture' or 'prior exploitation' no longer being applicable.⁴²⁰ In the case of offshore deposits, international state practice has borrowed from the private law practice of co-operative management. Arrangements have also produced agreement on resource sharing in the context of continental shelf delimitation and general maritime boundary agreements.

State practice on transboundary petroleum deposits reflects four kinds of co-operative agreements. Geological co-operation occurs when each party works a share proportionate to the amount of reserves in its territory at the time the agreement is concluded in accordance with the calculations of a joint commission.⁴²¹ This option is possible when there is a settled or at least an interim boundary arrangement. The second kind of agreement is based on joint operations where, because no boundary settlement has been reached, the parties agree on a tentative boundary and apply their own jurisdictions on each side.⁴²² Each is entitled to an equal share determined by contractual arrangement. (iii) Unitized exploitation refers to the situation

419 North Sea Cases (n48) 51 para 97.

420 Beauchamp (n216) 649.

421 R Lagoni 'Oil and Gas Deposits Across National Frontiers' (1979) 73 AJIL 215 at 222.

422 Ibid 223.

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where a single operator manages the deposit on behalf of all the parties in a joint development zone in which concessionaries from both sides enter into operating agreements with benefits and expenses being shared.⁴²³ Unitized exploitation can be utilized with or without a prior boundary settlement. The *condominium* arrangement occurs where the parties establish a common zone on the seabed wherein each maintains equal sovereign rights over the whole zone and a joint commission oversees development.⁴²⁴

When the political boundary has been settled prior to one of these offshore resource administration agreements, the basis of the agreement amounts to a sharing formula, the geographical distribution of the resource being a significant component in the formula. When a boundary issue is unresolved and claims to the resource overlap, the basis of the agreement is usually an equal division of benefits and costs. If the continental shelf delimitation between Namibia and South Africa is not settled before either party wishes to commence exploitation of Kudu-9A1, the parties could opt for a resource administration agreement which is based on joint operations, unitized exploitation or a condominium arrangement. It is submitted that unitization, the bringing together by some legal method of separately owned interests in gas, is an attractive option since it involves an overall program of development with production operations being carried on in the area on behalf of, and for the benefit of, the owners of such interests by single or co-ordinated management.

If the continental shelf boundary delimitation between South Africa and Namibia is settled prior to exploitation, two possible outcomes arise. If the delimitation agreed upon allocates the resource to either party exclusively, no

423 Ibid 224.

424 Ibid 226.

resource administration agreement will be necessary. However, as discussed *supra*, the magnitude of Kudu-9A1 is of such a nature that the field will probably straddle the boundary line. If this does occur, the states may select the mode of *geological* co-operation, with each party working a share in proportion to the amount of reserves in its territory as determined by a joint commission whose calculations will be based on amounts of reserves at the *time of the agreement*.

Resource administration agreements have been included in approximately thirty eight international agreements between coastal states, mostly bilateral.⁴²⁵ While some create a common zone wherein both parties claim sovereignty over the natural resources and establish a joint or condominium arrangement for the development of the deposit, the majority are simply 'agreements to agree' on the prospect of transboundary discoveries.⁴²⁶ Consequently, each state will have to demonstrate to the other that the field underlies its territory, requiring considerable exploitation and commercial discoveries. If no agreement is reached, the rule of capture may arguably apply.⁴²⁷

There is at present no clearly established international law on the subject of joint management schemes. Analogies from domestic law, which requires co-operative production of shared deposits, and from international law relating to fisheries management and the sharing of international water courses, are persuasive.⁴²⁸ It has been suggested that state practice, as evidenced by common deposit resource administration agreements, may support the emergence of a customary rule of international law that would require states to co-operate in exploration and exploitation of

425 Beauchamp (n216) 649.

426 Ibid 650.

427 Ibid.

428 Ibid.

common deposits.⁴²⁹ In the meantime, in contested offshore regions where no boundary settlement has been concluded, resource claims will continue to act as an impediment to such settlements.

(d) Adjacent continental shelf boundary between Namibia and the South African Islands.

(i) Nature and extent of the continental shelf.

Article 121(2) of LOSC states that the territorial sea, contiguous zone, EEZ and continental shelf of an island are determined in accordance with the provisions of the Convention applicable to other land territory. Both Namibia and South Africa can be expected to show interest in extended continental shelves.

(ii) Applicable law.

When the Law of the Sea Convention comes into force twelve months after the 60th ratification, South Africa and Namibia, if party thereto, will have recourse to Article 83 which embodies the requirement that the shelf delimitation agreement ought to yield an equitable solution, whether the states involved are opposite or adjacent. If no agreement can be reached the states concerned are to resort to dispute settlement procedures provided for in Part XV of the Convention.

If the LOSC is not in force at the time the shelf delimitation is negotiated, customary law will apply. The provisions of Article 6 of CSC prescribing the equidistance-special circumstances rule are declaratory of customary law for delimitations between opposite states only. The International Court in the North Sea Cases, stated that, where the states are opposite each other, 'These prolongations meet and overlap, and can thereby only be delimited by means of a median line; and, ignoring the

⁴²⁹ Lagoni (n421) 243.

presence of islets, rocks, and minor coastal projections ... such a line must effect an equal division of the particular area involved'.⁴³⁰ The result with adjacent states is different because the line of equidistance may or may not, depending on the circumstances, produce an equal division.

The Namibian mainland and South African islands are in a relationship of adjacency with respect to the continental shelf, the delimitation area lying seawards of both territories. The equidistance-special circumstances method is not prescribed. International customary law, as *per* the six leading cases on the topic, requires an equitable solution achieved by taking all the relevant circumstances into consideration.⁴³¹ It has also been held that the equidistance-special circumstances rule in Article 6 of CSC leads to the same result as customary law, namely an equitable result.⁴³²

According to case law, the requirement of an equitable solution contained in Article 83(1) also coincides with international customary law.⁴³³ Therefore the international customary law rule, an equitable solution taking all the relevant circumstances into account, will be applied (if LOSC is not applicable) to the shelf delimitation between Namibia and the Penguin Islands. Should LOSC provisions become relevant at a later stage, the delimitation will not require renegotiation as the *result* sought would be the same as the one already settled with reference to customary law, namely an *equitable solution*.

430 North Sea Cases. (n48) 36 para 57.

431 Channel Islands Case (n51) 420 para 65, 421 para 70; Libya/Tunisia Case (n231) 37, 38 para 23, 24; Gulf of Maine Case (n152) 1220 para 89; Libya/Malta Case (n53) 1198, 1199 para 28-29, 1202 para 45; Guinea/Guinea-Bissau Case (n145) 289 para 88.

432 Channel Islands Case (n51) 420 para 65.

433 Libya/Malta Case. (n53) 1197 para 26.

- (iii) Are the South African Islands entitled to a continental shelf?

1.1 General

This question refers to ten of the twelve islands. Penguin and Seal within Lüderitz Bay are only able to claim territorial seas because of their location.⁴³⁴ In principle, islands are entitled to all the zones a mainland is capable of generating.⁴³⁵ Thus the offshore islands have a continental shelf prolongation which they share with the shelf prolongation of the Namibian mainland.⁴³⁶ One and the same shelf can thus emanate from the coasts of two states.⁴³⁷

Though it was submitted that seven of the ten islands were 'rocks' as contemplated by Article 121(3) of LOSC, it was also concluded that this provision was not representative of international customary law. Therefore, all ten are entitled to a continental shelf. When LOSC comes into force and if both South Africa and Namibia are party thereto at the time, then the seven 'rocks' will not be entitled to a continental shelf. Shelf delimitation could then only involve Namibia and the islands of Ichaboe, Halifax and Possession.

At present however, the shelf delimitation is one between Namibia and all of the islands except Penguin and Seal. The delimitation involves one and the same continental shelf which projects into the sea from both the mainland and the islands. This makes it necessary to distinguish between the shelf within 200 nm of the mainland, the shelf (if it indeed exists) beyond 200 nm of the mainland and the shelf (if it exists) beyond 200 nm of the islands. Each category will be

434 See (2)(c)(i).

435 Article 121(2) LOSC; Hoffmann (n16) 193; Libya/Malta Case (n53) 1204 para 52.

436 Hoffmann (n16) 190; Channel Islands Case (n51) 443 para 191, 194.

437 Guinea/Guinea-Bissau Case (n145) 300 para 116.

discussed *infra*.

Regarding the shelf within 200 nm of the mainland, the rule is that 200 nm is the exclusive economic zone limit and also that of the continental shelf. The rules governing the situation are rules of international customary law.⁴³⁸ Within 200 nm of the baseline, natural prolongation is defined in terms of *distance*.⁴³⁹ There is therefore no need to consider geological and geophysical factors within the first 200 nm. Title to the shelf is conferred exclusively by distance.⁴⁴⁰

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The delimitation involves *adjacent* states. The land territories both face seawards towards the zone of delimitation. Though the *landward* delimitation of the territorial sea between these same parties was one between *opposite* states, this is acceptable since it has been clearly established that in delimitation matters, the relevant coasts can be opposite in some places and adjacent in others.⁴⁴¹ The importance of adjacency lies in the fact that there is more room for relevant circumstances to operate in arriving at an equitable result than in the case of opposite state delimitation.⁴⁴² Where a median line between opposite states yields appropriate proportions of continental shelf area to each party, the corrective role of 'special circumstances' is a limited one.⁴⁴³ However, if a line of equidistance between adjacent states produces inappropriate portions, the corrective role of 'special circumstances' could be definitive.⁴⁴⁴

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438 Libya/Malta Case (n53) 1199 para 34.

439 Ibid.

440 Ibid; 1200 para 39, 1210-1211 para 77.

441 Channel Islands Case (n51) 453 para 238; Gulf of Maine Case (n152) 1236 para 187; Guinea/Guinea-Bissau Case (n145) 290 para 91.

442 O'Connell (n95) 685.

443 Ibid.

444 Ibid.

The landmasses of the interested parties play no role, so it is irrelevant that the islands have a minimal landmass compared to that of the Namibian mainland.⁴⁴⁵

The equitable criteria or relevant factors are not restricted in number and no one criterion is obligatory.⁴⁴⁶ A selection will have to be made which will depend on the case in question.⁴⁴⁷ Possible relevant criteria in the Namibia/South African islands situation include criteria arising out of the geographic situation, normally the predominant factor in delimitation issues.⁴⁴⁸ The location of the islands is of vital importance. These islands are not only situated far from their parent state, but are so far away as to be not even in an opposite relationship thereto. Secondly, they lie extremely close to the mainland of another state, Namibia. In fact, the islands cut Namibia off from what would normally be a standard continental shelf. The geographical layout of these islands is in this respect even more extreme than that of the Channel Islands which lie in a French gulf a long way off from England but at least opposite the latter. The geographical situation of the Penguin Islands is also more extreme than that of the Kerkennah Islands (Libya/Tunisia Case), the Scilly Isles (Channel Islands Case) and Malta and Filfa (Libya/Malta Case). The Kerkennah Islands were a considerable distance from the opposite coast of Libya, the Scilly Isles were adjacent to mainland England and at a great distance from the opposite coast of France. Malta too was located far from the opposite coast of Libya but reasonably near to the

445 Guinea/Guinea-Bissau Case (n145) 301 para 119.

446 Libya/Malta Case (n53) 1203 para 48; Gulf of Maine Case (n152) 1224 para 110; Guinea/Guinea-Bissau Case (n145) 289 para 89.

447 Libya/Malta Case (n53) 1203 para 48.

448 Hoffmann (n16) 193; Libya/Tunisia Case (n231) 62, 63 para 76, 77; Gulf of Maine Case (n152) 1238 para 195, 197.

European continental landmass. Filfla was situated far from the opposite coast, namely Libya, but very near to Malta.

Clearly the location of the ten offshore islands could have a disproportionately distorting effect on the delimitation as they can deny the Namibian mainland a continental shelf which would normally accrue to it.⁴⁴⁹ The distorting effect would be more acute than any situation dealt with so far in international decisions. Where islands have distorted delimitations, all were considered a factor requiring adjustment to some degree of the equidistant line. The Scilly Isles were given half effect. Malta was afforded less influence than equidistance would have permitted. Filfla was discounted altogether, while the Channel Islands were allocated a 12 nm strip around the formations.

The location of the South African islands would justify a departure from the equidistant line. This line is, however, not prescribed. All Article 83(1) LOSC and, until this Convention comes into force, customary law requires is an equitable solution taking all the relevant circumstances into account. The distorting effect, in the form of deprivation, is a relevant circumstance. Namibia is deprived of a shelf mass it would otherwise be allocated. The nearest equivalent arose in the Channel Islands situation though the Penguin Islands have an even more acute effect. Therefore a solution involving at least as great an adjustment as in the Channel Islands Case is appropriate.

The magnitude of the relevance of the islands is linked to their characteristics. Sizewise, all ten are small with seven actually 'rocks' within the ambit of Article 121(3) LOSC.⁴⁵⁰ The remaining three are slightly larger. It would

449 Hoffmann (n16) 194.

450 See discussion (3) C (b)(i) 1.2.2.2; J M Van Dyke 'The Role of Islands in Delimiting Maritime Zones : The case of the Aegean Sea' (1989) 8 Ocean Yearbook (Ed E M Borgese, N Ginsburg and J R Morgan) 44 at 64.

be patently *inequitable* if such small islands could have a significantly distorting effect and even more so if minute formations could actually deprive a mainland of a shelf it would normally project. The tiny island of Filfa was discounted entirely even though it lay near to Malta, far from the opposite coast of Libya.⁴⁵¹

The physical and geological structure also contribute to the relevance of the South African islands.⁴⁵² They are all extremely bleak and inhospitable. The majority are uninhabitable, the remainder barely so. It would be manifestly inequitable if formations of this nature could distort a delimitation to the degree of deprivation. The barren island of Filfla, whose distorting effect stopped short of deprivation, was discounted altogether.

Several islands, as opposed to a single formation, will generally have a more disproportionately distorting effect. The cumulative distorting effect of ten South African islands is potentially great. Once again, the inequity attendant upon permitting such extensive distortion is

Borgese, N Ginsburg and J R Morgan) 44 at 64.

451 Libya/Malta Case_(n53) 1207 para 64.

452 North Sea Cases (n48) 54 para 101. Another method used where detached islands have been involved, is the method of enclaving. Enclaving is not a well-recognized method primarily because the possibility rarely arises. As a method, it is compatible with equitable criteria that stress the anomaly of sovereignty over a distant island, the disparity in coastline extent and the non-encroachment of an extended zone into areas too close to the coast of another state. Recently, Australia and Papua New-Guinea agreed on enclaving certain islands in the Torres Strait. Sometimes islands are semi-enclaved ie permitted a zone on one side of a boundary but not having any influence on the location of the principal boundary. In the Channel Islands Case, one of the arguments against the use of equidistance was that an amount of ocean space wholly disproportionate to the size of the islands and their coastline lengths would accrue to them. See (n51) 437 para 161.

obvious.⁴⁵³

The fact that the islands themselves are to serve as the basis from which the delimitation is to be made does not rule them out as a relevant circumstance. Quite the opposite can occur. In the Libya/Malta Case, the delimitation was to take place from Malta and its island status contributed to the reduction of the shelf apportioned to it.⁴⁵⁴

Difference in coastline length can be a relevant circumstance and must be considered in order to contribute to an equitable solution as required by both Article 83(1) LOSC and customary law.⁴⁵⁵ Quite clearly, the cumulative coastline lengths of the islands are vastly disproportionate when compared to the mainland coastline. Consequently, if the South African islands receive a significant offshore zone, the size would be disproportionate to the relative coastline lengths. An equitable result would dictate that the island coasts receive considerably less shelf mass than the mainland coast. (?)

Natural resources on the continental shelf in exploitable quantities are relevant circumstances and ought to be taken into account so as to weigh the delimitation in one direction or another.⁴⁵⁶ As discussed *supra* with regard to the Kudu-9A1 gasfield which is likely to straddle the shelf boundary between the Namibian and South African mainland coast, state practice reveals that parties conclude exploitation agreements rather than agreeing to boundary adjustments as such because of a shared deposit.⁴⁵⁷ It is

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453 Hoffmann (n16) 192.

454 Libya/Malta Case (n53) 1204 para 53.

455 Willis (n146) 38, 44; Guinea/Guinea-Bissau Case (n145) 292 para 97; Devine (n213) 136.

456 Libya/Malta Case (n53) 1203 para 50.

457 See discussion *supra* (3) C (c)(ii).

submitted that any problems arising out of potential cross-boundary deposits between the Namibian mainland and the offshore islands will be solved in a similar practical manner. S!

Security and defence interests feature as relevant or special circumstances when the delimitation is to be effected near a coast.⁴⁵⁸ In the present case, the shelf area to be delimited is not near the coast but at a considerable distance away and security interests will not influence the proposed solution in the form of relevant circumstances.

There are a number of other relevant factors based on physical geography which can influence a particular delimitation such as the general configuration of the coast, concavity and convexity and other special features.⁴⁵⁹ The Namibian coastline in the area to be delimited is fairly regular with no pronounced concavity, convexity or other notable features. (S)

The *political* status of an area could be a relevant factor.⁴⁶⁰ If the islands were politically independent, it would enhance their claim to a share of the shelf, as occurred in the *Libya/Malta* decision.⁴⁶¹ The ten offshore islands are not politically independent, so independence as a relevant factor does not arise. (S)

The relevant criteria or circumstances considered in the process of arriving at an equitable solution to the shelf delimitation between Namibia and the South African islands consistently indicate that the portion allotted to the islands should be *significantly* reduced in order to produce

458 *Libya/Malta Case* (n53) 1204 para 51.

459 *North Sea Cases* (n48) 54 para 101.

460 *Libya/Malta Case* (n53) 1208, 1209 para 72, 73.

461 *Ibid* 1204 para 52.

an equitable result. The methods by which an appropriate reduction can be effected will now be discussed.

The method used will only be equitable if the *result* it produces is equitable.⁴⁶² It is naturally possible to combine different methods in an effort to achieve an equitable solution.⁴⁶³ The method of apportionment which aims to divide the delimitation area *equally* between the parties is an equitable one where the maritime projections converge and overlap.⁴⁶⁴ Equal division is thus appropriate in allocation between opposite states. In the Namibia/islands context, no relationship of oppositeness nor overlapping areas arises, so this method is not useful.

Equidistance is a possible method though it has no privileged status compared to any other methods.⁴⁶⁵ In favour of using the equidistance method is the frequent use thereof by states in bilateral boundary agreements, its selection in some situations by tribunals, its conformity with abstract notions of equitable principles and its reliance upon neutral geography. Like any other method, it is useful if it leads to an equitable result. Would this be the outcome if applied in the Namibia/South African islands context?

Regarding Hollamsbird, Ichaboe, Possession, Albatross and Pomona, equidistance would allocate very substantial areas of continental shelf to these five islands. The mainland would be deprived of what it would normally be entitled to.

462 Libya/Tunisia Case (n231) 59 para 70; Gulf of Maine Case (n152) 1237 para 191; Libya/Malta Case (n53) 1198 para 28-29, 1202 para 45.

463 Gulf of Maine Case (n152) 1237 para 192.

464 Ibid 1238 para 195, 197.

465 Libya/Tunisia Case (n231) 79 para 110; Gulf of Maine Case (n152) 1223 para 106-107, 1225 para 122, 1226 para 124; Libya/Malta Case (n53) 1201 para 43; Guinea/Guinea-Bissau Case (n145) 294 para 102.

If the geographical situation, namely the close proximity of the islands to the coast, size and nature of the islands is taken into account, then an equidistance line produces gross disproportion and is manifestly *inequitable*.

An equidistant line in the case of Mercury, Plumpudding and Sinclair would grant these three islands very small tracts of continental shelf which would not even extend 12 nm from the mainland coast. This method would therefore lead to *inequitable* solutions for these islands.

Regarding Halifax and the Long Islands, a line of equidistance would yield small thin bands of continental shelf beyond the 12 nm limit of the territorial waters. These banks would systematically narrow as they advanced seawards, eventually tapering off at a point. This point would probably be less than 20 nm from the outer limit of the territorial seas. The equidistant line would therefore create two very small continental shelf enclaves adjacent to the territorial seas. This is not *inequitable* considering the geographic location, nature and size of the two islands. Equidistance is therefore a possible method of delimitation for Halifax and the Long Islands.

Abatement is a method usually prominent where substantial diminution of normal continental shelf areas is caused by the presence of islands, the idea being to avoid such diminution. In other words, the distorting effect of rocks, islets and minor coastal projections are to be eliminated.⁴⁶⁶ The ten offshore islands could substantially diminish shelf area which would otherwise accrue to the mainland. Moreover, of the ten, several are mere 'rocks'. The abatement method would be suitable as it would prevent the islands receiving disproportionately large areas of

466 North Sea Cases (n48) 36 para 57; Gulf of Maine Case (n152) 1239 para 201.

continental shelf at the expense of Namibia.

The 'method' of proportionality requires that the shelf area be divided in proportion to coastal lengths.⁴⁶⁷ The areas of the landmasses are not relevant.⁴⁶⁸ Mathematical proportionality is not at stake. It is substantial *disproportion* that is to be avoided.⁴⁶⁹ Hence only substantial and significant differences in coastal lengths are of importance.⁴⁷⁰ In the present case, the combined coastal length of the coasts of the islands is considerably less than the length of the West Coast of Namibia. Disproportion must be avoided. To do so, the islands must receive less than the mainland of the total shelf area available though the ratio of distribution need not be exact or mathematical. The fact that the land area of the islands is negligible in comparison to that of the mainland is disregarded. Thus the proportionality method appears suitable and equitable since it will produce an equitable result.

Four methods can be used in the particular situation, namely apportionment, equidistance, abatement and proportionality. As discussed above, it appears that the most appropriate method in the Penguin Islands context would be proportionality. This method could be used in conjunction with abatement to ensure that the islands do not deprive the

467 Libya/Malta Case (n53) 1207 para 66, 1209 para 73, 74; Gulf of Maine Case (n152) 1235 para 183, 1241 para 218, 1242 para 222; T L McDorman 'The Canada-France Maritime Boundary Case : Drawing a Line around St. Pierre and Miquelon' (1990) 84 AJIL 157 at 182,183. The author concludes that there are three purported uses of proportionality - as a factor in determining the method of drawing the boundary, as a circumstance relevant to the subsequent adjustment of the provisional line, and as an overall test of the equitableness of the final result. All three uses ensure that proportionate coastal lengths could be of considerable importance in the determination of a boundary.

468 Guinea/Guinea-Bissau Case (n145) 301 para 119.

469 Gulf of Maine Case (n152) 1236 para 185.

470 Libya/Malta Case (n53) 1206 para 59, 1209 para 74.

mainland of continental shelf.

Applying a combination of the methods of abatement and proportionality, the following delimitation solution is proposed. The continental shelf allocated to the islands should be co-extensive with the territorial seas allotted to them. This would give the islands enclaves of continental shelf which would extend 12 nm seaward but would not advance beyond that limit. All the remaining shelf seaward thereof and extending up to the 200 nm limit from the Namibian baseline should accrue to the mainland. This solution has been advanced as an equitable one on the basis of disproportion between the size of the landmass and the size of the islands that can generate these zones as against the percentage of the total zone that could be given to the islands.⁴⁷¹

In the Channel Islands Case, an enclave of 12 nm was awarded to the Channel Islands, and these formations were larger and more heavily populated than the islands opposite Namibia.⁴⁷² Since the Channel Islands were restricted to a 12 mile enclave, a strong case can be made for a similar restriction with regard to the ten offshore islands.

The delimitation of Halifax and the Long Islands could be effected by utilising an equidistance line, the result not being *inequitable*.

For the remaining islands, the suitable method is a combination of abatement and proportionality. The proportionate share of the shelf will be reduced to coincide with the territorial sea zone of each island.

471 Hoffmann (n16) 196, 197.

472 Channel Islands Case, (n51) 444, 445 para 202.

Thus the equidistance method for Halifax and Long Islands together with the combination of proportionality and abatement for the remaining islands produce an equitable result. No provisional delimitation has been suggested since a tentative solution is usually based on equidistance which is then subsequently modified in reaction to relevant or special circumstances. As previously stated, with the exception of Halifax and the group of Long Islands, equidistance would *prima facie* be so inequitable that a tentative solution based thereon would not be feasible. There is no need to justify the limited role which equidistance as a method has to play - it has no privileged status above other methods, not even in the first provisional step of a tentative delimitation.⁴⁷³

The final result must be evaluated and found to be equitable in all the circumstances. When appraising the result one is not restricted to the criteria considered as relevant factors in *arriving* at the solution. The equitableness of the final result can be tested against factors over and above those accounted for in reaching the solution, such as those based on human and economic geography.⁴⁷⁴

If the result produces serious economic repercussions for either Namibia or the islands, it would not be equitable.⁴⁷⁵ It is submitted that the proposed solution does not engender repercussions of this nature for either party and is thus far, equitable.

If a solution yielded catastrophic repercussions in the form of the destruction of a population's livelihood or economic

473 Libya/Tunisia Case (n231) 79 para 110; Libya/Malta Case (n53) 1201 para 43; Guinea/Guinea-Bissau Case (n145) 294 para 102.

474 Gulf of Maine Case (n152) 1244 para 232.

475 Ibid 1246 para 238.

well-being it would be blatantly inequitable.⁴⁷⁶ Since economically active guano collectors could continue their activities on the Penguin Islands, the proposed division is not inequitable on these grounds.

Proportionality is another checkpoint for the equitableness of a solution.⁴⁷⁷ There is no marked disproportion between the areas allocated to each by the use of the method suggested when the coastal lengths of the islands are compared to the length of the mainland coast. From a proportionality perspective, the proposed solution is equitable.

If a state was not left in control of maritime spaces opposite its coast, the result may be inequitable from a security or defence perspective.⁴⁷⁸ In the present case, the solution offered does allow each party control over the maritime areas opposite their respective coasts. Previously it was suggested that the boundary lines to the north of Hollamsbird and Ichaboe ought to be shifted south of the equidistance line to ensure control for the mainland.⁴⁷⁹ It was also posited that the boundary lines to the south of the same islands be moved north of the equidistance lines to guarantee Namibian control over opposite sea areas. In cognizance of the security aspect, it was also suggested that the equidistance line be disregarded in the case of Mercury, Plumpudding and Sinclair, and that a narrow corridor extending up to 12 nm from the islands might be allocated to them so that the islands would have control over the maritime areas immediately opposite them. Regarding the remaining islands, each party could control the sea spaces opposite it without the need for modification

476 Ibid 1245 para 237.

477 Libya/Malta Case, (n53) 1205 para 56-57, 1207 para 66, 1209 para 73-74, 1209-1210 para 75.

478 Guinea/Guinea-Bissau Case, (n145) 302 para 124.

479 See discussion (3) A (e).

of the equidistant line.⁴⁸⁰ The net result is equitable when the security interests of both parties are considered.

Another test used in evaluating the result is that the proposed solution must take cognizance of existing delimitations.⁴⁸¹ There are no other delimitations in the area under discussion.

An equitable result will not produce encavement.⁴⁸² Encavement would arise in the case of Mercury, Plumpudding and Sinclair if the method of equidistance was used. However, the suggested method, a combination of abatement and proportionality, avoids encavement. The result is equitable since encavement is avoided.

The resources of the continental shelf cannot be ignored because of the potential wealth they can generate for developing countries.⁴⁸³ The proportionality-abatement combination allocates the vast bulk of the shelf within 200 nm of its baseline to Namibia, a developing country. The result is not inequitable on this ground.

In the end, the result achieved using equidistance for Halifax and the Long Islands and applying a combination of the methods of abatement and proportionality for the remaining islands cannot be described as inequitable. Evaluation of the solution based on criteria other than those used in arriving at the result leads to the conclusion that it is an equitable result. The requirements of Article 83(1) LOSC (which was ratified on behalf of Namibia and to which South Africa is a signatory) will have been met and the requirements of customary law, relevant until LOSC

480 Ibid.

481 Guinea/Guinea-Bissau Case (n145) 291 para 93-94, 297 para 108.

482 Ibid 295 para 103,104.

483 Ibid 299 para 114.

becomes binding, will also have been satisfied.

1.2 Continental shelf (if it exists) beyond 200 nm of the mainland but within 200 nm of the islands or any of them.

These areas are those within 200 nm of the islands. 'Rocks' as defined in Article 121(3) are not capable of generating a continental shelf. Namibia, on whose behalf LOSC was ratified and South Africa, as signatory, are expected to act within the spirit of LOSC pending its applicability. Islands which are not rocks incapable of sustaining human habitation or generating an economic life of their own can, in principle, claim a continental shelf based on the distance principle. Within 200 nm of the baseline of these islands, the natural prolongation of the shelf is defined in terms of distance.⁴⁸⁴ Only the islands, on the basis of distance, can claim the shelf in this area. All ten islands could claim a shelf since Article 121(3) of LOSC is not customary law. Should it evolve into customary law or in the event of LOSC coming into force and South Africa becoming a party thereto, only Halifax, Ichaboe and Possession would be entitled to a shelf area. However, it has been suggested that the islands be allocated a shelf co-extensive with their territorial seas and, if acceptable, other shelf areas within 200 miles of the islands' baselines ought to be allocated to the mainland.

1.3 Continental shelf (if it exists) beyond 200 nm from the islands

The distance criterion is not applicable, the areas located beyond 200 nm from the islands and the mainland. The issue is complicated since the shelf is a prolongation of both islands and mainland, there being one continental shelf with the same geological history and physical characteristics.⁴⁸⁵ Therefore the principle of natural prolongation is of no

484 Libya/Malta Case (n53) 1199 para 33, 34. The distance criterion of the EEZ applies to the continental shelf.

485 Guinea/Guinea-Bissau Case (n145) 300 para 116.

assistance since it is a prolongation of both land entities.⁴⁸⁶

Despite the geographical fact of a shared prolongation, the shelf must still be apportioned in an equitable fashion. It is submitted that it would not be inequitable to award all of this outer part of the shelf, if it exists, to the mainland, giving no effect to the three islands. Denying these small and inhospitable islands any effect at a distance more than 200 nm from their baselines is not inequitable. The island of Filfla was similarly discounted.⁴⁸⁷ In addition, this proposal is in harmony with the concept of proportionality between allotted areas and the respective coast lengths.

(e) Conclusions

Namibia, via the UN Council for Namibia has ratified LOSC. South Africa is at present a signatory. Article 83(1) will probably influence their attitudes to the delimitation issue though the Treaty is not yet in force. The role of signatory is governed by Article 18 of the Vienna Convention on Treaties and provides that a signatory is obliged to refrain from acts which would defeat the object and purpose of the treaty. The object of Article 83(1) is to settle shelf delimitations on the basis of equitable principles which will produce an equitable solution. This kind of solution must be sought by weighing up various factors regarded as relevant in the circumstances.

The coastline is regular. There are no offshore features such as islands or rocks in the vicinity of the potential lateral boundary. No geomorphological discontinuities are

486 The impracticality of this principle has been noted and the lack of guidelines emphasized - Channel Islands Case (n51) 423 para 79; Libya/Tunisia Case (n231) 46,47 para 44.

487 Libya/Malta Case (n53) 1209 para 73.

evident. The one feature which is a relevant factor is the Kudu-9A1 gasfield which could straddle the boundary. It is uncertain whether a common deposit is a special circumstance and it is not certain whether a relevant factor is synonymous with a 'special circumstance'.

It is submitted that the shared deposit must be taken into account during negotiations aimed at reaching agreement on the lateral shelf boundary in order for an equitable solution to emerge. Furthermore, the lobster fisheries off the coast in the vicinity of the lateral shelf boundary should be similarly taken account of and, if necessary, the proposed boundary must be adjusted to avoid catastrophic repercussions for the economy of either state or a part of the population which might be dependent on the resource, eg a community.

If Namibia and South Africa agree that shared resources will not influence the fixing of the boundary, the matter of exploiting the cross-boundary resource can be dealt with in any one of a number of ways discussed *supra*.

If the provisions of Article 83(1) do not influence the attitudes as predicted, customary law is applicable. A summary of the international case law reveals a migration towards the principle of equity which amounts to reasonableness in all the circumstances. The object of Article 83(1) is a delimitation based on equitable principles. Therefore customary law principles and conventional law principles are substantially the same.

Regarding the islands, it has been suggested that, unless South Africa's attitude is influenced by Article 121 of LOSC, ten of the islands can claim a continental shelf until LOSC comes into force and thereafter providing South Africa does not ratify the Treaty. Naturally, if Article

121 evolves into customary law before LOSC comes into force, then South Africa will be bound by limitations placed on rocks.

If the islands are entitled to a shelf, customary law [and Article 83(1) of LOSC] requires an equitable solution taking all the relevant factors into account. The islands have a distorting effect, denying the Namibian mainland a continental shelf that would normally accrue to it. All previous cases of islands having an even less drastic distorting effect have resulted in the adjustment of the equidistant line since distortion is a relevant circumstance. The distortion created by the Penguin Islands is inequitable. Difference in coastline lengths is also a relevant circumstance. The cumulative lengths of the coasts of the islands is miniscule when compared to that of the mainland. An equitable solution would demand less shelf mass for the islands than that allocated to the mainland. In fact, an equitable solution requires a *significantly* reduced portion of the shelf for the islands.

The equidistance method for Halifax and Long Islands is not inequitable. For the remaining islands, a combination of abatement and proportionality based on coastline lengths has been proposed. The share of the shelf will coincide with the territorial sea zone proposed for each island.

When evaluated, the final result is found to be equitable in all the circumstances. No serious economic repercussions arise; there is no marked disproportion between the areas allocated to the islands and mainland respectively; each party will still control maritime areas opposite their respective coasts; no enclavement arises.

Shelf areas beyond 200 nm of the mainland but within 200 nm of the islands are allocated to the islands. The shelf area

beyond 200 nm of the islands has been allocated to the Namibian mainland. Denying small and inhospitable islands any effect beyond 200 nm from their baselines is not inequitable and is in harmony with the concept of proportionality between allotted areas and respective coastline lengths. (✓)

If South Africa becomes a party to LOSC and the Convention comes into force, or if Article 121 should evolve into customary law in the meantime, then only Ichaboe, Halifax and Possession can claim a continental shelf based on the abatement-proportionality combination discussed. }

D Exclusive Economic Zone

(a) General

By virtue of Sections 3 and 6 of the Territorial Waters Act 87 of 1963 (as amended by Act 98 of 1977) South African municipal law has created zones that extend from the low-water mark up to 200 miles in the case of Hollamsbird. If equidistance is applied, then the overall effect would amount to distortion since the EEZ of the mainland would be drastically reduced by EEZ claims of the islands.

(b) Relevant principles

(i) Treaty provisions

Article 74 of LOSC requires EEZ delimitation, in the case of both opposite and adjacent states, to be effected by agreement on the basis of international law in order to achieve an equitable result. The wording is identical to that of Article 83 of the same Convention which deals with the continental shelf. However, caution is advised before concluding that identical wording produces identical results.⁴⁸⁸ Part of the reason lies in the vagueness inherent in the reference to 'international law' and an 'equitable solution', the degree of vagueness exacerbated by

488 O'Connell (n95) 728.

the fact that the concept of natural prolongation, having no role to play in EEZ allocation, cannot be used to limit the scope.⁴⁸⁹ ✓

O'Connell expresses concern that if the economic zone was to be considered an enlargement of the boundaries of territorial waters, the role of the median line, because of its dominance in the case of territorial waters delimitation between opposite and adjacent states, might have a presumptive quality in excess of what Article 74 would seem to envisage. One would be left with an uncomfortable situation in which the presumptive quality of equidistance would be greater in EEZ delimitation than it would be in shelf allocations when the affinities of the shelf and EEZ are far more intense than those of the territorial sea and the EEZ.⁴⁹⁰

The relationship between the EEZ and the continental shelf is an intricate one. The rules regulating economic zone delimitation cannot be ignored in continental shelf matters, but the converse does not apply.⁴⁹¹ Some shelf considerations such as natural prolongation are discounted entirely in economic zone divisions. According to the Libya/Malta decision, principles and rules relevant to EEZ delimitation cannot be ignored as the two concepts are linked in modern law.⁴⁹² ✓ JS

For example, the legally permissible extent of the EEZ is one of the relevant circumstances to be taken into account. The shelf is however, not absorbed into the EEZ. An entity can have a shelf without an EEZ but not an EEZ without the

489 Ibid 728, 729.

490 Ibid 728.

491 Libya/Malta Case (n53) 1199 para 33,34; Gulf of Maine Case (n152) 1221-1222 para 95-96, 1225 para 120.

492 Libya/Malta Case (n53) 1199 para 33.

underlying shelf.⁴⁹³ It is impractical to have different boundaries for the seabed below and the superjacent water column since this would confuse the jurisdictions being exercised. The state with sovereign rights over the seabed resources could not control environmental threats to sedentary species nor prevent security threats to installations. A state with resource rights in the water column could have its attempts at controlling environmental threats to fisheries arising from exploitation activities on the seabed thwarted. The overlapping jurisdictions would confuse the application of the law, making gravitation toward coalescence of the lines attractive and inevitable.⁴⁹⁴ O'Connell suggests that this necessary practical coincidence is the reason for the identical wording of Articles 74 and 83. The two concepts, namely shelf and EEZ, are inextricably linked by cross-reference to the part on the shelf dealing with the resources of the seabed and the subsoil of the EEZ. Moreover, some countries claim shelves beyond the 200 nm limit. It would not be feasible to have different seabed boundaries within and beyond the 200 nm limit.⁴⁹⁵

493 Ibid 1199 para 34. Most writers agree that the inner (up to 200 nm) continental shelf has been subsumed within the EEZ, but interesting theories on the relationship between the two zones are emerging. Judge Shigeru Oda has formulated a theory of parallelism, according to which, under the new customary law on the nature and purpose of the EEZ, a claim thereto incorporates *ipso jure* a claim to the continental shelf rights. See B Kwiatkowska 'Equitable Maritime Boundary Delimitation - A legal Perspective' (1988)3 IJECCL 287 at 296-298. Sharma, in a detailed discussion on the dual regime *versus* fusion theories, concludes that the relationship is one of partial integration of the regimes of the shelf and EEZ. It is more appropriate to see them as complementary, co-existing regimes, each fulfilling distinct as well as integrated functions, rather than as conflicting regimes. See S P Sharma 'The Single Maritime Boundary Regime and the Relationship between the Continental Shelf and the Exclusive Economic Zone' (1987) 2 IJECCL 203 at 224.

494 O'Connell (n95) 729,730.

495 An interesting feature of the Torres Strait Treaty

The solution to the problem of coincidence is usually solved by the order of negotiation. If the shelf boundary is negotiated first it will be practical to give the water column above it the same boundary line.⁴⁹⁶ The reverse also applies. Thus this reciprocal interrelationship between the EEZ and the continental shelf influences the extent of the requests for delimitation of one or other area. Since by its very nature the EEZ regime includes the seabed and subsoil thereof, a request for its delimitation automatically involves delimitation of the underlying shelf with the obvious exception of the shelf beyond 200 nm. A continental shelf already delimited would normally be excluded from an EEZ delimitation unless the latter is intended to redefine the aggregate of maritime jurisdictions. Governments are therefore likely to assess their interests first and then select the sequence of negotiation. The first line agreed upon will normally attract coincidence of the second boundary.

(ii) International customary law

According to the Libya/Malta Case, the concept of the EEZ is part of international customary law.⁴⁹⁷ The development of this zone has taken place without the benefit of state practice regarding the establishment of boundaries between

involving Australia and Papua New-Guinea is that the swimming fisheries line diverges from the seabed line in the northern sector where the Australian inhabited islands of Boigu, Davan and Sabai are situated. This has the effect of allocating to these islands what is equivalent to a 12 mile fisheries zone. It establishes what constitutes two layers of jurisdiction in the area; a Papua New-Guinea seabed resources zone and an Australian fisheries jurisdiction zone. The viability of this division of jurisdiction in relation to the same area may be open to debate, but it was designed to ensure an equitable fisheries zone for the inhabitants of the islands. See Lumb (n241) 157.

496 O'Connell (n95) 730.

497 Libya/Malta Case (n53) 1199 para 34.

neighbouring claimants to this zone other than a general indication as to the median line constituting the provisional boundary in several pieces of legislation. In particular, African Atlantic state practice with regard to the EEZ lends factual support to the dominant view that the concept of an EEZ is now part of general customary international law. However, it is the principle of an EEZ which has been elevated to the status of customary law rather than the specific details of the text in LOSC.⁴⁹⁸

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Though the zone as a concept is part of customary law, the question remains whether the provisions of Article 74 concerning delimitation thereof are also part of the body of international customary law by virtue of state practice. Although examples of municipal legislation illustrate the extension of the exclusive economic zone to the median line, little has been officially expressed on the matter.

Proposals at UNCLOS III varied between use of the median line failing agreement for both opposite and adjacent states, equitable delimitation and unspecified calls on international law.⁴⁹⁹ ~~The lack of consensus was apparent.~~ Only actual state practice can clarify the issue and this means that the median line plays an important role.⁵⁰⁰

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(c) Adjacent EEZ boundary between Namibia and South Africa. Article 74 of LOSC places an obligation on adjacent states to conclude an agreement on the basis of international law in order to achieve an equitable solution. Article 74 is identically worded to Article 83 on continental shelf delimitation. Not only must states conclude agreements, but

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498 S K B Mfodwo, B M Tsamenyi and S K N Blay 'The Exclusive Economic Zone : State Practice in the African Atlantic Region' (1989) 20 No 5 ODIL 445 at 467, 468 notes 325, 326.

499 O'Connell (n95) 731.

500 Ibid.

they must also do so within a reasonable time and, if not, must resort to the procedures provided for in Part XV.⁵⁰¹ Until consensus is reached, states are required to enter into provisional arrangements of a practical nature during the transitional period.⁵⁰²

At the mouth of the Orange River where the land boundary meets the sea, Namibia and South Africa are in a relationship of adjacency without the presence of complicating factors. Namibia has ratified the LOSC. South Africa is a signatory. If both states take their interim obligations seriously, one can expect a committed effort to reach agreement on EEZ delimitation within a reasonable time, and an undertaking by both to commit themselves to provisional arrangements in the interim. Should negotiations fail to produce an agreement, the procedures in Part XV of LOSC should be followed though of course no obligation to do so arises until LOSC comes into force.

Coincidence of the EEZ and shelf boundaries is usually solved by the sequence of the negotiations. Since it is possible for a state to have a shelf without an EEZ but not the reverse, it is likely that the shelf boundary will be negotiated first.⁵⁰³ The impracticality of different boundaries for the seabed below and the superjacent water column above it will encourage coalescence of the two

501 Article 74(2).

502 Article 74(3). South Africa has claimed a 200 nm fishing zone, Namibia a 200 nm EEZ. At least twenty other coastal states have not converted their fishing zones into an EEZ. For fishery purposes, the fishing zones serve as functional equivalents of economic zones. Coastal state rights over non-living resources under the fishing zone are encompassed by the legal doctrine of the continental shelf. An official EEZ would of course recognize the coastal state's jurisdiction over scientific research and environmental protection. See L. Juda 'The Exclusive Economic Zone: Non-Claimant States' (1988) 19 ODIL 431 at 439, 440.

503 Libya/Malta Case (n53) 1199 para 34.

boundaries. The shelf boundary agreed upon will attract coincidence of the EEZ boundary.⁵⁰⁴ NB

(d) Adjacent EEZ boundary between Namibia and the South African Islands

In delimiting the 200 nm exclusive economic zone, two distinct areas emerge, namely the area within 200 nm of the mainland coast and areas which are beyond this limit but within 200 nm of the islands.

Dealing with the sea space within 200 nm of the Namibian baseline, the economic zone will coincide *horizontally* with the area of the continental shelf up to 200 nm from the baseline. Here the coalescence terminates, for *vertically*, the zones differ in that the economic zone will not only include the seabed and subsoil but also the vertical water column above. The natural resources in this area of delimitation include not only oil, gas, diamonds and sedentary species of fish but also the natural resources of the superjacent water column. These include swimming fish and energy resources derived from water and wind currents.

Recent statistics indicate that the Namibian small net catch amounts to 881 tons per annum while the trawl catch amounted to 29710 tons for the year ending 1988, made up of hake, kingklip, snoek, mackerel, monk, sole and red mullet.⁵⁰⁵ One and a half million tons of fish are taken in Namibian waters each year (most of it by distant water fleets of nations with no links to the territory) representing earnings of R1 200 million per year.⁵⁰⁶

Not all the rules and principles dealing with continental shelf delimitation are relevant in economic zone S →

504 See discussion (3) D (b)(i).

505 South African Shipping News and Fishing Industry Review (n277).

506 Ibid 39. Most of the fish harvested by foreigners are mackerel and hake.

delimitation. For example, natural prolongation is not relevant in EEZ allocation, the exclusive economic zone being exclusively governed by the notion of distance.⁵⁰⁷ ✓

The Namibian situation is notable in that natural prolongation plays no role in the shelf delimitation between it and the islands as a result of the geographic reality, the shelf being a prolongation of both the mainland and the islands *in the same direction*.⁵⁰⁸ Therefore, in the present case, the delimitation of the economic zone should proceed on the same principles as those applied in determining the continental shelf between the mainland and the islands.

That being the case, a similar allocation as that proposed for continental shelf purposes ought to be equally equitable for EEZ delimitation. This would mean that the water column above the shelf would be part of the economic zone, satisfying the practical requirement of coalescence between the two boundaries. Both zones would commence at the outer limit of the territorial seas of the South African islands and of Namibia and would extend to a line 200 nm from the mainland baseline. Considering that it is not possible for a state to have an EEZ without the corresponding underlying continental shelf area, unless specifically effected by treaty, the proposal seems a reasonable one. A treaty of this nature was concluded between Australia and Papua New-Guinea in 1978 whereby the swimming fisheries line did not correspond with the seabed line.⁵⁰⁹ Other than this type of treaty, it should not be possible to allot economic zone waters to a state other than the one entitled to the underlying shelf.

The economic zone within 200 nm of the islands but further than 200 nm from the mainland would be co-extensive with the

507 O'Connell (n95) 728, 729.

508 See discussion (3) C (d)(iii).

509 See (n495).

shelf component in the same maritime area. Thus the area comprises the superjacent waters as well as the seabed and subsoil, the latter by virtue of the proposed continental shelf division. It has been suggested that a continental shelf portion be allotted to only three of the Penguin Islands. For the same reasons as were offered for the area within 200 nm of the mainland, it is submitted that the exclusive economic zone area within the same limits should be allocated to those islands not excluded from claiming an EEZ via Article 121(3) LOSC. The EEZ would be co-extensive with the islands shelves in this area but would naturally include the resources of the water column as well as those of the seabed and subsoil.

The Marine Affairs Bill (GN 712/1985) envisaged a 200 mile EEZ for the islands. As discussed *supra*, an equidistance line would produce distortion and, accordingly, requires adjustment. Continental shelf principles are applicable. An equitable result is the aim. Disproportion is inequitable. It is a hypothetical median line which produces the distortion in this case. The distortion lies in the fact that the islands have more EEZ space than the Namibian mainland. In similar cases, islands have been ignored or only given partial effect. The nine islands which are rocks in terms of Article 121(3) have no claim to an EEZ.⁵¹⁰ The remaining three, Ichaboe, Halifax and Possession, are entitled to an economic zone. It is submitted that the extent of the zone ought to coincide with the amount of continental shelf allotted to each. Article 121(3) is not customary law, and South Africa is not a party to the LOSC. South Africa could claim an EEZ for the seven 'rocks' until Article 121(3) evolves into customary law or until LOSC comes into force and South Africa becomes a party thereto. But it is submitted that in doing so, South Africa would not fulfil the obligation as signatory to LOSC to refrain from

510 See discussion (3) C (b)(i) 1.2.2.2.

acts which could defeat the objects of the Treaty.

The three islands capable of generating an EEZ, namely Ichaboe, Halifax and Possession, will only be able to claim so much EEZ as is within 200 nm of their baselines and providing such areas are not within the 200 nm EEZ of Namibia. In other words, these three islands may claim economic zones beyond Namibia's 200 nm EEZ providing they are within the 200 nm limit of their own baselines. Natural prolongation cannot extend EEZ claims to beyond the distance restriction. The islands cannot have this EEZ without the corresponding underlying continental shelf. It has been proposed that these three islands' shelves comprise the shelf area within 200 nm of their baselines. Regarding the continental shelf (if it exists) beyond 200 nm of Ichaboe, Halifax and Possession or elsewhere, it has been argued that despite a shared natural prolongation, it would not be inequitable to award this extended part of the continental shelf exclusively to the mainland.⁵¹¹ The waters above it would naturally have the status of high seas.

(e) Complicating factors.

(i) Black Sophie.

As discussed *supra*, this formation is an island. It is a Namibian island and is located between Plumpudding and Sinclair, both classified as 'rocks' within the ambit of Article 121(3) of LOSC. If LOSC comes into force and South Africa ratifies the Treaty, or should Article 121(3) emerge as customary law before then, neither Plumpudding nor Sinclair would have a shelf or economic zone.

If Black Sophie was used as a Namibian basepoint, the outer edge of the Namibian EEZ would bulge as a result of the changed coastline. However, the island of Filfla in a similar situation was ignored altogether and not used as a

511 See discussion (3) C (d)(iii).

basepoint. If Black Sophie, by analogy, is not used as a basepoint and is therefore not part of the coastline, no bulge can occur as Namibia can only claim an EEZ within 200 nm of the *coastline*.

Is Black Sophie a 'rock' in terms of Article 121(3)? If the ratification of LOSC by the UN Council for Namibia is valid, and LOSC should come into force, Namibia will be bound by the provision.⁵¹² This will also be the case if Article 121(3) should become part of customary law in the interim. Geologically, the formation is a 'rock'. It is small, uninhabited, always wet and appears unsuitable for all purposes except perhaps as a base for a lighthouse. The miniscule size and its nature cast doubt on the capacity to support human habitation. The guano resources are negligible; diamonds, oil and gas resources merely speculative. It appears that the formation is incapable of supporting an economic life of its own.

It is submitted that Black Sophie is an island but also a 'rock' and therefore restricted to a territorial sea. Even though Article 121(3) is not in force as part of LOSC, nor part of customary law, Namibia, having signed and ratified the LOSC, will be expected to act in a way not calculated to defeat any of the objects of the Convention. One of the objects of LOSC as represented by Article 121(3) is to limit 'rocks' to a territorial sea and to afford only those islands capable of human habitation and able to support an economic life of their own the whole gamut of permissible maritime zones.

(f) Conclusions

LOSC is not yet in force. South Africa is not yet a party to the Convention but as a signatory it is hoped that the obligation not to act in a way designed to defeat the

⁵¹² See (n88).

objects of the Convention will lead to a determined effort to reach consensus on the basis of international law in order to settle the EEZ boundary. Until such an agreement is reached, both states are required to enter into provisional arrangements. As discussed *supra*, the aspect of coincidence of the EEZ and the continental shelf is usually solved by the sequence of negotiations.

With reference to the EEZ division between the South African islands and the Namibian mainland, it has been submitted that a similar division to that proposed for the shelf boundaries be applied to the EEZ boundary. The Namibian EEZ would commence at the outer limit of the territorial seas of the islands and would extend to a line 200 nm from the mainland.

The Marine Affairs Bill proposed a 200 nm EEZ for the islands. If equidistance was applied, distortion would arise because the islands would then have a more extensive EEZ than the Namibian mainland. Should either LOSC come into force or Article 121(3) develop into customary law, nine of the islands are 'rocks' and have no shelf or EEZ. Ichaboe, Halifax and Possession are entitled to an EEZ and it is submitted that the economic zones allocated should coincide with the proposed shelf delimitation. Naturally, the extent of the EEZ for each island is that area which is within 200 nm of its baselines but beyond 200 nm from the Namibian mainland. The islands can therefore claim economic zones beyond Namibia's EEZ on condition that they are within 200 nm of their own baselines. Of course the islands cannot have these zones without the corresponding underlying shelf area. As a result, it is proposed that the shelves of these three islands should comprise the shelf area within 200 nm of their baselines. If a shelf exists beyond 200 nm of Ichaboe, Halifax and Possession, it would not be inequitable to award this area to the Namibian mainland. Lastly, if

Black Sophie is used as a Namibian basepoint, the Namibian EEZ and shelf could 'bulge' as a result.

E Single Maritime Boundary (SMB)

(a) International customary law

In the Gulf of Maine Case, an SMB had to be established between Canada and the United States in the Gulf of Maine area. The dispute concerned one of the world's richest fishing grounds, the Georges Bank. The delimitation involved fixing a maritime boundary for all purposes, thus embracing both seabed and water column limits. The kind of boundary sought was an SMB for the continental shelf and fishery zones of the two states.

The chamber was of the opinion that because the matter did not deal exclusively with a continental shelf allocation, Article 6 of CSC, despite the fact that both states were party thereto, did not apply. In fact, the Convention as a whole was not relevant.⁵¹³ Furthermore, provisions dealing with territorial waters and the contiguous zone were similarly inappropriate and could not, by analogy, apply to a 200 mile economic zone and continental shelf.⁵¹⁴ Article 6 was not even applicable to the shelf component of the SMB.⁵¹⁵

The chamber proceeded on the basis that the issue was to be governed by international customary law, where the few basic principles on the topic of a single boundary merely provide guidelines to be followed in pursuit of an equitable solution.⁵¹⁶ The starting point is that the SMB should be determined by a fundamental norm which represents the conviction of all states.⁵¹⁷ This norm is given form and

513 Gulf of Maine Case (n152) 1225 para 118.

514 *Ibid* para 120.

515 *Ibid* para 121.

516 *Ibid* 1219 para 81, 1220 para 89.

517 *Ibid* 1224 para 112.

stature by a number of rules such as no unilateral delimitation; negotiations to be conducted in good faith; recourse to a third party where agreement is unattainable; the search for an equitable result using equitable criteria and practical methods.⁵¹⁸ Aside from positive rules to be adhered to, it is not a legal requirement that an SMB must protect existing fishing patterns. It is also not a rule that an SMB should ensure optimum conservation and management of living resources nor that it should prevent future disputes. However, these and other considerations such as the notion that an SMB should ensure non-encroachment and also not isolate seaward projections of coasts can all contribute to an equitable result by assuming the character of equitable criteria though they are not, by definition, *rules of customary law*.⁵¹⁹

An SMB delimitation involves the selection of the most equitable criteria and the most appropriate combination of practical methods to ensure the goal of an equitable result.⁵²⁰ Different combinations of methods may be used for different segments of the line. However, because it is a boundary for two or more different zones, it is necessary to exclude criteria exclusively connected to the particular characteristics of only one of the natural realities. Therefore, in an SMB delimitation, preference should be given to criteria suited to multi-purpose delimitation because of their neutral character.⁵²¹

The most important neutral criteria are geographical factors, and in selecting these particular features, the aim should be an equal division of those areas where maritime projections converge and overlap.⁵²² Features such as tiny

518 Ibid.

519 Ibid 1223, 1224 para 110.

520 Ibid 1230 para 156, 1237 para 191.

521 Ibid 1238 para 197.

522 Ibid.

islets, uninhabited rocks or low-tide elevations lying at a considerable distance from the mainland would be potentially disadvantageous when drawing a line intended to effect equal division of overlapping zones. Naturally, if any of them should individually have a degree of importance they can have an appropriate corrective effect.⁵²³ A feature cited as one without a corrective effect is the geographical phenomenon of concavity. If for example, an equidistant line cut a coast off from a seaward projection because of coastline concavity, it would not initiate a correction.⁵²⁴

Criteria used to evaluate the result produced by consideration of the neutral criteria (mainly derived from physical and political geography) can include new circumstances based on economic and human geography.⁵²⁵ For example, the result would be unacceptable if it produced catastrophic repercussions for the livelihood or economic well-being of the populations involved, which *in casu* would only occur if the Georges Bank was allocated exclusively to one of the parties.⁵²⁶

In the Guinea/Guinea-Bissau Case, an SMB had to be determined between two adjacent states off the West African coast.⁵²⁷ The delimitation involved a single boundary for the purposes of distinguishing the territorial waters, exclusive economic zone and continental shelves of the parties. The objective was once again an *equitable solution* with reference to Articles 74(1) and 83 of LOSC.

The tribunal stressed that the relevant factors and methods to be used were those anchored in legal rules. The factors would emerge by virtue of the circumstances of each case and

523 Ibid 1239 para 201.

524 Ibid 1242 para 219.

525 Ibid 1244 para 232.

526 Ibid 1245 para 237.

527 Guinea/Guinea-Bissau Case (n145).

from characteristics peculiar to each region. That being the case, no factor is obligatory and the factors are not restricted in number.⁵²⁸

This case is notable for the importance attributed to existing delimitations in the region. It was stressed that an equitable result was one which did not ignore existing delimitations in the region. The macro-geographic approach was to be followed which meant that the valid method to adopt was to consider the West African region as a whole and to seek a solution taking the overall shape into account.⁵²⁹ This would immediately exclude methods such as parallels of latitude and equidistance. Lastly, the outcome of the delimitation should be integrated into the present and future delimitations of the region as a whole.

From these two cases, various SMB principles emerge. Firstly, there are no conventional principles on single, multi-purpose boundary lines. Secondly, an SMB is, as are other boundaries, a natural prolongation of land territory. Thirdly, an SMB is governed by the same fundamental norm as other dividing lines, namely that an equitable result be achieved by taking account of geographical configuration and other relevant circumstances. Fourthly, circumstances bound up exclusively with a single zone characteristic must be discounted. Only criteria suited for multi-purpose allocation are relevant. Fifthly, international customary law does not *require*, as part of an equitable result, the protection of existing fishing patterns although this feature can be considered as an equitable criterion. Lastly, it is not an international customary law requirement that a delimitation make optimum conservation and management of living resources possible, though once again these considerations may be taken into account in the role of

528 Ibid 289 para 89.

529 Ibid 297 para 108.

equitable criteria.

The Gulf of Maine Case was the first dispute that involved an SMB relating to both the continental shelf and EEZ but this fact did not lead to any radical innovations in the law.⁵³⁰ By way of contrast, in the Guinea/Guinea-Bissau Case, the area in dispute comprised the EEZ, shelf and the territorial waters, the boundary being sought beginning at the coast itself. The tribunal did not distinguish between the ~~rules~~ applicable to the delimitation of the territorial sea on the one hand and the EEZ on the other. The entire boundary was dealt with in terms of equitable criteria.⁵³¹

(b) SMB - an alternative for South Africa and Namibia?

Namibia and its southerly neighbour may elect to settle for an SMB instead of delimiting each individual zone. Both states have declared 200 nm resource zones, Namibia an EEZ and South Africa a fishing zone. A state's entitlement to territorial seas and a contiguous zone is far less exclusive and for all practical purposes may be ignored when selecting an SMB for zones which include an EEZ. The states may select arbitration procedures and request a tribunal to fix a single multi-purpose boundary.

530 Willis (n146) 24.

531 Ibid 25; Guinea/Guinea-Bissau Case (n145) 272 para 43. For a discussion on practical problems associated with single boundaries see D M McRae 'The Single Maritime Boundary : Problems in Theory and Practice' in The UN Convention on the Law of the Sea : Impact and Implementation (1987) (Ed E D Brown and R R Churchill) 225 at 228. On 16 August 1988, Denmark submitted its maritime boundary dispute with Norway to the ICJ. The court has been requested to decide in accordance with international law, where an SMB line shall be drawn in the fishing zone and shelf areas between Greenland and Jan Mayen. See L D M Nelson 'The Roles of Equity in the Delimitation of Maritime Boundaries' (1990) 84 AJIL 837 note 1.

Since there are no conventional provisions on single boundaries, international customary law will be applicable. In terms thereof, an SMB is determined by a fundamental norm composed of several components such as *bona fide* negotiations and recourse to third party settlement. The fundamental norm is, in essence, pursuit of an equitable result by taking relevant circumstances into account and then selecting the most practical method of delimitation. Only neutral, multi-purpose criteria can be considered and it may be necessary to use different methods or a combination of several methods for different parts of the single line.

The important criteria would be the geographical and physical characteristics of the islands - their size, nature (bare), situation (close to the coast) and the proportion between coastal length of the islands and that of the mainland. Particular resources will have to be ignored as being sole-purpose orientated. For example, oil, gas and diamond resources are related to territorial water and continental shelf delimitation while fish and energy resources are primarily connected to EEZ delimitation.

Once a tentative result is achieved on the basis of geographical and physical criteria, the equitableness thereof can be assessed from the angle of resource criteria drawn from the field of economic geography. The question will be whether the solution effects an equitable distribution of all the resources, actual and potential. Factors rooted in human geography can also be useful at the stage of result evaluation, more specifically whether the result will cause substantial economic dislocation or detrimentally affect the economic livelihood of populations in the area.

Regarding the South African islands proximate to the Namibian coastline, it would be surprising if the two states elected the SMB option. Although essentially an adjacent delimitation, the adjacency is not orthodox in the sense that a common land frontier separates the states. The sea spaces lie outwards from both territories. In addition, the territorial sea delimitation between the islands and the mainland is one involving *opposite* states. Furthermore, if LOSC comes into force or Article 121(3) develops into customary law, only three of the islands will be entitled to a continental shelf and EEZ. It would appear a futile exercise to attempt an SMB solution for Namibia and the Penguin Islands. However, it should be noted that Canada and France have agreed to submit the maritime boundary delimitation dispute regarding St. Pierre and Miquelon to international arbitration. Both states have requested a single maritime boundary for all maritime zones. These French islands are situated 12 nm from the southern coast of the Canadian province of Newfoundland, a geographically similar situation to that of the Penguin Islands.

The Namibian/South African mainland delimitation does concern orthodox adjacency. If the two states elect a single shelf and EEZ division, international customary law requires negotiations to be conducted in good faith with a view to securing an agreement. Unilateral declarations are ~~irrelevant~~. If no agreement is concluded, the states are obliged to submit the dispute to an arbitral tribunal for settlement. Customary law principles relating to an SMB are founded on the concept of a binding fundamental norm which amounts to seeking an equitable result after considering all the relevant circumstances or criteria.

The possible criteria are unrestricted in number and non-obligatory. They must however, be neutral, multi-purpose factors not exclusively connected to territorial sea, EEZ or

shelf zone characteristics. Naturally, the most important criteria are those which are presented by geographical realities. What kind of geographical configuration characterizes the Namibian/South African coastline? There is no evidence of concavity. There are no islets, rocks or low-tide elevations opposite the Orange River mouth. The coastline is relatively straight in the area of a potential SMB. Economic factors are not permanent - they play no role in the *establishment* of the boundary.⁵³²

In selecting the method of delimitation, two important considerations arise. Firstly, the most practical method is to be employed. Secondly, long-distance delimitation may require a wider choice of methods than short-distance delimitation. Equidistance is one of several methods. The oft cited disadvantage it has of producing enclavement does not arise here since concavity is not a feature of the West Coast of Namibia and South Africa. Furthermore, it was emphasized in the Gulf of Maine Case that the potential effect of cutting a coast off from a seaward extension as a result of concavity would not initiate a modification.⁵³³ Equidistance has the inherent advantage of being easy to apply. A combination of methods is not necessary in the Namibian/South African context. There are no islands capable of distorting what would otherwise be an equitable delimitation by causing the line to veer off in any direction. The method of apportionment, which involves equal division of overlapping areas, is appropriate in the case of *opposite* states and is not relevant in the Namibian context. Abatement is similarly not a realistic alternative, there being no offshore features pushing the

532 Guinea/Guinea-Bissau Case (n145) 302 para 122, 123; Gulf of Maine Case (n152) 1245 para 237. The area has traditionally been a rich fishing ground. The exact location of an SMB line will not materially disrupt existing fishing patterns or the management and conservation of the living resources.

533 Gulf of Maine Case (n152) 1242 para 219.

equidistant line in unexpected directions.

The method employed must produce an equitable result. The result can be evaluated in the light of criteria not necessarily used in establishing the line. Factors related to economic and human geography may be used to gauge the equitableness of the proposed solution. It must also be established that the tentative division will not produce catastrophic repercussions for the livelihood and economic well-being of the populations involved. Proportionality in relation to respective coast lengths may indicate the equitableness of the result. At stake is legal proportionality expressed in the negative. Disproportion must be avoided. In the Namibian situation, there is no marked difference between coast lengths and an equidistant line will not be rejected on the grounds of disproportion.

In addition, an equidistance line as an SMB will not deny the states involved control of maritime areas opposite their coasts - the line appears to be equitable on these grounds too. Moreover, the equitable nature of the result is enhanced by the fact that no enclavement results. Have the resources, actual and potential, been equitably distributed? The fishing resources are substantial along the entire West Coast. An SMB based on the equidistance method will not materially affect the distribution thereof. Regarding the Kudu-9A1 gasfield, the equitableness of the result would depend on whether the SMB severed the field or not. If the field straddles the line, joint exploitation is possible and the result is equitable. If the line was so located that the entire field was allocated to Namibia, it may be judged inequitable depending on potential future discoveries in South African maritime territory below the Kudu gasfield. The more likely future South African discoveries are, the less inequitable the line will be judged. If the SMB based on the equidistant line allocates the entire field to South

Africa, Namibia may well object to the result on the grounds of inequitable distribution of actual resources. However, the discovery of the second field, Kudu-9A2, may point to the opposite conclusion.

(c) Conclusions

An SMB is not appropriate as a delimitation alternative for the Penguin Islands and Namibia, not because of an inherent defect in the concept of a single boundary, but because of the geographical location of the islands in relation to the mainland.

An SMB between Namibia and the South African mainland is a possible solution. Such a decision must be based on agreement. Great care will have to be taken when selecting relevant criteria in order to establish the line. Those relevant to exclusive zones must be ignored while those considered must be neutral and multi-purpose. The equitableness of the solution will be evaluated in the light of various criteria drawn from a pool wider than that used for the purpose of establishing the tentative line. In the Namibian/South African context, the equitableness of an SMB based on equidistance will probably depend on the equitableness of resource distribution or the absence of resources.

There is no doubt that these states are free to negotiate whatever boundaries they wish. It is worth noting that from a functional point of view, an SMB may ignore real interests at stake. An SMB is often a convenient political solution which may not be preceded by serious consideration of biological or ecological factors. On the other hand, separate boundaries have the potential for continuous and sometimes unreasonable conflict and, as a result, many states may opt for the relative simplicity and certainty of a single line.

(F) New Trends

(a) The Equiratio Method

This method of delimitation can be defined as follows :

'A boundary line between the offshore areas under the jurisdiction of two coastal states, either adjacent or opposite, will be called an equiratio line when every point of it will be defined by a constant ratio of its distances from the nearest points of the baselines from which the breadth of the territorial sea of each state is measured'.⁵³⁴

Mathematically, the equidistance method is a borderline case of the equiratio one. Delimitations performed using the equiratio method will consist of finite stretches of lines or curves which will be either arcs of circles or parts of ellipses, parabolas or hyperbolas. The difference lies in replacing the parabolic equidistance boundary line between, for example, an island state and a continental one by an elliptic curve whose dimensions are related to the ratio agreed upon.⁵³⁵

The equidistance line $1/1$ is simply a parabola. As it moves further away from its axis, it means that further offshore, the island's claim to part of the continental shelf area will become more and more disproportionate. This increasingly inequitable parabolic boundary line can be replaced by an elliptic one, the dimensions of which can be varied as needs be according to a continuously moving scale.

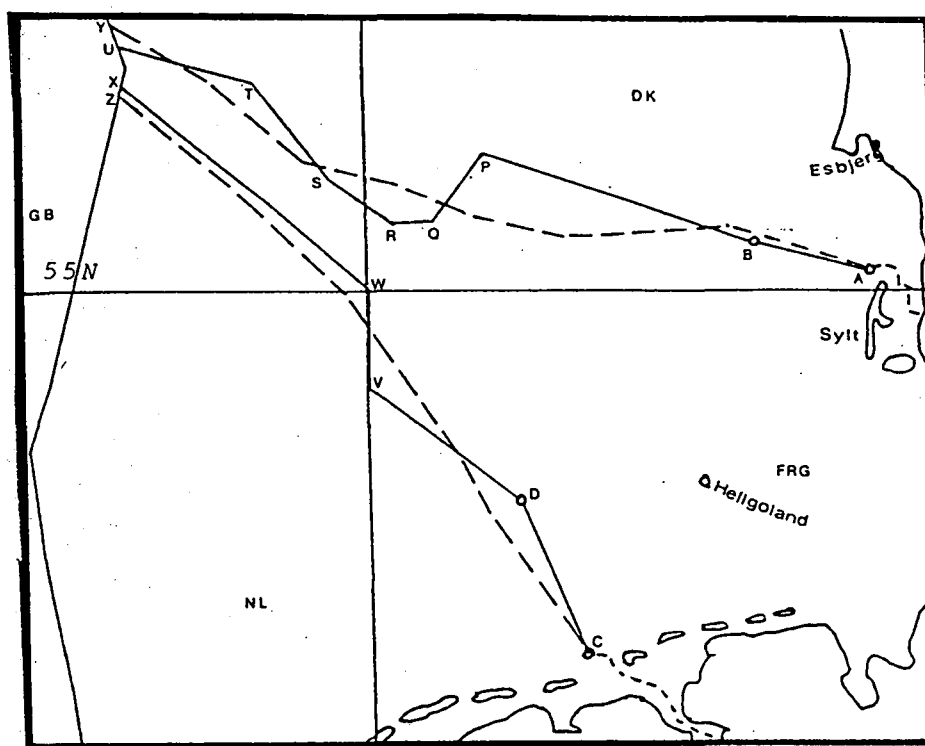
The curve $2/10$ is the locus of a point which moves in such a manner that its distance from point B equals $2/10$ of its distance from the low-water line of state A. This curve, and any others for which the fraction 'distance to

534 W Langeraar 'Maritime delimitation : The equiratio method - a new approach' (1986) 10 No 1 Marine Policy, 3 at 7.

535 Ibid 5.

point/distance to line' is smaller than unity, represents an ellipse.⁵³⁶ Any point of, for example, the $3/4$ ellipse has a distance from point B which equals 0,75 times the distance from the low-water line of state A. The distance of the apogee of the ellipse, for example point C, from the low-water line can be calculated beforehand. This distance (d) = $a.q/(q-p)$ in which p is the numerator and q the denominator of the fraction 'distance to point/distance to line' and it is on this basis that the equiratio method has been developed.⁵³⁷

Figure 1



[Reproduced from Langeraar (n534) 1].

536 Ibid 6.

537 Ibid 7.

What would the situation have been if Denmark and the Netherlands in the North Sea Cases had not insisted on the use of the equidistance method but proposed a partitioning based on equiratio instead? The two countries could have suggested an equiratio of 0,90 to the advantage of Germany. The boundary line would have consisted of points which were defined by the fact that their distances from the nearest points on the low-water lines of Denmark and the Netherlands would be $\frac{9}{10}$ of the distances to the nearest points on the low-water lines of Germany. Of note is that the ratio agreed upon is the one which will produce a result sufficiently acceptable to the negotiating parties.⁵³⁸

The agreed boundary line is represented by the composite line A-B-P-Q-R-S-T-U and on the Dutch side by C-D-V-W-X on Figure 1. The dashed lines represent a 0,90 equiratio line C-Z between the Netherlands and Germany and the line A-Y between Denmark and Germany. Regarding the line A-Y, all distances to the nearest points on the low-water line of Denmark are 0,90 times the distances to the nearest points on the low-water line of Germany. The line C-Z is constructed in the same way. The equiratio of $\frac{9}{10}$ would presumably have been acceptable to Germany taking into account the boundary lines it finally agreed to.⁵³⁹

In the Libya/Malta Case, a dispute arose concerning Malta's application of the equidistance principle.⁵⁴⁰ Libya alleged that it was entitled to a larger area of the continental shelf than an equidistance line would grant it on the basis of geological factors (which the court rejected) and on the grounds that the delimitation should accommodate significant differences in the lengths of the various coastlines. The

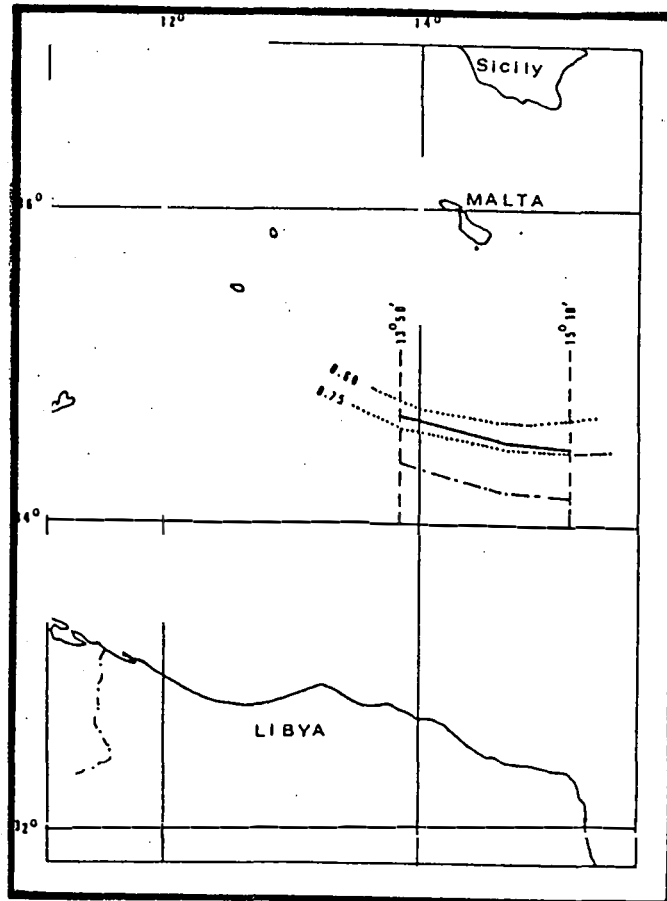
538 Ibid 9.

539 Ibid 10.

540 Libya/Malta Case (n53).

court used a median line as a first step and eventually adjusted the line to the one produced by transposing the median line northwards through 18° of latitude.

Figure 2



[Reproduced from Langeraar (n534) 17]

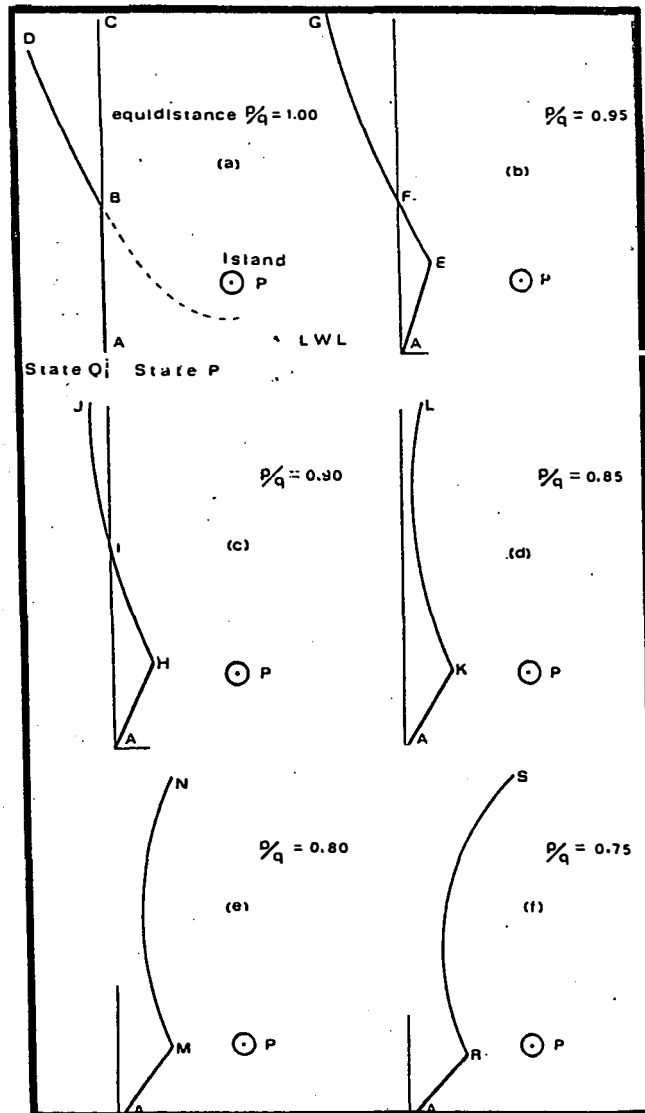
Figure 2 depicts the central part of the Mediterranean Sea showing a portion of the delimitation of the continental shelf area between Malta and Libya. The court restricted its decision to the area between the meridians of $13^{\circ} 50'$ and $15^{\circ} 10'$. The dotted-dashed line represents the equidistance boundary line between the two countries. The solid line portrays the equitable solution decided upon by the court. The dotted lines represent an 0,60 and 0,75 equiratio boundary line, delimiting the continental shelf area between Malta and Libya to the advantage of Libya.

Figure 2 presents the equiratio method as a potentially powerful tool in the hands of negotiators representing opposing parties attempting to agree on a mutually acceptable notion of equity, often in the case of contrariety.⁵⁴¹

The influence of an offshore island can also be accommodated by the equiratio method. Figure 3 portrays two adjacent states P and Q of which the border intersects with the low-water line at point A, the low-water line being a straight line. State P owns the offshore island P. In Figure 3(a), the offshore delimitation is performed by using the equidistance method (equiratio $1/1$). The offshore boundary line is represented by the line A-B-D. Without island P the boundary line would be A-C. Point B is the point of intersection between A-C and the parabola which in this case represents the boundary line between island P and state Q. Since it is likely that state Q may not accept A-B-D as an equitable delimitation of the offshore area, the use of some partial-effect measures may be called for. This can be achieved by using the equiratio method employing different ratios and the possibilities are represented by Figure 3(b) to (f).

⁵⁴¹ Langeraar (n534) 16, 17.

Figure 3



[Reproduced from Langeraar (n534) 15]

Figure 3 represents six aspects of the same terrestrial situation, but with increasingly changing offshore boundary lines. Two continental coastal states Q and P have a continuous straight low-water line, with the island P - belonging to state P - lying off the coast of state P. The offshore boundary lines vary from equidistance to an equiratio of 0,75.

This method is patently more flexible than equidistance and can better counter the tendency of an equidistant line to become increasingly inequitable further offshore, especially

in the case of an island state situated opposite a continental state. The versatility of the method is remarkable. At its disposal are an infinite number of ratios capable of meeting diverse demands and the flexibility and adaptability to varying circumstances make it a valuable tool for negotiators considering the political options open to negotiating parties.

(b) Factor Analysis Approach

Charney makes the allegation that the use of a fact-intensive rule of law by the International Court and by the tribunal in the Channel Islands Case has encouraged conflict and permitted existing conflicts to fester.⁵⁴² Every contesting state can hope that some unique fact will swing the boundary in its favour, clearly encouraging disputants to raise every possible factual argument in the course of diplomatic negotiation and litigation. The writer suggests that the court should assist in tightening the law by reducing the range of facts deemed to be relevant. This should be done by developing an explicit format for considering the arguments and for articulating the basis for its decision.⁵⁴³ The ideal approach would be one which would permit the relevant factors to be balanced in order to arrive at the boundary line.⁵⁴⁴

Charney's theory involves a five-step procedure beginning with the identification of the *functions* to be served by coastal state jurisdiction in the specific zone to be delimited. Next, all the *factors* concerning the boundary area that reflect the functions to be served by the zone must be identified. These facts must then be used to construct a line or range of lines appropriate for the function to which is relates. The alternative lines and

542 J I Charney 'Ocean Boundaries Between Nations : A Theory for Progress' (1984) 78 AJIL 582 at 595.

543 Ibid 595, 596; Evans (n254) 18,19.

544 Charney (n542) 596.

factors should then be weighed according to their importance in order to arrive at the line that best reflects the relevant factors considering their importance to the zone. Lastly, an appropriate cartographic method should be selected to describe the line accurately and reliably.⁵⁴⁵ Ideally the court should be able to produce a line that would take optimal account of the relevant factors and would be recognized as legitimate by the disputants.

The first step involves identification of the physical area in dispute. It is important to determine which part of the coastline of each state faces the disputed area, what the extent of the seaward and lateral dimensions of the ocean area relevant to the dispute are and what specific functions the boundary will serve.⁵⁴⁶ For example, the EEZ gives jurisdiction to the coastal state over resources in the water column and for the protection of the environment. The jurisdiction does not directly concern other activities in the area such as navigation and overflight.

The next step focuses on the identification of relevant factors. Charney classifies the possible factors under four headings, though only by way of example. These include *geomorphological* considerations such as the concept of proximity (boundary lines are fixed in such a way that the areas subjected to each state's rights would be closer to that state than to the other state); appurtenance (eg what ocean area would be perpendicular to the general trend of the relevant coastline); natural features such as the existence of an island, rock or other seabed feature such as a trench which could influence the direction of the boundary; proportionality in the sense that a marked dissimilarity in ratio of length of coastline to seabed areas might characterize the potential line as

545 Ibid 597.

546 Ibid 598.

inappropriate.

Secondly, there are *geological* factors to be considered. One example is natural prolongation, a concept based on the view that a geological relationship exists between the land territory and the continental shelf. An analysis of the geology may show that the composition of the seabed and subsoil in one area may be a continuation of features found on the *land* area of one of the disputants or similarities of resource deposits on land and in the ocean floor may emerge, connecting the two areas.⁵⁴⁷

The third category of factors are *resource* orientated since the function of the zone is directly related to resource uses of the area. The unity of a deposit is relevant. For example, do the fish stocks inhabit different parts of the area in dispute so that a line separating individual species can be located? Are hydrocarbon deposits divisible by a geographically identifiable line or do they overlap to such an extent that no line can separate them? Historical patterns indicative of usage must be evaluated because an established usage may permit the development of a boundary line that reflects long-established associations.⁵⁴⁸ Environmental aspects must also be allocated a role. Do the ocean and land areas at stake have a direct environmental connection? Since environmental management is one of the functions that gave rise to the exclusive economic zone, the boundary might be determined in a way that would take account of environmental relationships.

The fourth category of factors is connected to prior conduct in the disputed area as this may provide evidence to support

547 Ibid 600. Charney notes that the distance criterion means that the permitted distance is unaffected by geology as such.

548 Ibid 601.

the location of the boundary line.⁵⁴⁹ The existence of a binding delimitation agreement would dispose of the dispute. Conduct can create an estoppel situation or tacit agreement carrying significant weight, though unilateral claims by one party never acquiesced to by the other are irrelevant. Relevant conduct is located between the two extremes. In the Libya/Tunisia decision, both parties had accepted the use of the line for operational purposes over a long period of time despite the ongoing delimitation dispute, and this history or conduct carried substantial weight in the delimitation of a portion of the boundary.⁵⁵⁰ The value of the evidence lies in the identification of a line both parties could utilize which reflects realities and a balance of the real interests of the parties which did not emerge from their advocacy before the court.⁵⁵¹

The third step involves identifying a line or range of possible lines by studying each factor independently. The aim is to find a line or lines that would best accommodate the function as reflected by the relevant factor.⁵⁵² Some factors can quite easily be converted into an identifiable line. For example, if hydrocarbons have been located and divisions among them can be identified, the divisions can be represented by a line. Similar lines should be drawn representing other factors such as appurtenance, presence of natural features and prolongation. Other factors, while not being used to generate a line directly, may nevertheless contribute to narrowing the choices. For example, many lines could satisfy the test of proportionality, but the test should be applied to the various potential lines in order to evaluate them.⁵⁵³

549 Ibid 602.

550 Libya/Tunisia Case (n231) 70-71 para 93-96, 83 para 117, 84 para 118.

551 Charney (n542) 602.

552 Ibid.

553 Ibid.

The fourth step requires analysis of the potential lines, a crucial stage in the five-step procedure. In other words, the information has to be weighed in order to produce a single boundary line.⁵⁵⁴ There may be many lines produced by the relevant factors and the decision maker will have to evaluate the importance of the factors for the purposes of the zone. It may not be possible to establish a hierarchy and Charney uses a guideline which is capable of being modified. He grants considerable importance to the earth's features, namely geomorphological characteristics, particularly those reflected on navigational charts of the area. Information of this nature is least subject to dispute and can be analysed by using standard cartographic techniques.⁵⁵⁵ Abstract information derived from geological and biological studies is less useful though if data of this kind does provide information on the resources, then sufficient consideration should be given thereto.

Use patterns of the resources by nationals are important. If they show a clear demarcation of activities verging on historic rights the evidence of such patterns may be given substantial weight since they represent the physical realities of the area.⁵⁵⁶ Where the use patterns have been less consistent, little significance would follow for the patterns are then comparable to the variable economic factors disregarded in the Libya/Tunisia decision.⁵⁵⁷

Charney is cautious regarding the evidence of prior conduct or prior governmental activities, suggesting that strong reliance thereon would discourage parties from developing informal working relationships pending the outcome of a

554 Ibid 603.

555 Ibid.

556 Ibid.

557 Libya/Tunisia Case, (n231) 77 para 107.

During the fifth and final stage, all the alternative lines and considerations should be balanced, based on their relative importance to the delimitation. An attempt should be made to identify the line which best accommodates the factors that have been identified. This comparison was the crux of the Channel Islands decision.⁵⁶² Charney does not suggest a set formula for the calculation but poses that an analysis of a specific boundary situation ought to indicate the ways in which the various factors and lines are compared and contrasted to produce a boundary best suited to the functions that are the object of the delimitation.⁵⁶³

Lastly, once a line has been selected, it will have to be described, possibly point by point. Alternatively, a formula for describing the line could be developed. Techniques such as an equidistance line, a modified equidistance line, a bisector of angles, a parallel to known lines or lines of constant latitude and longitude may be used to represent the selected line. None of these methods is important in itself. The choice is found in the ability to capture, in a mathematical formula, the line that was indicated by the reasons identified in the prior steps.⁵⁶⁴ These techniques should make it possible for the line to be reproduced accurately and to be adjusted if necessary.

According to Charney, the Libya/Tunisia judgement made it clear that the balancing of relevant factors in order to reach an equitable result ought to be the method by which the line is identified. The weakness of the judgement was the court's unwillingness to delineate the weighing process in the text of the opinion.⁵⁶⁵ The court did identify specific factors to be *discounted* for the purposes of

562 Channel Islands Case (n51) 441 para 180, 444-445 para 202.

563 Charney (n542) 605.

564 Ibid 606.

565 Ibid; Evans (n254) 27,28,33.

delimitation such as economic data, but it did not clearly articulate an analysis whereby all the relevant factors were weighed in order to identify the appropriate line. The five-step analysis, advocated by Charney, is designed to encourage and facilitate this weighing process.

The factor analysis approach set out *supra*, with its systematic approach to boundary disputes, may stimulate efforts to clarify the somewhat obscure law in this area.⁵⁶⁶ Recent developments seem to have focused more on the *result*, and the principles have, according to Charney, been selected for each case with that goal in mind. Charney is convinced that if disputes are to be minimized and negotiated settlements to be encouraged, more attention will have to be given to evolving a substantive rule of law for all cases.⁵⁶⁷

(c) Management Function Approach

Maritime boundaries are currently viewed in terms of territory and fixed lines rather than in terms of system and managerial needs. This is so because maritime boundaries have their origin in a land-based international boundary concept which embodies the idea of separation.⁵⁶⁸ This attitude is manifested in the methods and process of boundary-making. Politics dominate ecological, technical and administrative needs. Consequently, division in terms of political ideas of boundary-making does not relate to logical ocean management purposes.

566 Charney (n542) 606.

567 Ibid. Other commentators fear that an exhaustive classification of relevant circumstances could result in misconceptions or overconceptualization. See Kwiatkowska (n493) 293.

568 L. Juda and R. H. Burroughs 'The prospects for comprehensive ocean management' (1990) 14 No 1 Marine Policy 23 at 30,31; Beauchamp (n216) 656.

According to Beauchamp, the last two decades have witnessed an expansion of the traditional uses of the ocean due to the growth of new activities in marine areas never before utilized.⁵⁶⁹

The competition for ocean resources has intensified and the growing number of developing nations, along with industrialized ones, all seek to extend their maritime jurisdictions. In this new era of ocean use, the primary national motivation to extend offshore jurisdiction is based on the value of resources rather than on factors such as national security and defence.

Beauchamp's theory is based on the premise that ocean boundaries ~~can only be spatial or functional~~. The former are those which define certain physical areas of the globe along political lines. Thus in international law, spatial boundaries are lines of demarcation between different legal systems.⁵⁷⁰ In the ocean itself, spatial limits of state sovereignty ~~are marked~~ by the low-water line or by baselines defining the extent of internal waters and the beginning of the territorial seas; and by the outer limit and the lateral boundaries of the territorial sea.⁵⁷¹

Functional jurisdiction on the other hand, is not absolute. It seeks to provide control for a limited purpose and can be unfunctional or multifunctional in nature. In a functional zone, other countries may carry out activities in the same area which are different from those specific activities for which the functional jurisdiction is claimed.⁵⁷² In contrast, territorial jurisdiction covers all resources and all activities. For example, in a 200 nautical mile fishing zone nations will have high seas rights of navigation beyond

569 Ibid 612.

570 Ibid 618.

571 Ibid 619.

572 Ibid 629.

the territorial waters. Thus by definition, zones based on *functional* jurisdiction can only exist outside the territorial seas of a coastal state.

The scope of the functional zone is determined by its needs.⁵⁷³ If the goal is optimum fisheries management, the zone will be determined by considering the location and movement of various stocks, breeding and spawning areas. A functional approach will require that boundaries drawn to allocate specific jurisdictions take into account not only location as such but also take cognizance of scientific and ecological realities.⁵⁷⁴

Naturally, it remains important for states to know the extent of their territorial sovereignty. However, nations today are more interested in the ocean for its economic opportunities than for security purposes. Nowadays, competition for ocean space is resource-orientated. The ocean areas now recognized and based on a functional concept are the contiguous zone, continental shelf, fishing zones, pollution zones and the multifunctional EEZ. The functional quality is of course modified by an operational element based on the coastal state's desire to acquire territory. Though they do not strictly conform to the theory of functionalism, they can still be described as functional because they are distinct from strictly spatial boundaries which simply define limits of territorial sovereignty.⁵⁷⁵

In its purest form, functionalism is a global scheme of political integration. Viewed strictly, only the Area as defined in LOSC would qualify as a *functional* zone. In view of the realities of international politics, such a grand scale of global management for ocean uses cannot rea-

573 Ibid 630.

574 Ibid.

575 Ibid 631.

listically be considered, but individual nations can adopt a functional *approach* to ocean uses within the limits of their own national jurisdiction. Where ocean management needs call for it, such an approach can be on a regional basis.⁵⁷⁶

The first attempt at codification of principles of conservation and management of the living resources outside the territorial sea occurred at the 1958 Geneva Convention on Fishing and Conservation of the Living Resources of the High Seas (Fishing and Conservation Convention). The Convention provided for freedom of fishery on the high seas subject to treaty obligations and, failing agreement, created the right to adopt non-discriminatory unilateral measures for conservation.⁵⁷⁷ The functional feature of the continental shelf as an ocean zone is its *exploitability* which automatically places valuable resources under coastal state control. Yet exploitability does not give a coastal state exclusive or absolute authority for *all* purposes and does not in itself affect the high seas character of the water column above.⁵⁷⁸

By the late 1960's, the concept of jurisdictional zones for conservation and management of fisheries contiguous to the territorial sea had become an accepted practice in international law. Today, although the degree of exclusivity varies, the 200 mile fishery zone has become widely acceptable as state practice.⁵⁷⁹

Regarding pollution zones, the first formal, international action taken was the conclusion of the 1954 International Convention for the Prevention of Pollution of the Seas by Oil whereby ships were prohibited from discharging oil in certain areas of the sea, usually within 50 miles of a

576 Ibid 631, 632.

577 Ibid 638.

578 Ibid 636.

579 Ibid 639.

coast. However, the Convention did not make external enforcement by the coastal state possible, the only available protection being action in self-defence. The 1958 Convention on the High Seas (HSC) permitted state action to prevent pollution but did not specify a jurisdictional *zone* for such purposes, Article 24 simply permitting states to draw up pollution prevention regulations.

The first offshore *zone* declared specifically for controlling pollution was established in the Canadian Arctic Waters Pollution Prevention Act which prohibited the deposit of waste into the Arctic waters in a zone 100 nm in width measured from the Arctic coast.⁵⁸⁰ The accompanying explanation by the Secretary of State for External Affairs stated that 'The Arctic Wastes Bill represents a constructive and functional approach to environmental preservation. It asserts only the limited jurisdiction required to achieve a special and vital purpose'.⁵⁸¹ Another unilateral claim to a pollution control zone was made by the United States in the Clean Water Act of 1977 where jurisdiction to prevent vessel discharge was extended not only to the territorial sea and contiguous zone but also to activities on the shelf and within the 200 mile fishery zone.⁵⁸² The Canadian legislation is particularly significant because it creates a functional enforcement zone beyond national territorial jurisdiction for the specific purpose of controlling pollution. The Arctic exception clause contained in Article 234 of LOSC appears to legitimize the Canadian initiative.⁵⁸³

580 Ibid 640 note 152.

581 Ibid 640.

582 Ibid 641.

583 Ibid. When LOSC comes into force, the EEZ will be the coastal state functional zone for pollution control.

Interestingly, the contiguous zone was actually the first recognized zone of functional jurisdiction in the sea. Initially a coastal state, in times of war, would stop and search vessels nearing its coast. This activity expanded into state enforcement of various other special functions. The contiguous zone was created to accommodate various, occasional and particular exercises of authority by coastal states beyond the territorial sea. 'The real function of the contiguous zone concept has been to serve as a safety valve from the rigidities of the territorial sea, permitting the satisfaction of particular reasonable demands through exercise of limited authority which does not endanger the whole gamut of community interests'.⁵⁸⁴ The contiguous zone, continental shelf, fisheries and pollution zones are all examples of *functional* zones in which a coastal state can exercise a particular authority while not excluding other traditional uses.

The exclusive economic zone is the functional zone acknowledged in the LOSC. The functional nature of this particular zone becomes clear when its hybrid aspects are observed. It is firstly *territorial* in nature because rights are contingent on propinquity of the coastal state. It is *functional* in nature because the coastal state not only has an opportunity to manage more activities in a wider, functional zone but also has a *responsibility* to manage properly and share the surplus of living resources.⁵⁸⁵ It is also functional because it is a multipurpose zone which goes beyond territorial jurisdiction in order to fulfil the specific but limited purposes for which it is established.

One of the most distinct features of this multifunctional zone is that it describes the rights of the coastal state

⁵⁸⁴ McDougal and Burke (n90) 76.

⁵⁸⁵ Articles 62, 63, 64 LOSC; Beauchamp (n216) 643.

and those of the international community in the zone.⁵⁸⁶ This aspect brings the EEZ closer to the classical definition of functionalism than any previous maritime zone.⁵⁸⁷ It creates an opportunity for the coastal state to manage ocean uses on a systematic basis.

The Area is a new concept embodied in LOSC and consists of the deep seabed and subsoil beyond the limits of national jurisdiction, continental shelf and EEZ.⁵⁸⁸ It is envisaged that an international authority will manage the exploitation of resources in the Area for the benefit of the world community. In fact, this deep seabed regime will be the only functional zone under global jurisdiction with no element of territoriality.⁵⁸⁹ ✓

Resource administration zones are established to provide a specific functional jurisdiction for a specific problem. These zones, unless entirely within one nation's jurisdiction, cannot be claimed unilaterally but require a functional, co-operative relationship between the parties involved. The boundaries are fixed with reference to the nature and location of a particular resource so that the resource may be developed and administered for the benefit of the parties involved, thereby avoiding the problems presented by territorial boundary settlements. Internationally, the use of these zones is important when dealing with mobile resources such as fish stocks and fluid deposits of oil and gas subject to two or more state jurisdictions.

Usually, natural resources beneath a potential boundary line make it particularly difficult to resolve a boundary dispute, causing a delay in the exploitation or conservation.

586 Article 58 LOSC.

587 Beauchamp (n216) 643.

588 Articles 133-150 LOSC.

589 Beauchamp (n216) 643.

and management of the resource. One method of preventing this kind of delay, whether the boundary is settled or not, is to arrange a division or joint development scheme which will not affect future territorial settlements. This concept was first applied to fishery management and has since been used to promote joint development of offshore transboundary petroleum deposits.

State practice reveals that two recent ocean boundary disputes have been negotiated without rigorous application of the criteria prescribed for continental shelf adjudications. The settlement between Papua New Guinea and Australia, dealing with a complex situation ~~was signed in 1978.~~⁵⁹⁰ The treaty approached the different components of the dispute ie sovereignty, fisheries, navigation, islands and the lifestyle and livelihood of local inhabitants separately. This meant that features not normally prominent in maritime boundary issues were acknowledged. The Torres Strait Treaty produced separate lines for seabed and fisheries jurisdiction and also created a 'protected zone' to preserve the traditional ways of life and livelihood of the local inhabitants as well as to protect the marine environment. The treaty is significant for it provides a precedent for treating the seabed and water column separately for delineation purposes.

Another example of a co-operative approach to delimitation is found in the agreement on seabed and fishery jurisdiction between Iceland and the island of Jan Mayen which is Norwegian territory 290 nm northeast of Iceland in the Norwegian Sea.⁵⁹¹ The first agreement signed in May 1980 established the economic zones of Jan Mayen and Iceland, articulated a process for fishery management and created a conciliation commission to recommend a continental shelf

590 See (n495); Lumb (n241); McDorman (n467) 177.

591 (1982) 21 ILM 1222.

boundary. The second agreement proposed a shelf boundary identical to that of the EEZ because the basis of such a division in conjunction with co-operative seabed arrangements would produce an equitable solution.⁵⁹²

Both the Torres Strait and Jan Mayen solutions are significant due to the comments on the relationship between EEZ and shelf boundaries, the manifestation of co-operative resource management, the importance granted to socio-economic interests and the application of international law to delimitation of overlapping maritime zones.⁵⁹³

The last fifteen years has heralded the express recognition of unifunctional zones for separate control or management purposes. It is now acceptable to assert jurisdiction on grounds other than territoriality. The multifunctional EEZ is the culmination of this trend in international law. It emerged due to technological advances which highlighted the interdependencies of the world community in the ocean.⁵⁹⁴

592 Churchill (n266) 21.

593 Beauchamp (n216) 656. A recent example of a co-operative approach to maritime boundaries with specific reference to the EEZ is manifested in the USA-USSR boundary agreement signed on 1 June 1990. The purpose of the agreement is to ensure that coastal state jurisdiction is exercised in all maritime areas in which either party could exercise such jurisdiction for any purpose, in accordance with international law, in the absence of a maritime boundary. See M N Leich 'Contemporary Practice of the United States Relating to International Law' (1990) 84 AJIL 885 at 885, 886. However, the decision in *Georgia v South Carolina* 110 S.Ct. 2903 in June 1990 illustrates that the goal of capturing maximum marine territory is still prominent, it being the reason for the different applications of equidistance and the accommodation of different 'special circumstances'. See D J Bederman 'International Decisions - *Georgia v South Carolina*' (1990) 84 AJIL 909 at 911.

594 Ibid.

According to Beauchamp, these developments demand a new perception of maritime boundaries. A single maritime boundary between neighbouring states will not be the best solution in all cases. In some circumstances, despite the administrative convenience of a single boundary, reasons for more than one line may exist - each to be delimited on different principles to serve varying management needs.⁵⁹⁵ Coastal states may have to think in terms of several boundaries delimiting their reaches of territorial and functional jurisdictions as regards neighbouring states as well as within the international community. Functional, extraterritorial zones may be created not only for one state, but also for regions and may be based primarily on economic or administrative considerations. These criteria will be complex as more diverse uses are made of offshore areas. The attempt to reconcile political aspirations with an orderly division and effective management of the larger ocean areas will require innovative bilateral and multilateral arrangements to accommodate the multifunctional nature of the EEZ with its dual nature composed of seabed, water column and surface areas.⁵⁹⁶

If the aim of the emerging international legal order is to achieve rational management of the ocean space and resources, the significance of a maritime boundary should lie in its function rather than in its location.⁵⁹⁷ Coastal states will continue to look to the ocean for resources and energy. Boundary-making and ocean management are inextricably connected. The primary function of ocean

595 Ibid 657.

596 Ibid.

597 Ibid 658; A E Chircop 'Fences Make Good Neighbours, or Do They? : Competitive and Co-operative Ocean Boundary-Making' (1987) 3 No 2 International Insights 45 at 45, 49, 51; D M McRae 'Canada and the Delimitation of Maritime Boundaries' in Canadian Oceans Policy (1989) (Ed D McRae and G Munro) 145 at 160.

boundaries can now be described as one of *management*.⁵⁹⁸

(d) The Primacy of Equidistance

The Libya/Malta judgement of 1985 was significant because the court recognized the primacy of distance in respect of title and in the delimitation of maritime areas including the continental shelf.⁵⁹⁹ From this primacy flows the inevitable *negative* conclusion that the physical fact of prolongation is then irrelevant. Unfortunately the positive result, namely that equidistance is the provisional point of departure, was not articulated.⁶⁰⁰ In fact the court stated that it was ... unable to accept that, even as a preliminary and provisional step towards the drawing of a delimitation line, the equidistance method is one which *must* be used....⁶⁰¹

Proximity or distance is nowadays a fundamental part of the concept of the shelf and territorial sea, contiguous and exclusive economic zones. The refusal in the earlier judgements to accord equidistance any special function was a result of the ideas then prevailing in respect of the shelf.⁶⁰²

At that time, the shelf was linked to natural prolongation. While there was no principle of proximity inherent in the whole concept of continental shelf appurtenance, it was obviously impossible to view equidistance as part of the natural law of the continental shelf, ie ...to treat it as

598 Beauchamp (n216) 660.

599 Libya/Malta Case (n53) 1199 para 33, 34; Vicuña (n399) 132.

600 P Weil The Law of Maritime Delimitation - Reflections (1989) 81.

601 Libya/Malta Case (n53) 1201 para 43.

602 Weil (n600) 80; Nelson (n531) 857 ascribes the rejection of the reception of the principle of equidistance in both the conventional and customary law of maritime boundary delimitation to the uniqueness of each situation.

logically necessary, in the sense of being an inescapable *a priori* accompaniment of basic continental shelf doctrine'.⁶⁰³

The introduction of the distance criterion half-opened the door for equidistance as a first step. Weil makes it clear that the plea for recognition of the fundamental and inherent character of equidistance does not mean that every maritime delimitation should legally be equidistant.⁶⁰⁴ The reason for the non-obligatory nature of equidistance is no longer to be found in the non-fundamental character of this method but in the fact that although international law requires delimitation to be rooted in title (and title is based on distance) it also insists on an equitable delimitation.⁶⁰⁵ Both conditions must be fulfilled which is why under existing law, the equidistance line is only provisional.⁶⁰⁶

The result of the distance criterion, the equidistance line, must be tested during a second stage, as a matter of equity, against the relevant circumstances. The dual nature of delimitation is simply a translation of the principle stated in the North Sea Cases and repeated in all judgements since, including the Libya/Malta judgement, that equidistance is not a legally obligatory method. According to Weil, anchoring delimitation in title transforms equidistance into

603 North Sea Cases (n48) 32 para 46. The theory of the primacy of equidistance as a result of the distance principle had already surfaced several years prior to Weil's publication. One of the Canadian arguments in the Gulf of Maine decision (n152) was that the emergence of the 'distance principle' or 'adjacency' of the area to the coast gave new emphasis to the ~~equidistance method which flows from the distance principle~~. See L E Clain 'Gulf of Maine - A Disappointing First in the Delimitation of a Single Maritime Boundary' (1984-1985) 25 VJIL 521 at 555.

604 Weil (n600) 82, 83.

605 Ibid 83.

606 Libya/Malta Case (n53) 1206 para 63.

the method legally required as the *point of departure*.⁶⁰⁷ The need for an equitable solution leads to rejection of the equidistance line as the legally required *point of arrival*.⁶⁰⁸

The two-phase procedure identified and advocated by Weil requires discussion. According to the recent decisions, the law ought to concentrate on the *goal* of an equitable result. Weil sets out to demonstrate that this attitude is no longer tenable and that the *method* of arriving at a delimitation line is as important from the law's point of view as the result. If this is not the case, it would mean that the end justifies the means and also that each case would have to be treated *sui generis*.⁶⁰⁹ Excluding the law from the process of delimitation and concentrating exclusively on the result would cause maritime delimitation to lose all predictability and certainty. When two states decide on judicial or arbitration procedures to solve a dispute, the matter will be judged by the standards of law, and it is not enough to proclaim the necessity of achieving an equitable result without considering *how* to achieve it.⁶¹⁰

The law of delimitation ~~must satisfy two requirements~~. It must be in accordance with objectively identifiable norms and it must allow scope for modifying the law in order to accommodate particular features of a given situation. Therefore the law of delimitation must have two elements - to move straight from the facts to an equitable line would be to leapfrog the legal basis for delimitation and veer towards the subjective and arbitrary. On the other hand, to stick exclusively to legal considerations would put the requirement of equity at risk. How does one know where to begin - ~~with title or the general norm of equity?~~ According

607 Weil (n600) 83.

608 Ibid.

609 Ibid 201.

610 Ibid.

to Weil, the answer lies in the fact that equity cannot be judged *in vacuo*. It is only the equity of a given line which can be evaluated.⁶¹¹

As a result, the two-phase process has to begin with a line drawn on the basis of a general and objective norm. This line will be the point of reference for assessing the equity of the outcome. The process boils down to delimitation based on legal title followed by a check to see whether, when the relevant circumstances are examined, the line conforms with equitable principles.⁶¹² Methods, equitable principles and relevant circumstances are all subject to the law. Each has a place in the two-phase process. Methods have their place in the first phase of establishing the provisional line and equitable principles and relevant circumstances their place in the second phase.

Weil advocates that the provisional or starting line cannot be anything other than a line of equidistance because of its convenience, simplicity and scientific character.⁶¹³

It has never been doubted that the equidistance method of delimitation is a very convenient one ...has the virtue that ...[the lines] traced by competent cartographers will for all practical purposes agree...[No] other method of delimitation has the same combination of practical convenience and certainty of application.⁶¹⁴

To the simplicity and objectivity must be added the fact that even though it does not always lead to an equitable result, it does produce a line which is *prima facie*

611 Ibid 202.

612 Ibid 203.

613 Ibid 205; T L McDorman 'The Libya-Malta Case : Opposite States Confront the Court' (1986) 24 CYIL 335 at 359.

614 North Sea Cases (n48) 23 para 22, 23; Libya/Tunisia Case (n231) 78, 79 para 109; Guinea/Guinea-Bissau Case (n145) 294 para 102.

equitable.⁶¹⁵ The line is especially appropriate as a starting point because it lends itself particularly well to any adjustments which may be necessary in order to fulfil the requirement of an equitable result.

Furthermore, equidistance has long since been accepted as a point of departure and the majority of judgements have used it as a starting point and either confirmed it as equitable in the particular circumstances or rejected or modified it because it seemed inequitable. In a negotiated or third party settlement, the first step has been to see what a line of equidistance would produce, mainly because a start had to be made somewhere. But although this method may have been more convenient than others, it was not legally necessary to begin with it. Equidistance had no privileged status.⁶¹⁶

According to Weil, things have changed since the Libya/Malta judgement. The practical advantages of the method remain, but now there is a legal reason for *requiring* and not merely recommending equidistance as the first step. The reason is the need to divide overlapping areas of two coastal projections according to a criterion connected to the legal basis of title to those projections.⁶¹⁷ The equidistance method, apart from acknowledging the coastal geography, incorporates, to a remarkable degree, the double parameter of coast and distance which lies at the heart of the legal concept that states are entitled to maritime areas adjacent to their shores. Equidistance takes account of the concept of maritime delimitation as presently provided for by the law. For instance, it respects the requirement of non-encroachment both in its negative form, ie not to cut off a

615. Weil (n600) 206.

616. Gulf of Maine Case. (n152) 1224, 1225 para 115. This was so except for delimitations of the continental shelf between states party to the 1958 Continental Shelf Convention who were bound by the prescribed method embodied in Article 6.

617. Weil (n600) 207.

state from areas situated directly before its coastal front and in its positive form, ie to give each state a boundary line sufficiently far from its coast. The link between title and delimitation, the legal nature of title and the modern concept of delimitation all point to equidistance as a first step. *The law now requires what was originally no more than a matter of convenience.*⁶¹⁸ Equidistance must be the point of departure because it is an inherent expression of legal title.

Though the delimitation process may begin with a line of equidistance, it does not necessarily end with one. Equidistance is not a principle of law. It is simply a method of delimitation. An equidistance line, though *prima facie* equitable, may turn out to be inequitable in the particular circumstances of the case. It is only when the cross check on the equity of the result is made that the fate of the original line will be determined.⁶¹⁹ Only if the equidistance line is equitable will it survive and be the definitive line. If inequitable, it will have to be adjusted. An equidistance line can only produce one of two results, an equitable solution or an inequitable one.

It is during the second phase that the original line, equidistance, is tested against the relevant circumstances of the case. This second phase involves the application of *equitable principles* in all the *relevant circumstances* in order to achieve an *equitable solution*.⁶²⁰ The equitable solution refers to the outcome. Equitable principles and relevant circumstances refer to the means of achieving it. Relevant circumstances involve raw facts such as concavity of the coast, the presence of an island. Equitable

618 Ibid 208.

619 Ibid.

620 *Libya/Malta Case* (n53) 1202 para 45 (italics supplied). Bederman (n593) at 913 criticises the rapid adjustment of the equidistance line.

principles imply judgement on these elements of fact. Equitable principles are therefore man-made. It is equitable principles which make it possible to grant or deny legal relevance to the facts and to use them for assessing the equity of the delimitation line.⁶²¹ For example, the concavity of a coast or presence of an island makes it possible to form a judgement on the provisional delimitation only in the light of an equitable principle according to which equity requires the modification of excessive deviations in the equidistance line caused by minor geographic features.⁶²² This equitable principle is the result of a legal choice; it does not emanate from any logical or legal necessity. It is equally true that equitable principles would be nothing without relevant circumstances to refer to. The principle of non-encroachment has meaning only by reference to actual geographic circumstances which cause the line of equidistance to move further towards or away from the coasts of the parties.⁶²³ The two concepts go hand in hand. Equitable principles acquire substance only by reference to relevant circumstances and these circumstances operate only with the help and within the context of equitable principles. It is their coming together which produces equity as a legal concept.⁶²⁴

Following its confrontation with relevant circumstances the equidistance line, if it produces an equitable solution, will become the definitive line. If not, it will have to be adjusted. There is no lack of variations on equidistance capable of reducing the unreasonable consequences without losing the advantages offered by use of the method. For example, a *simplified* equidistance line is a line in which, in order to make the line less complicated, the number of

621 Weil (n600) 211, 212.

622 Ibid 212.

623 Ibid.

624 Ibid.

turning points is reduced by using straight lines between the principal points. This was effectively used in the Channel Islands Case.⁶²⁵ *Partial effect* is another way of correcting exaggerated distortions caused by geographical features such as islands. This corrects the equidistance line and does not reject it. In the case of islands, the *enclave* option similarly adjusts but does not reject the equidistance line. A correction can also be made by adjusting the basepoints rather than the line itself, allowing the line to be moved further from the coast to which the court thinks it is too near. This is done without altering the technique for construction of the line.

The transposition of the median line, ie shifting it so as to move it further from one coast and nearer to the other, is a useful means of modification. In the Gulf of Maine situation, the median line selected as the second segment between the opposite and parallel coasts of Massachusetts and Nova Scotia was shifted eastwards.⁶²⁶ In the Libya/Malta decision, the median line was shifted northwards.⁶²⁷ The perpendicular method can be a useful variant of the equidistance method when an inequitable line has resulted in the case of adjacent states. The perpendicular line, when used between straight, adjacent coasts, achieves the same equal division of the overlapping area as does the median line between opposite coasts. A line of equidistance is *per definition* the perpendicular bisecting the straight line between those two points. A line of equidistance is, in fact, a series of perpendiculars.

625 Channel Islands Case (n51) 429 para 111.

626 Gulf of Maine Case (n152) 1242, 1243 para 222.

627 Libya/Malta Case (n53) 1208 para 71, 1209 para 73.

Is the discretionary power of judges and arbitrators to correct the line of equidistance of such a nature that they can choose any method or combination of methods whatsoever? Or is the adjustment of the prior line and therefore the eventual choice of the definitive line subject to certain rules of law? Normativity, ~~or~~ the application of rules, covers the choice of method, the method of adjustment and the choice of alternatives - in short, the whole delimitation process from beginning to end.⁶²⁸ According to Weil, the courts have thus far not characterized the nature of the discretion and it seems as though they see themselves as empowered to divide the line into as many segments, with as many methods as the situation appears to them to require. Furthermore, the courts appear to consider themselves free to adopt for each of these segments whatever method or combination of methods they deem appropriate for drawing the definitive line.⁶²⁹

So the uncertainty associated with adjusting the starting line of equidistance remains unresolved because few judgements have conceived delimitation as a two-stage process and because of an aversion to limit the discretionary power of the courts. Weil admits that the characterization of delimitation into two distinct stages has not been accepted in all judgements. On occasion the notion has been rejected in principle, while in the Channel Islands Case,⁶³⁰ the court clearly adopted the two-stage procedure.⁶³⁰ Weil predicts that a customary law rule will eventually develop to restrict the power of correction to methods of adjustment which would move the definitive boundary as little as possible from the original line of equidistance. Only in exceptional cases will the courts, providing reasons are given, be free to use alternative

628. Weil (n600) 271.

629. Ibid 272.

630. Channel Islands Case (n51) 444, 445 para 201, 202.

methods.⁶³¹

Weil pleads convincingly for the normativity of the delimitation process. By connecting delimitation to legal title and basing title to all maritime areas on distance, the courts have initiated developments which should lead to normatization of the two-pronged process which they have applied many times but without so far granting it the obligatory character which alone can turn it into a rule of law. Firstly the equidistance method is utilized not only because it is easy, objective and *prima facie* equitable, but also because it reflects legal ideas on the title of states to maritime areas and expresses the modern concept of maritime delimitation.⁶³² Thereafter the line of equidistance is tested against the relevant circumstances of the case to ensure that it does not in practice produce an inequitable result. Depending on the outcome, the line is either retained as the definitive line or adjusted. The generality essential to any legal norm is safeguarded without neglecting the need to adapt it to the particularity of concrete situations.⁶³³ Because it is rooted in title, delimitation has the generality to protect it from the risk of subjectivity.

Weil proceeds to advocate the normativity of equidistance as a first step. Equidistance is a method, but it is more than that according to the author. Since delimitation is based on title and title is dominated by the distance criterion, equidistance has the status of a legal principle.⁶³⁴ This means that this method *must* have a place in delimitation since the law now *requires* equidistance to be included in the process. This is not the same as saying that every delimitation must be equidistant. All that Weil proposes is

⁶³¹ Weil (n600) 276.

⁶³² Ibid 282.

⁶³³ Ibid.

⁶³⁴ Ibid 283; Devine (n213) 129,130,132.

that equidistance must be *part of the process* - in practice, the starting point.

Weil's thesis includes the normativity of the verification of the solution as equitable. In other words, the provisional result must be subject to the test of equity and, if necessary, followed by correction in order to reach an equitable solution. This is the goal of the second phase. Allegations that equity is an integral part of the law mean that the assessment of equity can be 'normativized' and subjected to constraints inherent in normativity such as generality, coherence, foreseeability and precision.⁶³⁵

What the judge has to assess in the second phase of the process is whether or not the equidistant line seems to him to approach so close to the coast of one of the states as to compromise its political and economic interests. This is what equity is, no more and no less. The very nature of the line of equidistance should ensure its reasonable distance from both coasts, but if features interfere with this, modification of the line may be necessary. The provisional line of equidistance, originating in distance, will be tested against distance and, if necessary, adjusted by distance.⁶³⁶

The last stage of the law's conquest of delimitation involves the legal regulation of the adjustment of the starting line. This step is the least secure and it will take time for courts to follow the minimalist approach of the 1977 Channel Islands award in which it was stated that adjustment ought to be limited to a variant of equidistance and essential minor changes to the starting line of equidistance.⁶³⁷

635 Ibid 284.

636 Ibid 285.

637 Ibid 285, 286.

Weil acknowledges that the normative net will always leave room for judicial assessment or discretion. No matter how many legal rules may emerge, a judge will always arrive at the solution through active intervention.⁶³⁸ It is the judge who will assess whether the line of equidistance stays sufficiently far from both coasts and, if not, will select an appropriate line. The judicial function includes an irreducible element of discretion. Without this element, the law and judicial function would be slaves to the given when in fact they are and must remain the work of man.⁶³⁹ None of the concepts of non-encroachment, coastal configuration, relationship of opposition or adjacency or proportionality has so far been the subject of any scientific or even reasonably rigorous definition. Instead all depend, in various degrees, on the qualitative and therefore intuitive assessment of the judge.⁶⁴⁰

(e) Implications of new trends.

The Equiratio Method of delimitation involves the use of an elliptic curve whose dimensions are related to the ratio agreed upon. Equidistance is a borderline example of the equiratio $1/1$. The ratio $1/1$, ie the equidistance line, will play a decisive role in the landward delimitation of the territorial sea between the islands and Namibia. The Equiratio Method could also be used to achieve partial effect measures where the influence of an offshore island has to be considered.⁶⁴¹

The Factor Analysis Approach devised by Charney is advanced as the ideal approach a court or tribunal ought to adopt in order to 'tighten' the law by reducing the range of facts deemed to be relevant.⁶⁴² In addition, Charney considers it

638 Ibid 286.

639 Ibid; Evans (n254) 29.

640 Ibid 287.

641 See (3) F (a) Figure 3 (a)-(f).

642 See (3) F (b).

necessary for the court or tribunal to develop an explicit format for considering the arguments and for articulating the basis for its decision.⁶⁴³ The analysis approach consists of a five-step procedure involving identification of the physical area to be delimited, isolation of the relevant factors, determination of a range of possible boundary lines, analysis of these lines and selection of the best one. If Namibia and South Africa fail to agree on the delimitation of sea spaces in the three areas of overlap, namely the Orange River mouth, Walvis Bay and the Penguin Islands, and the matter is referred to a court or tribunal, it is hoped that cognizance will be taken of the need for an explicit format as suggested by Charney.

The Management Function Approach is an appeal to states such as Namibia and South Africa to revise their attitude to boundary delimitation. Beauchamp suggests that negotiations preceding boundary negotiations ought to be viewed in terms of managerial needs instead of in terms of territory and fixed lines.⁶⁴⁴ Functional jurisdiction seeks to provide control for limited purposes only. In a functional zone, control is not absolute and other states may carry out activities in the same area which are different from those specific activities for which the functional jurisdiction is claimed. Already there are examples of zones allocated on a functional basis. These include the contiguous zone, continental shelf, fishing and pollution zones as well as the multifunctional EEZ.

Some observations can be made at this point. Although these zones are based on a functional concept, the fact that almost all claims thereto extend to the maximum is an indication of a lingering desire to acquire as much territory as is legally possible. Beauchamp is aware of

643 Charney (n542) 595, 596.

644 See (3) F (c).

this and suggests that individual nations can at least adopt a functional *approach* to ocean uses within the limits of their own national jurisdiction. Both South Africa and Namibia have claimed maximum bands of ocean space and, indeed, have in some cases such as the contiguous zone, exceeded these limits. It appears that these two states will not deviate from the general trend of acquiring maximum territory in favour of an approach governed by functional needs only. It is hoped that once the delimitation has been finalized, both states will adopt a functional approach to ocean uses and where ocean management needs calls for it, do so on a regional, co-operative basis.

By far the most relevant new trend to emerge is the manifestation of the Primacy of Equidistance. Prosper Weil is a determined advocate of the importance of the role of equidistance in delimitation issues.⁶⁴⁵ The emergence began when the importance of *distance* was realized. Proximity or distance is nowadays a fundamental part of the concept of the shelf, territorial sea, contiguous and exclusive economic zones. Weil holds the view that if delimitation is to be anchored in title (and title is based on distance), one is obliged to proceed from a line of equidistance. Equidistance is a line drawn on the basis of an objective norm. Summarized, where in the past equidistance was recommended because *inter alia* it was a simple, scientifically applicable method which *prima facie* produced an equitable result, it is now a legal principle and must be part of the delimitation process.

Although Weil advocates that the starting point of a delimitation solution must be an equidistant line, he reduces the process to a two-phase procedure. The line drawn, namely equidistance, must be tested in the second stage to assess the equity of the outcome. It boils down to

645 See (3) F (d).

delimitation based on title followed by a check to see whether, when the relevant circumstances are examined, the line conforms with equitable principles.⁶⁴⁶

Though the process may begin with a line of equidistance, it does not necessarily end with one. When the cross check on the equity of the result is made, the fate of the original line is determined. If the line produces an equitable result, it is the definitive line. If not, the line will have to be adjusted. This can be achieved by opting for a simplified equidistance line, a partial-effect correction or transposition of the line. It is the choice of an adjustment method which Weil acknowledges remains unresolved. He ascribes this to an aversion on the part of the courts to limit their discretionary power. The author feels that normativity or the application of rules ought to cover the whole delimitation process including choice of alternative methods of adjusting the equidistance line.⁶⁴⁷

The most recent decisions appear to confirm Weil's observation as to the importance of equidistance. The court in the Libya/Malta Case expressly took the line of equidistance as its starting point.⁶⁴⁸ This was a provisional step. Thereafter, relevant circumstances were considered to see if equidistance was the appropriate solution. This judgement has been characterized as a transitional one, indicating a shift from judicial attitudes which treated equidistance on the same basis as any other relevant factor to one which would give it a special role in arriving at an equitable solution.⁶⁴⁹ The hope has been expressed that the next delimitation case will formalize the new status of equidistance as a pivotal concept in

646 Weil (n600) 203.

647 Ibid 271.

648 Libya/Malta Case (n53) 1206 para 62.

649 Weil (n600) 80, 81, 82.

delimitation.⁶⁵⁰

In the Namibia context, equidistance will be an appropriate means of delimitation between the islands and the mainland where they are in an opposite relationship to one another, ie the landward delimitation. There are no special circumstances requiring adjustment of this line. The islands are not *per se* special circumstances justifying a departure.⁶⁵¹

The equidistance line would also apply to territorial waters delimitation seaward of the islands. In this case however, there would probably be special circumstances which could indicate that a departure from equidistance may be appropriate.

Thus in accordance with this recent trend, the correct starting point in any hypothetical continental shelf, EEZ or SMB delimitation between the islands and Namibia would be a notional equidistance line. The second stage would involve an evaluation of the line. By taking all the relevant factors into consideration, one would have to decide if the line produced an equitable result. If not, an adjustment of the notional line would be necessary in order to achieve an equitable result.

The general principle is an equitable result taking into account all relevant circumstances. This application of equity emerges in the specific context of other principles selected such as security, non-enclavement and proportionality.

Ensuring the security of a coastal state, be it an island or mainland, can be an application of equity in a shelf or EEZ

⁶⁵⁰ Ibid 82.

⁶⁵¹ Hoffmann (n16) 199.

delimitation. However, these areas are a considerable distance from the coast and hence the security of the state is less likely to be at risk. In territorial sea delimitation, the security aspect is likely to be pertinent as the areas will lie close inshore. The security interests of a coastal state may then constitute special circumstances capable of initiating departure from the equidistance line in order to protect this interest. The delimitation of the territorial sea between the islands and the opposite Namibian mainland by means of an equidistance line will not be affected by security interests. An adjustment would not enhance the security of either party.

The delimitation of the territorial waters seaward of the Penguin Islands is one between adjacent states. Security interests will be prominent.⁶⁵² In the case of Mercury, Plumpudding and Sinclair, equidistance will produce a result giving the islands minimal territorial sea in a seaward direction. Moreover, these waters will be surrounded by Namibian territorial waters. As a result, these islands would not control the maritime areas opposite their coasts and would be cut off from the sea by the Namibian territorial waters. In the case of Hollamsbird and Ichaboe, equidistance will produce a division which will affect the security interests of the mainland by depriving it of control over areas opposite its coast.⁶⁵³ In the case of Halifax, Long, Possession, Albatross and Pomona, the security aspect will not be threatened by the equidistance line.

The security interests of Plumpudding, Mercury and Sinclair could constitute special circumstances. An adjustment is appropriate. This could take the form of a narrow corridor of island territorial waters projecting in a seaward

652 See discussion (3) A (e).

653 Ibid.

direction being created. The islands would have access to the sea through their own territorial waters. The security interests of the mainland, where jeopardized by equidistance, could also be special circumstances. The equidistance lines can be adjusted in such a way as to allow the mainland control over the maritime areas directly opposite.⁶⁵⁴

Non-enclavement is also an aspect of equity. If an equidistance line produced enclavement, the result would not be equitable. The territorial waters of Mercury, Plumpudding and Sinclair would be cut off from the sea by a line of equidistance. Enclavement is a special circumstance.⁶⁵⁵ The narrow corridor of territorial waters in a seaward direction would be the appropriate adjustment. The principle of non-enclavement was also discussed in relation to Penguin and Seal Islands. These islands could be cut off if Lüderitz Bay was closed by a straight line. Once again the 'corridor' solution has been advocated with compensation taking the form of corresponding adjustments in the Bay.⁶⁵⁶

Natural prolongation is only relevant where the continental shelf exceeds 200 nm for up to this limit, title is governed by distance. Such a shelf may exist in places off the Namibian coast. Would this area be a natural prolongation of the mainland or the islands? If a tribunal found the submerged land to be a prolongation of both, prolongation

654 Ibid.

655 Guinea/Guinea-Bissau Case, (n145) 294 para 102, 295 para 103-104. However, the tribunal in the Channel Islands arbitration allowed enclavement of the Channel Islands continental shelf within the French continental shelf - (n51) 444, 445 para 202. It may be that non-enclavement in shelf, EEZ and SMB delimitation applies to mainland territory but not to islands. If so, the principle will have little application in the Penguin Islands situation.

656 See discussion (2) (c)(i).

would be irrelevant as a factor in delimitation.⁶⁵⁷ An equitable result would have to be sought taking other relevant circumstances into account.

Proportionality as a factor is based on the idea that a state's title to maritime areas is based on coastal projection, the land dominating the sea.⁶⁵⁸ However, it is the maritime areas projected from the coast as opposed to the hinterland that is relevant. The longer the coast, the greater the seaward projection. This is manifested in the principle of proportionality. A state with a longer coastline is entitled to more extensive zones than one with a shorter coastline.⁶⁵⁹ The principle of proportionality is an aspect of the application of equity and would probably be one of the more important principles in delimitation between the islands and Namibia. The division achieved need not be directly proportional nor need it be mathematical.⁶⁶⁰ In the end, it is disproportion that must be avoided.

There would be a marked and significant difference between the combined lengths of the coasts of the islands when compared to that of the mainland. Disproportion must be avoided. The islands ought to receive considerably less of the total area to be delimited though the ratio need not be exact or mathematical.⁶⁶¹

657 See discussion (3) C (d)(iii) and (n486).

658 Weil (n600) 65.

659 Guinea/Guinea-Bissau Case (n145) 300-301 para 118, 119, 120.

660 See discussion (3) C (d)(iii).

661 Landmass is irrelevant. It is not relevant that the area of the islands is miniscule when compared to that of the mainland.

(f) Conclusions

The delimitation issue between the islands and Namibia will hopefully be solved by agreement between the two states. The two-stage procedure advocated by Weil has been applied. The equidistance line is to be evaluated in the light of relevant circumstances. Where an inequitable result emerges, adjustments have been proposed. It is hoped that the two states will approach negotiations with an awareness of management needs. If the two parties fail to reach agreement on their lateral and opposite boundaries and the matter is to be settled by a court or tribunal, it is hoped that Charney's plea for a tightening of the law is heeded.

CHAPTER V.

(1) INTRODUCTION.

Walvis Bay is an enclave of some 1124 km² and is situated at latitude 22°57 S and longitude 14°30 E. It is approximately 1300 kilometres from Cape Town and 800 km to the north of the nearest piece of South African turf. The present Bay was formerly the Golfo de Santa Maria da Conceige and was discovered on 8 December 1487 by Bartolomeu Dias, though this has been disputed.¹ It is a prized part of the Republic of South Africa bounded on three sides by an independent Namibia and on the remaining side by the Atlantic Ocean. At present the population stands at approximately 26 000 inhabitants.²

Walvis Bay acquired its first jetty which was 616 feet long, in 1898. The harbour activities declined in proportion as the Germans developed Swakopmund as a harbour for German South-West Africa.³ Only after a railway line was built from Swakopmund to Walvis Bay did the latter develop into the chief port of Namibia. The building of a new harbour in 1927 as well as the development of industries greatly contributed to Walvis Bay's gradual development, particularly after World War II.

Till now, Walvis Bay has been the principal point of access to the interior and has been the focal point of the Namibian import and export trade. As Namibia's only deep-water port, some 85% of the total exports pass through the port.⁴ These exports include uranium, diamonds, copper, lead and other minerals. In 1981 the South African Railways and Harbour

1 J von Moltke 'The Boundaries of South West Africa' (1977) SWA Annual 170 alleges that Dias in fact bypassed the Bay.

2 The Sunday Times 13 August 1989 19.

3 'Walvis Bay-Baai' (1979) SWA Annual 19 at 20.

4 Sunday Times (n2) 19. For a detailed record of port activities see R Moorsom Walvis Bay Namibia's Port (1984) 22-26 and L Berat Walvis Bay (1990) 2.

Authority initiated a modernization project enabling the harbour to receive large freighters and tanks. By 1983 the port was capable of handling bulk exports of ore and fish products as well as receiving most categories of imports.⁵ The port settlement is also the home of a lucrative pelagic fish-processing industry, has a sizeable fishing fleet and is used as a base by Eastern European fishing fleets.⁶ Viewed commercially, Walvis Bay is South Africa's fifth largest port currently handling in excess of 2 million tons of cargo per annum, most notably uranium from Rio Tinto Zinc's Rossing mine.

Walvis Bay's significance goes beyond being a port. There are plans to connect the railway system of Namibia via Botswana with the system serving Botswana, Zimbabwe and Zaire which is currently served by the ports of Angola, Tanzania, Mozambique and South Africa.⁷ This Benguela Railway is unreliable due to the Angolan civil war, and the Tanzanian and Mozambique ports cannot handle the existing traffic. This leaves South Africa with considerable economic power over the black states of Southern Africa as they are dependent upon the South African railway system and ports for international trade.⁸ The construction of this direct rail link to Walvis Bay in Namibia would reduce the dependence by providing a modern port on the Atlantic Ocean which would be even closer to the North and South American and North European ports than the South African, Tanzanian and Mozambiquan ports.

- 5 G Evans 'Walvis Bay: South Africa, Namibia and the question of sovereignty' (1990) 66 No 3 International Affairs 559 at 560.
- 6 E A Partington 'Walvis Bay and the Penguin Islands: the Validity of South Africa's Claims to Sovereignty' (1988) 16 No 2, 3 DJILP 247 at 248; Evans (n5) 561; Moorsom (n4) 27-35.
- 7 D L Sparks 'Namibia's Coastal and Marine Development Potential' (1984) 83 African Affairs 477 at 482; Partington (n6) 248.
- 8 Ibid note 7.

Furthermore, Walvis Bay is one of the few ports suitable for military purposes along more than 2500 km of coastline from Cape Town in South Africa to Mocimêdes in Angola. Control over the Bay is vital from a security point of view.⁹ Along with Simonstown in the Cape, it is one of two strategic points in the region which have already proved valuable in two World Wars, and, should conflict arise, may yet again play a crucial role in ensuring access to sea lines of communication around the Cape and into the Indian Ocean and Persian Gulf.¹⁰ As a result, South Africa has stepped up its presence in the enclave, spending about 22 million rand in 1988/1989 on expanding and upgrading the military institutions there.¹¹

International consultants have ruled out the prospect of an alternative port. There have been rumours of a site north of Swakopmund - but this is not economically feasible as the territory's only railway line runs from Walvis Bay to South Africa.¹² Namibia's other harbour is Lüderitz Bay which can only handle coasters with less than 18 foot draught. Expansion and redevelopment of this narrow and rock-bottomed inlet will be prohibitively expensive.¹³ There is thus no other location which can serve the vital role for Namibia's economy save Walvis Bay. As Partington observes, the nation that controls Walvis Bay, in effect, controls Namibia.¹⁴

- 9 J A Brohman and D B Knight 'Some geopolitical aspects of the conflict in Namibia/South West Africa' in *Political Studies from Spatial Perspectives* (1981) (Ed A D Burnett and P J Taylor) 489 at 506; R Dreyer 'Dispute over Walvis Bay - Origins and Implications for Namibian Independence' (1984) 83 *African Affairs* 497 at 505.
- 10 Moorsom (n4) 63-66; Evans (n5) 562.
- 11 Ibid 559 note 1; Berat (n4) 87, 88. At the same time, the South African Navy held its biggest and most comprehensive exercise in recent years around the offshore waters of Walvis Bay.
- 12 Sunday Times (n2) 19; Sparks (n7) 493, 494.
- 13 Evans (n5) 565 note 18; Moorsom (n4) 11, 60; Berat (n4) 188, 189.
- 14 Partington (n6) 248; Moorsom (n4) 59.

Thus the shape and structure of Namibian boundaries reflect its status as a colonial relic from a bygone era. The strategically important territorial enclave of Walvis Bay has acted to compound the problem.

South Africa's attitude on the topic of sovereignty has been consistent. As early as 1980 commentators noted that South Africa had in fact, only committed itself to discussing the *availability* of Walvis Bay to a democratically elected Namibian government.¹⁵ This was preceded by unambiguous statements released as early as 1976 by the Prime Minister who stated 'While we transferred the administration of Walvis Bay to SWA in 1922, we will seriously consider a repeal of that law during the recess... I want no misunderstanding about this. Walvis Bay belongs to South Africa'.¹⁶ Subsequent to elections held in Namibia and three months before the formal date of independence in Pretoria's most explicit statement on the future of the harbour, Deputy Minister of Defence Wynand Breytenbach said 'Just as little as it could be expected of the USA to give up Alaska, could it be expected of South Africa to give up Walvis Bay'.¹⁷ The need to protect South Africa's fishing grounds along that section of the coast as well as its strategic importance were cited as key considerations.¹⁸ Regarding the legal status of the Bay, Mr Donald Sole, South African Ambassador to the UN from 1977-1982, said that South Africa's right was recognized in international law, and used international recognition of the United Kingdom's claim to

15 J R V Prescott *The Maritime Political Boundaries of the World* (1985) 333.

16 W S Barnard 'The Political Geography of an Exclave: Walvis Bay' (Sep 1987 - April 1988) 15 No 1, 2 SA Geographer 85 at 88; J Dugard 'South West Africa/Namibia and the United Nations' (1978) ASSAL 59 at 60; Moorson (n4) 49, 50, 68.

17 Cape Times 20 December 1989 9.

18 Die Burger 20 December 1989 25.

Gibraltar as an analogy.¹⁹ But it was made equally clear that South Africa was prepared, indeed anxious, to negotiate with Namibia on the use of Walvis Bay 'according to our right to decide about our sovereign territory'.²⁰

Namibia's attitude was evident when a sabre-rattling Sam Nujoma vowed that SWAPO would liberate 'every inch' of Namibia, including Walvis Bay. A more realistic scenario was sketched by SWAPO's secretary-general Andimba Toivo ja Toivo when he conceded that the new government would have to reach an agreement with South Africa 'to use the port, even if it meant paying fees until the sovereignty issue is resolved'.²¹ Six weeks prior to independence, a senior member of SWAPO told a meeting of the organization in Walvis Bay that the release of Nelson Mandela had raised hopes that Pretoria could be reasonable about the transfer of the Bay to Namibia. However, Namibia's viewpoint is best illustrated in the Constitution. Article 1(4) states that

'The national territory of Namibia shall consist of the whole of the territory recognized by the international community through the organs of the United Nations as Namibia, including the enclave, harbour and port of Walvis Bay...'.²²

Supporters of the viewpoint that Walvis Bay ought to be incorporated into the territory of Namibia argue that it is simply a recognition of Namibia's vital interests. This is

19 The Argus, 15 February 1990 7.

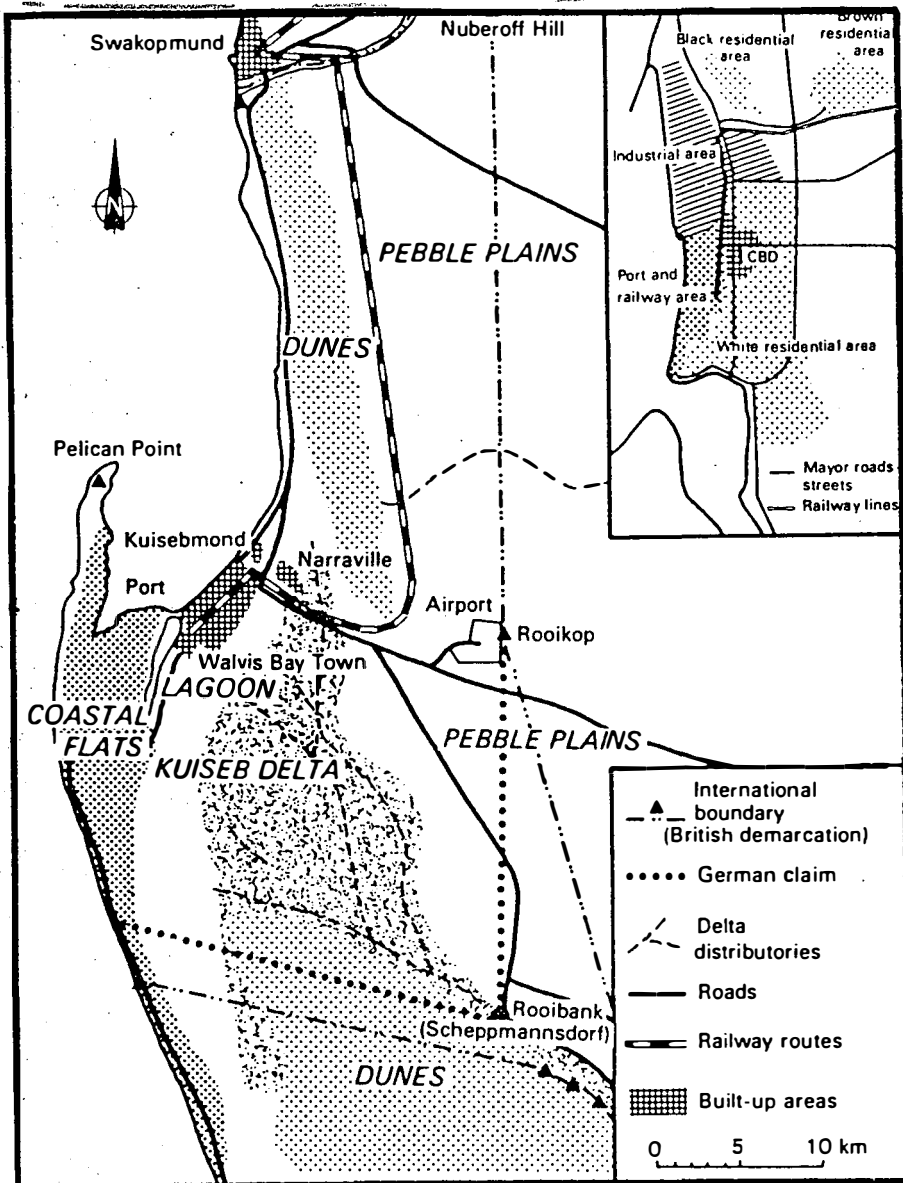
20 Die Burger, (n18). President De Klerk unequivocally endorsed this position, emphasizing that South Africa's policy on Walvis Bay was to maintain the *status quo*. 'Namibia's access to the harbour will at all times be assured. Many countries have enclaves apart from them such as the Falkland Islands and Kabinda' - Evans (n5) 567. For possible scenarios see Dreyer (n9) 509, 510. Negotiations on the future of Walvis Bay took place in Cape Town on 14 March 1991. See The Argus, 18 March 1991 17.

21 The Sunday Times, (n2); Moorsom (n4) 18.

22 The Constitution was approved by the Constituent Assembly on 9 February 1990.

the basis of the Philippine claim to the Spratly Islands in the southern part of the South China Sea. It claims that the incorporation of the islands is inextricably linked with the economic development of Palawan Province. This argument has been described as not 'particularly compelling', the International Court of Justice not recognizing economic interest as a justifiable base for territorial acquisition.²³

D1



[Reproduced from SA Geographer (1987-1988) 15 No 1, 2 95]

23 S Davidson 'South East Asia: The Spratly Islands' (1988) 3 IJEC 345 at 352; Dreyer (n9) 507.

(a) Legislative and Constitutional History

The legal history began on 12 March 1878 when the officer commanding HMS *Industry* of the Royal Navy, Commodore R C Dyer, hoisted the British flag and proclaimed the annexation to the British Empire of the 'Port or Settlement of Walfisch Bay'.²⁴ The boundary of the annexed territory was described as follows:

'...on the south by a line from a point on the coast 15 miles south of Pelican Point to Scheppmansdorf; on the east by a line from Scheppmansdorf to the Rooibank, including the Plateau, and thence to 10 miles inland from the mouth of the Swakop River; on the north by the last 10 miles of the course of the said Swakop River'.²⁵

The annexation was confirmed on 14 December 1878 by Letters Patent from Queen Victoria.²⁶ These documents authorized the Governor and Parliament of the British Colony of the Cape of Good Hope to annex Walvis Bay whereupon it would form part of the Cape of Good Hope.

In 1884 the Cape Parliament enacted legislation authorizing the Governor of the Cape Colony to proclaim that Walvis Bay (as described in the Letters Patent) was annexed to and formed part of the Cape.²⁷ On 7 August 1884, the Governor duly signed a Proclamation declaring that the Bay and

24 Partington (n6) 249. The general history began in 1793 when Captain Duminy in the *Meermin* formally took possession of Walvis Bay for the Dutch government. On 16 September 1795, the Cape of Good Hope fell into the hands of the United Kingdom. In 1806, the Cape once again was controlled by the Netherlands but not for long, as in the same year, it was reconquered by the United Kingdom - see Von Moltke (n1) 170. After reports of the possible establishment of a third Boer Republic around the area of Walvis Bay, Commodore Dyer was sent to proclaim the Bay as British Territory.

25 69 BFSP 1177.

26 70 BFSP 495, 496.

27 Walvis Bay and St. John's River Territories Annexation Act 35 of 1884.

surrounding area (as described in the 1878 Proclamation, 1878 Letters Patent and 1884 Statute) had become and was part of the Colony of the Cape of Good Hope.²⁸

At the same time, Germany was building a colonial empire of its own in Africa, with South West Africa becoming its first colony. In August and September of 1884, ahead of British efforts to do the same, Germany claimed the coast from the Orange River to the frontier of Portuguese Angola, excepting Walvis Bay.²⁹ Germany continued to acquire colonies in East and West Africa adjacent to other British colonies. As a result, in 1890 Germany and the United Kingdom entered into an agreement whereby their respective spheres of influence were spelled out, most notably the British sovereignty over Walvis Bay. However, the Germans were dissatisfied with the southern boundary of Walvis Bay as determined by a British survey in 1886. The agreement provided that the delimitation of the southern boundary would be reserved for arbitration.³⁰ In 1909 the matter was referred to the King of Spain for arbitration and in 1911 the award confirmed the accuracy of the British surveyed boundary.³¹

28 Proclamation 184 of 1884, Colony of the Cape of Good Hope Government Gazette No 6519 1884; 75 BFSP 407, 408.

29 Ibid 546-549. The diplomatic correspondence between Germany and the United Kingdom regarding the establishment of the German Colony can be found at 75 BFSP 528-553; Dreyer (n9) 499.

30 82 BFSP 35 at 40.

31 Partington (n6) 250, 251. The dispute centred around two questions. Were distances in Dyer's description measured in statute or nautical miles? Secondly, the use of the word 'plateau' was interpreted differently by German and British representatives. King Alphonso XIII appointed Professor Joaquin Prida as arbitrator who confirmed the British boundary map prepared by Phillip Wrey (based on Dyer's description) on 23 May 1911. Subsequently, Germany on several occasions explored the possibility of acquiring Walvis Bay. However, the Governor of the Cape in 1908 said '... it was a valuable asset and that it did not cease to be valuable because we are not at present making much use of it. ... I do not sell an old family jewel merely because my wife is not habitually wearing it' - V

Meanwhile, in 1910 the United Kingdom forged the Union of South Africa out of its colonies in Southern Africa namely, the Cape of Good Hope, Natal, Transvaal and the Orange River Colony.³² The four colonies became provinces of the Union with the '...same limits as ... at the establishment of the Union'.³³ The Union of South Africa had become a British Dominion and Walvis Bay was part of that Dominion.

In terms of Article 119 of the Treaty of Versailles which formally ended World War I, Germany renounced her colonies. These became part of a system of mandates under the League of Nations which had also been created in terms of the Treaty.³⁴ South Africa then enacted legislation to carry the mandate for German South West Africa into effect pending formal establishment of the mandate system.³⁵ In 1920 the Council of the League of Nations confirmed the mandate involving the territory 'which formerly constituted the German Protectorate of South West Africa'.³⁶

Then in 1922, the South African Parliament enacted the South West Africa Affairs Act 24 of 1922 whereby Section (1)(i) provided that

'From a date to be fixed by the Governor-General by proclamation in the *Gazette*... the port and settlement of Walvis Bay which forms part of the province of the Cape of Good Hope shall be administered as if it were part of the mandated territory and as if inhabitants of the said port

Prescott 'Africa's Boundary Problems' (1979) 28 No 1 Optima 3 at 8. For a detailed discussion of the demarcation dispute see W S Barnard 'What is a Plateau?' (1979) SWA Annual 61; Berat (n4) 47.

32 Sections 2, 4 South Africa Act 9 of 1909.

33 Ibid Section 6.

34 112 BFSP 13 at 21, 22.

35 Section 1 Treaty of Peace and South West Africa Mandate Act 49 of 1919; J A Faris 'The Administration of Walvis Bay' (1979) 5 SAYIL 63 at 69.

36 113 BFSP 1109.

and settlement were inhabitants of the mandated territory;...

As a result, the Governor-General proclaimed 1 October 1922 as the effective date of transfer of administration.³⁷

Three years later, the South African Parliament enacted the South West Africa Constitution Act 42 of 1925. Section 43(a) declared that

'The port and settlement of Walvis Bay shall be deemed to form part of the territory [of South West Africa] for the purposes of this Act'.

In 1949, South West Africa was granted representation in the Parliament of the Union for the first time, and in granting representation, 'territory' was defined as the territory of South West Africa including Walvis Bay.³⁸ This signalled the first parliamentary representation for Walvis Bay in either the Union Parliament or the Parliament of the Colony of the Cape.

The Union severed its ties to the British Crown and Commonwealth in 1961 when it became the Republic of South Africa. The boundaries of the provinces remained unchanged.³⁹ In 1968 South West Africa was given a new constitution and once again, the identical provision deeming Walvis Bay to be part of South West Africa was included.⁴⁰

In anticipation of South West Africa attaining independence, South Africa in 1977 transferred the administration of

37 Proclamation 145 of 1922, Government Gazette No 1262 1922; Faris (n35) 75-77.

38 Section 1 South-West Africa Affairs Amendment Act 23 of 1949.

39 Section 1 Republic of South Africa Constitution Act 32 of 1961; Faris (n35) 65, 66.

40 Section 36 South-West Africa Constitution Act 39 of 1968.

Walvis Bay back to the Province of the Cape of Good Hope.⁴¹ Thus the white electorate of Walvis Bay was transferred to the Cape electoral district until 1982 when Walvis Bay became a separate constituency.⁴² This is the legislative and constitutional position of Walvis Bay at present.

(b) Status in Municipal Law

It has been argued that Walvis Bay was never formally incorporated into the Colony of the Cape of Good Hope.⁴³ It has also been suggested that Walvis Bay was never accorded the treatment or status of an integral part of the Colony of the Cape or of the Union of South Africa, the inhabitants of the Bay, for example, never having the vote. These allegations, on examination, are factually incorrect.

The Colony of the Cape of Good Hope expanded piecemeal with periodic annexations increasing its size. With these annexations, the franchise was sometimes extended to white adults immediately, sometimes not. Walvis Bay was not treated differently to other territories annexed to the Cape. Also, the laws of the Cape were not made uniformly applicable throughout the Colony, some being excluded from parts with provision for extension at a later date.⁴⁴ Eventually in 1949, South West Africa and Walvis Bay as part of the 'territory' were given representation in the Union Parliament.⁴⁵

That Walvis Bay constituted a part of the Cape at least prior to 1922 regarding South African municipal law, emerges from the criminal case of *Rex v Mahoney* in which the defendant was convicted in an inferior court in Walvis Bay

41 Walvis Bay Administration Proclamation R202 of 1977 Government Gazette No 5731 1977.

42 Partington (n6) 254 note 43.

43 G P Goeckner and I R Gunning 'Namibia, South Africa, and the Walvis Bay Dispute' (1980) 89 YLJ 903 at 904 note 5.

44 Partington (n6) 265.

45 Sections 1, 27-33 South-West Africa Affairs Amendment Act 23 of 1949.

of an offence under South West African law.⁴⁶ The case was sent for review to the High Court of South West Africa. This court refused to review on the ground that Walvis Bay was not a part of the Mandated Territory. The case was then sent to the Cape Provincial Division of the Supreme Court of South Africa, the jurisdiction of which was limited to the Province of the Cape of Good Hope. This court reversed the conviction because of an improper promulgation of the law in question to Walvis Bay which was 'Union territory' and not part of the Mandated Territory of South West Africa.⁴⁷

With the transfer of the administration of the Bay to South West Africa in 1922, the port was 'deemed' to be part of South West Africa, and it became *de facto*, part of South West Africa. The leading case relevant to the status of the Bay after 1922 was *Rex v Offen*.⁴⁸ It involved a criminal prosecution for the evasion of customs duties and the Appellate Division of the Supreme Court of South Africa (South Africa's highest court) was called upon to construe the 1922 Act transferring the administration of Walvis Bay. The Chief Justice stated "If we examine the words of sec.1 of the Act of 1922 we do not find that Walvis Bay is made a part of the mandated territory. The section says: '(1) ... the port and settlement of Walvis Bay, which forms part of the Province of the Cape of Good Hope, shall be administered as if it were part of the mandated territory and as if the inhabitants... were inhabitants of the mandated territory'".⁴⁹ This construction is consistent with the use of the word 'deemed' generally in South African law. It has

46 1921 CPD 557. Union Proclamation No 7 of 1921 published in the Union Gazette 7 January 1921 provided that all Proclamations issued by the Administrator of South-West Africa up to and operative in that territory on 2 January 1921 would be operative and have the force of law within the territory of Walfish Bay.

47 Ibid 562.

48 1935 AD 4.

49 Ibid 6.

been recognized that the word means '... that the person or things to which it relates are to be considered to be what really they are not...'.⁵⁰

In the case of Regina v Akkermann, the defendant was convicted of entering South West Africa without the required permit via Walvis Bay. The High Court of South West Africa, upon examination of the 1922 Act and Proclamation held that

'...this legislation... was intended to state and did in fact state that for all practical, legal, statutory, legislative and procedural purposes whether civil or criminal, the port and settlement of Walvis Bay shall, as from a certain date, be regarded ... as if it were an integral part of the Territory of South West Africa... Put differently, for the purposes of criminal law, this legislation in my opinion proclaimed that after a certain date any act or omission which would, if committed within the Territory constitute a crime, would, under the same law, likewise constitute a crime, if committed... within... Walvis Bay'.⁵¹

These decisions were made years before sovereignty over Walvis Bay became an international issue and there is no suggestion that they were influenced by political or other non-legal factors. The crux of the decisions is that Walvis Bay, while being part of the Province of the Cape and thus under the sovereignty of South Africa, was for all purposes *other than sovereignty*, part of the Mandated Territory of South West Africa.

An analogy in international law can be found in Article III of the 1903 Panama Canal Treaty whereby Panama, in ceding the Canal Zone to the United States in perpetuity, granted to the latter '... rights, power and authority... which the United States would possess and exercise as if it were the

50 Chotabhai v Union Government (Minister of Justice) and Registrar of Asiatics, 1911 AD 13 at 33.

51 1954(1) SA 195 (SWA) at 196.

sovereign of the territory'.⁵² There was never any doubt that Panama had retained sovereignty of the Canal Zone during 75 years of outside administration.⁵³ The use of the word 'if' in both cases was intended to describe a *de facto* situation and was not intended to alter the situation *de jure*.⁵⁴

When the administration of Walvis Bay was transferred back to the Cape Province in 1977, Proclamation R202 provided that any reference to the South West Africa Division of the Supreme Court was to be construed as a reference to the Cape of Good Hope Division of the Supreme Court of South Africa. Furthermore, it provided that the port and settlement of Walvis Bay would be excluded from the jurisdiction of the South West Africa Division of the Supreme Court of South Africa.⁵⁵

(c) Status in International Law

(i) Position after 1922

Until the retransfer of Walvis Bay's administration back to the Cape Province, there was no sovereignty issue. However, during the Third Session of the Permanent Mandates Commission of the League of Nations in 1923, a member of the Commission observed that Walvis Bay, though not part of the Mandated Territory, was included in the contents of South Africa's Annual Report. A South African representative immediately replied that the Bay had been attached to the Mandated Territory for administrative reasons only.⁵⁶ In its report to the Council, the Commission noted this.⁵⁷

52 96 BFSP 553 at 554, 555.

53 L Oppenheim International Law (1955) 1 8ed (Ed H Lauterpacht) 458, 459.

54 Partington (n6) 267.

55 J A Faris 'South Africa's severance of links with South West Africa' (1977) 3 SAYIL 49 at 61.

56 Dreyer (n9) 503; Partington (n6) 268.

57 Ibid.

Five years later, during the Fourteenth Session of the Commission, discussion on the administration of Walvis Bay took place. Once again, the South African representative repeated that the Bay was included in the Mandated Territory for administrative purposes only. The same explanation followed the same query in 1938.⁵⁸ It was clear that the Commission was concerned that South Africa was administering the Bay as part of SWA/Namibia when it was not part of the Mandated Territory. This was so because South Africa could not unilaterally alter the Mandate (by adding the Bay to the Territory) without the consent of the Council of the League of Nations.⁵⁹ No such request for modification was forthcoming.

When the League of Nations dissolved itself in 1946 and recommended that the Mandates be transformed into United Nations Trusteeships, South Africa refused to comply and found itself at odds with the United Nations. The General Assembly then purported to terminate the South African Mandate over SWA.⁶⁰ That same year the International Court of Justice ruled against Ethiopia and Liberia in cases brought against South Africa regarding the Mandate.⁶¹ The subsequent conduct of the parties is significant. Ethiopia alleged that South Africa had established a 'military landing field' in the Swakopmund District of SWA in violation of Article 4 of the Mandate which expressly prohibited military bases.⁶² South Africa replied that the

58 Ibid 269, 270.

59 Ibid 270. Had South Africa wished to add Walvis Bay to the Mandated Territory there was the precedent in 1923 whereby the Mandate for the Belgian portion of German East Africa (now Rwanda and Burundi) was increased in size and the British portion of German East Africa (now the Tanganyika portion of Tanzania) decreased via a resolution of the Council of the League of Nations - 118 BFSP, 899 at 905.

60 GA Res 2145; UN Doc A/6316 (1966).

61 South West Africa Cases (Ethiopia v South Africa; Liberia v South Africa) 1966 ICJ Rep 4.

62 Partington (n6) 271.

base was in Walvis Bay which was South African territory and not included in the Mandate. This geographic explanation was accepted.⁶³

It is significant that at this time, no nation disputed South Africa's sovereignty over Walvis Bay.⁶⁴

(ii) Significance of maps.

Maps are playing a more prominent role in international law than ever before. The International Court of Justice accepted maps as a relevant factor in the Case Concerning Sovereignty Over Certain Frontier Land (Belgium v Netherlands).⁶⁵ It is clear that maps produced by a state or utilized or accepted by it are going to be strong evidence, if not conclusive, of the boundaries or sovereignty depicted thereon.

Regarding maps published by the South African government, the first, dated 1914, depicts Walvis Bay separated from SWA/Namibia by an *international* boundary though without the colour shading accompanying other international boundaries on the same map.⁶⁶ Maps dated 1923, 1935, 1937, 1938 and 1940 show no boundary or only a magisterial one between the Bay and SWA. The maps attached to the South African Annual Reports submitted to the Council for the years 1937-1939 do depict an *international* boundary in the Bay area. In the one and only report to the United Nations in 1946, the western boundary of the Mandated Territory was described as the Atlantic Ocean. Since Walvis Bay was not mentioned, it

63 Ibid. It was however stated that in a military sense, Walvis Bay was in South West Africa as it was completely surrounded by the Mandated Territory. This is factually incorrect as Walvis Bay is bounded on the west by the Atlantic Ocean.

64 Ibid note 131. The United States has also consistently recognized South Africa's sovereignty over the enclave.

65 1959 ICJ Rep 209 at 214, 215, 216, 220, 225, 227; see discussion Chapter IV (2) (a)(ii).

66 Partington (n6) 273.

could by implication, be part of the Mandated Territory. However, the Report explicitly stated that Walvis Bay '...is administered by the Administration of South West Africa, but the area remains nevertheless an integral part of the Province of the Cape of Good Hope'.⁶⁷ From 1940 onwards, all official maps consistently represent *international* boundary lines between Walvis Bay and SWA/Namibia.⁶⁸

Most of the German maps of SWA represent Walvis Bay as British territory.⁶⁹ The United Nations maps - thirteen of them dating from 1950 to 1977 - show an *international* boundary around Walvis Bay while six maps thereafter indicate no boundary at all.⁷⁰ Most of the maps do carry disclaimers that the boundaries depicted do not imply official endorsement or acceptance by the United Nations. It has been argued that these disclaimers only apply to the *delimitation* of the boundaries shown and not to the *allocation* of the territory shown. In that case, the United Nations maps representing an international boundary between Walvis Bay and SWA could be evidence of acquiescence and recognition of South Africa's sovereignty over Walvis Bay.⁷¹

67 Ibid 274 note 155.

68 These maps are dated 1943, 1944, 1950, 1952, 1955, 1961, 1962, 1965 - Partington (n6) 274, 275.

69 Ibid 275-277 notes 166-174.

70 Ibid 279 note 182.

71 Ibid. According to Akweenda, the legal significance of the disclaimer, which states that the boundaries are to be settled by an independent Namibia, is that it avoids any assertion that the United Nations, by publishing the map, has become bound to accept the alignments depicted by virtue of legal concepts of estoppel, acquiescence or recognition. The disclaimer would also negate the assertion that United Nations member states which share common boundaries with Namibia have become bound by virtue of these principles. The map was prepared for the purpose of dissemination and information, not for delimitation so the boundaries depicted are provisional. See S Akweenda 'The Legal Significance of Maps in Boundary Questions: A Reappraisal With Particular Emphasis on Namibia' (1989) 60 BYIL 205 at 211, 251, 252.

What conclusions can be drawn from the maps? Because South Africa was unable to alter the terms of the Mandate unilaterally, South African maps showing Walvis Bay as part of SWA/Namibia are of limited value though the arbitrator in the Island of Palmas Case did comment that official or semi-official maps would be of special interest in cases where they do not assert the sovereignty of the country whose government issued them, the so-called declaration against self-interest.⁷² In addition, since 1940 South African maps have consistently shown Walvis Bay to not be part of SWA/Namibia, a situation acknowledged and accepted by the United Nations and the rest of the international community, at least up until 1977. Ultimately, it is difficult to deny South African sovereignty over Walvis Bay based on map evidence.

(iii) Role of estoppel.

Is it possible that the doctrine of estoppel in international law may impede South Africa's claim to Walvis Bay? This argument is predicated on South Africa's conduct in severing the Bay from the Cape and incorporating it into SWA/Namibia so totally that an independent Namibia is not economically viable without it. Put differently, fifty five years of continuous administration of the Bay as part of SAW/Namibia has created a degree of interconnection and expectation that undermines the South African claim. South Africa's non-assertion or ineffective assertion of its sovereignty from 1922-1977 amounts to abandonment of that right. The integration was publicly endorsed by successive governments and it was declared state policy that the entire political, economic, social and cultural infrastructures of the Bay should be aligned with Windhoek and not Cape Town. For more than half a century, the aspiration towards self-government was intimately bound up with the expectation of

72 (1928) 22 AJIL 867 at 891-893; Akweenda (n71) 219.

the Union. South Africa encouraged and acquiesced in this idea (at least up until 1977) and it cannot now challenge this merely to promote its own interests. Thus having caused the people of Walvis Bay and Namibia to rely on the integration as a *fait accompli*, South Africa is now estopped from claiming sovereignty over Walvis Bay.

Estoppel is not a mode of acquisition of territory. Instead, it forms part of the evidence of sovereignty - acquiescence, recognition, admissions and estoppel often blurring together in any given case.⁷³ Estoppel is an aid in the interpretation of facts and legal instruments. Though described as a principle of substantive law, it is essentially procedural in that there must be a recognized basis for claiming sovereignty over territory. If not, estoppel has no application.⁷⁴

A study of international decisions reveals that estoppel, though not a *mode* of acquisition, can *prevent* the acquisition of territory. In the Temple of Preah Vihear Case, estoppel was invoked to prevent Thailand from denying that the boundary was that as shown on the map.⁷⁵ This was a delimitation case, not an acquisition case, the court eventually ruling that the map boundary (as opposed to the treaty boundary) was the definitive one. In the Legal Status of Eastern Greenland Case, estoppel, dubbed recognition, was relied on to prevent Norway denying its own recognition of Danish sovereignty and thus being used to prevent acquisition of territory.⁷⁶ In the Right of Passage

73 M Akehurst A Modern Introduction to International Law (1984) 5ed 148-150.

74 Ibid 149. The author observes that the attitude of international law regarding estoppel has not been consistent.

75 Case Concerning the Temple of Preah Vihear (Cambodia v. Thailand) 1962 ICJ Rep 6 at 63-65; Akweenda (n71) 221, 222, 223.

76 1933 PCIJ (Ser A./B) No 53 22 at 68, 69.

of Indian Territory Case, estoppel was raised to prevent India from denying Portugal's effective occupation of Portuguese enclaves situated in Indian territory.⁷⁷ In the Arbitral Award of the King of Spain, estoppel was used to prevent Nicaragua from denying that the boundary, fixed by the King of Spain in prior arbitration and accepted by Nicaragua, was in fact its boundary.⁷⁸ In the Minguier and Ecrehos Case, estoppel in the guise of admission was raised to prevent France from denying that the boundary between it and the Channel Islands was where France had previously said it was.⁷⁹ Once again, estoppel prevented the *acquisition* of territory.

In the Fisheries Case, involving the United Kingdom and Norway, estoppel or 'general toleration' was invoked to prevent the United Kingdom from asserting that the fishing zone boundary set by Norway had not been set according to a valid principle of international law.⁸⁰ In the Honduras Borders Case (Guatemala v Honduras), estoppel in the form of acquiescence was used to bar Honduras from denying Guatemala's sovereignty *re* territory over which there had been a long and unopposed assertion of the latter's

77 Case Concerning Right of Passage Over Indian Territory (Portugal v India) 1960 ICJ Rep 6 at 39 where it was found that 'They accepted the situation as they found it and left the Portuguese in occupation of... the villages' and 'The Portuguese sovereignty over the villages was recognized by the British in fact and by implication and was subsequently tacitly recognized by India'.

78 Case Concerning the Arbitral Award Made By The King of Spain on 23 December 1906 (Honduras v Nicaragua) 1960 ICJ Rep 192 at 213 where it was decided that '...Nicaragua, by express declaration and by conduct, recognized the Award as valid and it is no longer open to Nigaragua to go back upon that recognition and to challenge the validity of the Award'.

79 The Minguiers and Ecrehos Case (France v United Kingdom) 1953 ICJ Rep 47 at 71.

80 Fisheries Case (United Kingdom v Norway) 1951 ICJ Rep 116 at 138, 139.

authority.⁸¹ All these examples illustrate how estoppel can prevent the *acquisition* of territory. There appears to be no authority in the case law that estoppel may act to *effect* the transfer from one state to another.⁸²

An analysis of the essential elements of estoppel and application thereof to the Walvis Bay issue is relevant. The elements are that the right was apparently actionable; that the party actually seized of the right ought to have been aware that it was actionable; that the party ought to have been aware that his silence may be construed by others as a communication of assent to their behaviour; that the party ought to have communicated - unequivocally by all available processes - that he did not accede to such behaviour and that he reserved his right to action; that under the circumstances, others could not have expected to be informed of such intentions or to consider them serious or *prima facie* valid; that others did not manifestly or tacitly, attempt to defer or prevent authoritative resolution of conflicting claims; that subsequent action on the initial right will be prejudicial to the interests of either the community or to its individual members.⁸³

If one examines the Walvis Bay situation, it becomes clear that the criteria cannot be met. Firstly, South Africa's right to maintain Walvis Bay as part of the Cape Province cannot be said to have been actionable ie contested by action. By virtue of the Mandate, South Africa was entitled to administer SWA as an integral part of the Union. In fact, SWA was considered by some scholars to be practically a fifth province of the Union.⁸⁴ Including Walvis Bay in

81 1933 2 UNRIAA 1307 at 1327-1329.

82 Partington (n6) 282.

83 W M Reisman Nullity and Revision (1971) 385, 386; A P Rubin 'The International Legal Effects of Unilateral Declarations' (1977) 71 AJIL 1 at 16, 17.

84 H R Hahlo and E Kahn The Union of South Africa, The Development of its Laws and Constitution (1960) 129.

the administration of the Mandated Territory was within the limits of the Mandate and was acquiesced to by the League of Nations, the only body which could have brought an action.

The second essential element has no application since the right was not actionable. The third element is not established. South Africa cannot be accused of silence. It repeatedly asserted that the administration of Walvis Bay had been transferred only for administration purposes and that it remained part of the Cape Province.⁸⁵

Regarding the fourth element, by expressly stating that Walvis Bay remained part of the Cape, by treating it only 'as if' it were part of SWA/Namibia and never requesting modification of the Mandate in order to include the Bay as part of the Mandated Territory, South Africa adequately reserved its sovereignty over the area.⁸⁶

The fifth element is inapplicable. South Africa informed the entire international community that Walvis Bay remained under its sovereignty, a position recognized by the League of Nations and unchallenged until 1977. The sixth element is not relevant as there were no conflicting claims to be resolved until 1977. The seventh element of estoppel is probably the only one where an argument can be formulated against South Africa keeping Walvis Bay. By retaining Walvis Bay, South Africa could adversely affect the economy of Namibia.⁸⁷ However, this situation is no different from other landlocked states that depend on their neighbours for seaborne trade. Moreover, Walvis Bay is just as dependent

85 See discussion (1) and (1) (b).

86 Partington (n6) 283. Some commentators are concerned that South Africa has '... somewhat compromised its position by administering Walvis Bay from Windhoek... since 1922, only transferring administration back to the Cape Province on 1 September 1977' - see Brohman and Knight (n9) 507; Dreyer (n9) 503.

87 See discussion (1).

on Namibia's continued use of the port.

Even if the last point is conceded, it is insufficient for the application of estoppel in international law to the issue of sovereignty over Walvis bay.⁸⁸ The only South African *conduct* relevant to the topic of sovereignty relates to the maps produced by the government which failed to record an *international* boundary between Walvis Bay and Namibia. According to Partington, this is insufficient to establish estoppel against South Africa.⁸⁹ It is highly questionable whether these maps were intended to represent sovereign rights.

(iv) Non self-governing territory

If Walvis Bay was never part of the Mandated Territory, and it is submitted that this is correct, is the Bay a non self-governing territory envisaged by Article 73 of the United Nations Charter? If so, South Africa would incur the duty of administering Walvis Bay as a 'sacred trust'. If Article 73 is applicable, South Africa has the duty to abide by the desires of the inhabitants as to whether they wish to be part of Namibia or the Republic.⁹⁰

88 Partington (n6) 284. For a contrary finding on the applicability of estoppel see Goeckner and Gunning (n43) 904-910. It is submitted that the authors have offered an incomplete legislative history. There is no reference to the 1977 retransfer and no discussion of South Africa's express intention regarding the 1922 transfer. See also Moorsom (n4) 15-18 and Berat (n4) 167-173.

89 Partington (n6) 284 note 207. For a contrary view see Moorsom (n4) 18 and Berat (n4) 173.

90 Legal Consequences for States of the Continued Presence of South Africa in Namibia (South West Africa) Notwithstanding Security Council Resolution 276 (1970) 1971 ICJ Rep 16 at 31. What these desires may be has not been determined. It is worth noting that the majority of the population is non-white and may wish to be incorporated into the now independent state of Namibia - Partington (n6) 285 note 210.

This argument rests on two General Assembly Resolutions establishing the criteria for identifying a non self-governing territory.⁹¹ Firstly, the territory must be geographically separate from the administering state. Secondly, the people must be ethnically or culturally distinct from those of the administering state. Lastly, the status of the territory must be arbitrarily subordinate to that of the administering state.

Walvis Bay is geographically separated from the rest of South Africa. This is not unique in Africa. Three other similar coastal enclaves, considered integral parts of their nations, exist on the continent, namely the Angolan enclave of Cabinda and the Spanish Mediterranean enclaves of Ceuta and Melilla. In Europe, the Belgian enclave of Baerle-Duc, surrounded entirely by the Netherlands, comes to mind. The World Court ruled in favour of Belgium on the sovereignty aspect, in the process rejecting the principle of contiguity as a rule of positive international law granting contiguous states paramount claims to enclaves and adjacent territories.⁹²

The second criterion is difficult to apply. The White and Coloured populations of Walvis Bay clearly have an ethnic and cultural identity with similar groups in South Africa. As for the Black African population, any ethnic and cultural test is difficult to apply on a continent where national

91 GA Res 1514 Para 6 provides that 'any attempt aimed at the partial or total disruption of national unity and the territorial integrity of a country is incompatible with the purposes and principles of the Charter of the United Nations' and can be used by both sides in the Walvis Bay dispute to bolster their respective positions. Annex to GA Res 1541 entitled 'Principles which should guide Members in determining whether or not an obligation exists to transmit the information called for in Article 73 of the Charter of the United Nations' provides the guidelines.

92 Case Concerning Sovereignty Over Certain Frontier Land (n65).

boundaries as a rule ignore ethnic and cultural identity. African nations have on various occasions accepted that colonial boundaries dominate cultural or ethnic distinctions.⁹³ To apply this criterion to Walvis Bay and not to the rest of Africa would be inconsistent and arbitrary.

The third aspect is ambiguous. The meaning of 'arbitrarily subordinate' is not clear. In any event, the status of Walvis Bay is not in any significant manner any more subordinate than any other part of South Africa, it having been integrated without distinction. The concept of a self-governing territory did not exist prior to 1945. It is a concept produced by gradual development, marked by its manifestation in Article 73 of the United Nations Charter and subsequent maturity.⁹⁴

With the granting of parliamentary representation to SWA/Namibia in 1949, the South African government gave the people of Walvis Bay rights identical to those of the people in the four provinces of the Union. Thus SWA had become a *de facto* fifth province. Given the political framework based on parliamentary supremacy, it is difficult to see how South Africa's administration of Walvis Bay through Windhoek from 1922-1977 instead of through Cape Town provides the basis for suggesting that the status of Walvis Bay was or is 'arbitrarily subordinate'. Of course if Walvis Bay was a non self-governing territory in 1977, the retransfer back to Cape Town would not have affected its status. However, the argument in favour of such status was weak in 1977, and the 1977 transfer together with subsequent developments have eliminated the argument altogether.⁹⁵

93 Partington (n6) 286.

94 Ibid 287.

95 Ibid note 222. For a contrary finding see Goeckner and Gunning (n43) 916-918 and Moorsom (n4) 16-18.

Finally, the possibility that the imposition of apartheid in Walvis Bay provides a basis under Article 73 for depriving South Africa of the enclave, the idea being that apartheid deprives the government of any internal legitimacy at all, is fallacious.⁹⁶ This contention could be used to justify dismembering not only the rest of South Africa but a number of other countries in the world with oppressed minorities. Governmental legitimacy and territorial sovereignty are not the same thing and no case can be made out for applying criteria of the former to the latter.⁹⁷

It is difficult to argue for the status of a non self-governing territory for Walvis Bay and as such, entitled to the right of self-determination when the United Nations refused to acknowledge such status for Gibraltar and the Falkland Islands, colonies which *prima facie* qualify but for their neighbours questionable claims to sovereignty.⁹⁸ In

96 Partington (n6) 287.

97 Oppenheim (n53) 131, 451, 452.

98 D J Devine 'The Status of Rhodesia in International Law' (1974) *Acta Juridica* 109 at 206-207. The reason why the wishes of the majority of the population of Gibraltar were disregarded was because they were the beneficiaries of colonialism. This means that they had been brought to Gibraltar, had gradually replaced the original population and in doing so, had changed the cultural and social character of the society of Gibraltar. Thus, if the majority in a non-self-governing territory are the beneficiaries of colonialism, no right of self-determination accrues to them. This theory has not been applied consistently. The majority in Fiji consisted of persons of Indian origin who were brought into the territory, eventually outnumbering the native population. Despite being the obvious beneficiaries of colonialism, the General Assembly recommended the grant of independence to a Fiji ruled by this majority. Devine poses possible explanations for the inconsistency. The first is based on a distinction between Western and non-Western peoples. A majority of the latter, when classified as beneficiaries of colonialism, are denied the right to self-determination. The second possible explanation is that where the outnumbered minority in the non-self-governing territory form part of an ethnic group which represent the bulk of the population of an independent

the Walvis Bay context, arguments based on Article 73 are not valid and therefore cannot justify taking Walvis Bay from South Africa.

(d) Conclusions.

Several commentators have challenged South Africa's mode of acquisition but Akehurst observes that modes are irrelevant when the original acquisition is not challenged.⁹⁹ In viewing the supposed dispute over Walvis Bay, the issue is not whether and how the British (and thus South Africa) acquired sovereignty but whether subsequent to independence, Walvis Bay is part of Namibia or not. The issue arises solely because of the *de facto* integration of the Bay into Namibia in 1922.

The question is reduced to determining whether Walvis Bay was part of the Mandated Territory at the time the Mandate was established in 1920. The Mandate comprised territory which constituted German South West Africa. The record is clear. Germany recognized Walvis Bay as British Territory and thus part of South Africa in 1920.¹⁰⁰

The Mandated Territory was never increased in size. The only event to give rise to a dispute was the transfer of administration in 1922 and subsequent *de facto* integration.

adjoining state, the majority in the territory, as beneficiaries of colonialism, have no right of self-determination whilst in other cases they do.

99 Akehurst (n73) 142; T Huaraka 'Walvis Bay and International Law' (1978) 18 *IJIL* 160 at 163-170. Huaraka alleges that since the Bay was not *terra nullius*, it being inhabited by the Topnaars, the only valid mode would have been cession. The Dyer proclamation amounted to a unilateral act, and as cession requires mutual agreement, no cession took place.

100 The dispute concerning the *demarcation* of Walvis Bay, eventually settled by arbitration, is irrefutable evidence of German acknowledgement - see (n31); *Border and Territorial Disputes*. (1987) 2ed (Ed A J Day) 166 at 168.

However, the motives behind the integration were based on practical administration considerations and these motives have been consistently expressed. The sovereignty of the Republic of South Africa over the port and settlement of Walvis Bay is unassailable.¹⁰¹

(2) EXISTING MARITIME ZONES OFF WALVIS BAY.

(a) International Law.

The provisions on bays and their baselines would, in theory, be applicable to Walvis Bay. South Africa could use a straight baseline across the mouth between the natural entrance points. The low-water mark will be the baseline around the bay if a straight baseline is not used and will naturally be the baseline on the unenclosed parts of the bay where a straight line is used.¹⁰²

The permitted zones to be measured from the baseline include the territorial sea of 12 nm, the contiguous zone of 24 nm,

101. Von Molke (n1) 172; Partington (n6) 289; Faris (n55) 60; P E J Brooks 'The Legal Status of Walvis Bay' (1976) 2 SAYIL 187 at 189, 190. The General Assembly identified the transfer of the administration of Walvis Bay back to the Cape in 1977 as 'annexation' [GA Res 32/9D, UN Doc A/32/2.7 para 6-8 (1977)]. This is not correct. Annexation is a method of acquiring territory. As sovereignty over Walvis Bay has been vested in South Africa (or its predecessor the United Kingdom) for more than a century, the 1977 event has no effect on that sovereignty which continued to be vested in South Africa. According to Dreyer (n9) 507, resolutions identifying the 1977 transfer as annexation are merely declarations of principle. Berat presents an interesting theory on the validity of South African claims to Walvis Bay. According to intertemporal law, original (and valid) title to territory may lapse or become invalid through the operation of new law. Because the nature of world power has changed, theories once the norm have been modified. The law of decolonization, a by-product of the right of self-determination, is part of the new law. In addition, in terms of modern international law, the right of self-determination has become part of *jus cogens*. See Berat (n4) 153, 154, 161, 163, 177.

102. See discussion Chapter III (I) (b) and (2) A (b).

a fishing zone or EEZ with a 200 nm limit and the continental shelf as described in the CSC and LOSC.

(b) Municipal Law

Though Walvis Bay meets the legal criteria set for bays and could be closed off by making use of a straight baseline, South Africa has not elected to do so.¹⁰³ It would be consistent with previous conduct not to use a straight baseline across the mouth of Walvis Bay. The area of the port and settlement extends beyond the natural entrance points of the Bay.¹⁰⁴

In terms of the Territorial Waters Act of 1963, South Africa has claimed territorial waters of 12 nm, a contiguous zone and fishing zone of 200 nm as well as a continental shelf as described by the 1959 Continental Shelf Convention or as it may from time to time be defined by international convention accepted by the Republic.¹⁰⁵ These zones are measured from the low-water mark which is described as the 'lowest line to which the water of the sea recedes during periods of ordinary spring tides'.¹⁰⁶

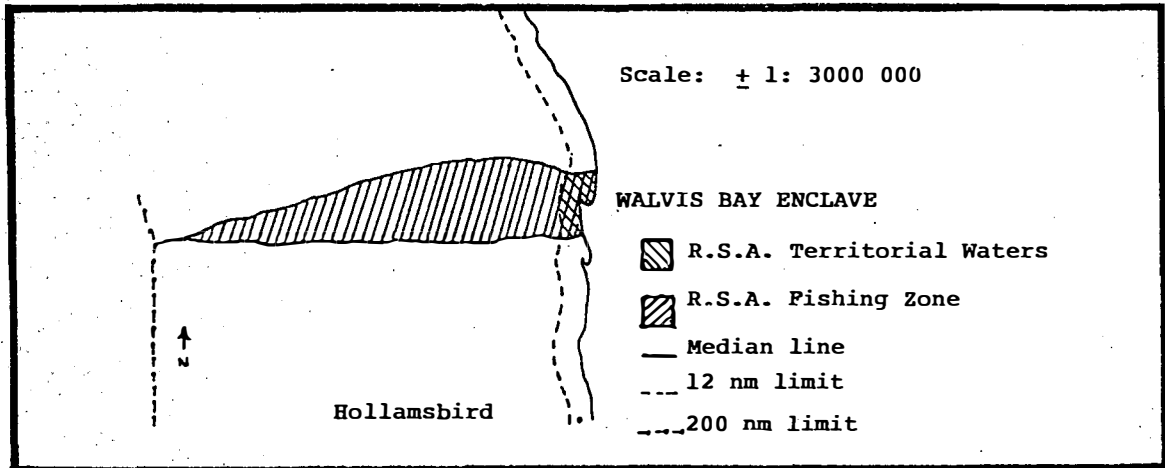
103. D J Devine 'Bays, baselines, passage and pollution in South African waters' (1986) 19 CILSA 85 at 87. At one stage closing off bays with straight baselines was a distinct possibility in terms of the Draft Bill on Marine Matters (GN 712/1985 - Government Gazette, 1:11:1985). Section 1 of the Marine Traffic Act 2 of 1981 stipulates that the waters of Walvis Bay are internal waters. The territorial seas are measured from the low-water mark. As there is no closing line, the regimes of internal waters and territorial seas overlap within the bay, making the outer limit of the territorial waters a matter of speculation.

104. See diagram D 1 *supra*.

105. Sections 2, 3, 4, 7 of Act 87 of 1963 (as amended by Act 98 of 1977). The unacceptability of the 200 mile contiguous zone has been discussed in Chapter IV (3) B (c).

106. Section 1 Act 87 of 1963.

D2



Namibia, by virtue of the Territorial Sea and Exclusive Economic Zone Act has claimed a 12 nm territorial sea, a 200 nm contiguous zone, a 200 nm EEZ and a continental shelf as defined by international convention, the word 'Convention' referring to LOSC.¹⁰⁷ The low-water line is defined in this Act as 'the line of lowest astronomical tide'.

(c) Relevant Principles.

(i) Introduction.

The delimitation is one between states in a relationship of orthodox adjacency. The relevant principles will be discussed with reference to the specific zone to be delimited.

(ii) Territorial sea.

Delimitation between adjacent states is governed by Article 12 of TSC and Article 15 of LOSC which are declaratory of customary law. Replicas of each other, both prescribe, in the absence of agreement, the equidistance-special circumstances solution. The first scenario is that the two states will agree on the delimitation of the territorial

107 Sections 1, 2(1), 4(1), 4(3)(b) and 6(1) of the Territorial Sea and Exclusive Economic Zone of Namibia Act 3 of 1990. The objection to the breadth of the contiguous zone has been discussed in Chapter IV (3) B (c).

sea. They could opt for a line perpendicular to the general direction of the coast. This is appropriate *in casu* where there is a reasonable section of regular or rectilinear shoreline.¹⁰⁸ The states are free to agree to a delimitation based on any considerations they consider valid.

If Namibia and South Africa do not reach agreement, the equidistance-special circumstances rule is applicable. There are no islands in the vicinity of the area to be delimited. The coastline is regular and not concave or convex. No shared deposits have been identified. There appear to be no identifiable special circumstances. Therefore the delimitation, in the absence of agreement to the contrary, should be based on equidistance.

(iii) Contiguous zone

Regarding delimitation, Article 24(3) of TSC stipulates that the zone may not, unless the states agree otherwise, exceed the median line equidistant from the nearest points of the states' coasts where these coasts are adjacent. There is no exception to the equidistant line in the case of special circumstances. LOSC is silent on the topic of *delimitation*, the reason being that an EEZ delimitation would cover the topic.

Although both South Africa and Namibia have declared contiguous zones exceeding the maximum belt, this fact will not affect the delimitation between them. South Africa and Namibia could conclude an agreement on the contiguous zone division between them. Failing agreement, the contiguous zone boundary will be represented by the equidistant line. No special circumstances can modify the line.

108 See discussion Chapter IV (3) A (d).

Ultimately, the contiguous zone boundary will depend on the EEZ delimitation between the two states and this will be discussed *infra*.

(iv) Continental shelf

There are various sources regarding principles governing shelf delimitations but the exact extent to which the contents coincide or diverge is controversial.¹⁰⁹

Article 6 of the Continental Shelf Convention distinguishes delimitations between opposite states on one hand and delimitations between adjacent states on the other.¹¹⁰ Concerning adjacent states, the boundary is to be determined by the line of equidistance (except where adjustment is appropriate due to the existence of special circumstances) unless the states agree otherwise. Examples of 'special circumstances' will be discussed with specific reference to the Namibia/South African delimitation in the area of Walvis Bay.

Article 83(1) of LOSC produced a fundamental change in the wording of the formula for shelf delimitations. Subarticle (1) prescribes that the delimitation for adjacent (and opposite) states shall be effected by 'agreement on the basis of international law as referred to in Article 38 of the Statute of the International Court of Justice, in order to achieve an equitable solution'.

The World Court noted that the text excluded any specific criteria, requiring only an equitable solution.¹¹¹ The goal

109 D P O'Connell The International Law of the Sea (1984) Vol II 684.

110 See discussion Chapter IV (3) C (b)(i) 1.1.

111 Case Concerning the Continental Shelf (Tunisia/Libyan Arab Jamahiriya) 1982 ICJ Rep 18 at 49 para 50 hereinafter cited as the Libya/Tunisia Case; B H Oxman 'The Third United Nations Conference on the Law of the Sea: The Tenth Session (1981)' (1982) 76 AJIL 1 at 14,

is set but Article 83 is silent as to the method to be followed, offers no indication as to which factors ought to be considered and does not articulate the relevant principles and rules. As a result, detail on these issues must be extracted from the decisions of courts and tribunals. In short, they must be sought in international customary law.

The six international decisions have been discussed in detail.¹¹² Only those judgements relevant to the Walvis Bay situation will be noted here. In the North Sea Continental Shelf Cases, the thrust of the decision amounted to recognition of a divergence between the equidistance-special circumstances rule embodied in Article 6 CSC and customary law on the topic.¹¹³ The court found that the median line delimitation of Article 6 is not prescribed for adjacent states by international customary law as it is for opposite states. The court also confirmed the existence of an obligation on the states involved to enter into delimitation negotiations, to consider all relevant circumstances and to apply equitable principles.¹¹⁴ Factors or special circumstances included general configuration of the coasts, special or unusual features, physical and geological structure, natural resources and a degree of proportionality between shelf areas and coastline lengths.¹¹⁵

The Libya/Tunisia Case involved a shelf delimitation between adjacent states which were not party to the 1958 CSC and was

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¹¹² See Chapter IV (3) C (b)(ii).

¹¹³ North Sea Continental Shelf Cases (Federal Republic of Germany v Denmark; Federal Republic of Germany v Netherlands) 1969 ICJ Rep 1 at 25 para 26, hereinafter cited as North Sea Cases. This alleged divergence was criticized - L A Willis 'From Precedent to Precedent: The Triumph of Pragmatism in the Law of Maritime Boundaries' (1986) 24 CYIL 3 at 8.

¹¹⁴ North Sea Cases (n113) 46, 47 para 85.

¹¹⁵ Ibid 54 para 101.

to produce a solution based on *ex aequo et bono* principles.¹¹⁶ Important aspects to emerge were the confirmation that equidistance was not a mandatory legal principle in delimitations between adjacent states and that equitable principles and relevant circumstances represented international customary law.¹¹⁷ Some examples of relevant circumstances included the presence of islands, bathymetric curves, potential cut-off effects, coastline irregularity and future delimitations.¹¹⁸

In the Dispute Concerning Delimitation of the Maritime Boundary (Guinea/Guinea-Bissau) hereinafter referred to as the Guinea/Guinea-Bissau Case, a single maritime boundary was sought between adjacent coasts.¹¹⁹ Though complicated by phenomena of concavity and convexity, characteristics absent in the Walvis Bay context, the decision reaffirmed that the goal of delimitation remained an equitable solution.¹²⁰ A solution of this nature could not ignore existing delimitations in the region, the so-called 'macro-geographic' approach.¹²¹ Special circumstances to be taken account of included security and defence factors while economic considerations were denied the status of special features.¹²²

What emerges from the decisions is that international customary law requires an *equitable solution* by taking all relevant circumstances into account. The equidistance - special circumstances rule expressed in Article 6 means that

116 See (n111) 37 para 23 and discussion in Chapter IV (3) C (b)(ii) 1.3.

117 Libya/Tunisia Case (n111) 37 para 23, 38 para 24, 79 para 110.

118 Ibid 62 para 76, 63 para 77.

119 Dispute Concerning Delimitation of the Maritime Boundary (Guinea/Guinea-Bissau) (1986) 25 ILM 251.

120 Ibid 289 para 88.

121 Ibid 291 para 93, 94. See discussion Chapter IV (3) C (b)(ii) 1.6.

122 Guinea/Guinea-Bissau Case (n119) 302 para 122.

an equitable solution must be achieved. That being so, Article 6 is declaratory of customary law. Therefore, Article 6 and customary law ~~lead to~~ the same result. Article 83 of LOSC also advocates an equitable solution and is thus already absorbed into the corpus of customary law.¹²³

Secondly, the distance criterion which applies to the continental shelf is also a principle of customary law. Up to 200 nm, title to a shelf is based exclusively on distance. In this area, geological and geophysical factors play no part.

Thirdly, there is no *numerus clausus* of 'special circumstances'. No factor is *per se* equitable. It only acquires that nature if it generates an equitable result. Thus the relevant criteria vary from case to case, necessitating selection of only the most equitable or pertinent. Generally, most criteria appear to be geographical in nature such as coastline configuration, coastline length and the presence of islands. Others are rooted in economic geography such as shared resources. Factors such as security and defence considerations originate in political geography.

Fourthly, methods are not *per se* equitable. Like relevant factors, they assume an equitable character if they produce an equitable result. The result is what counts, not the means employed to obtain it. Equidistance is one of many methods; it is not a mandatory method and does not have privileged status over other methods.¹²⁴

Fifthly, the result must be evaluated, and in order to be valid, found to be equitable. As part of the process of

123 See discussion Chapter IV (3) C (b)(iii) and (iv).

124 Ibid.

evaluation, account may be taken of criteria based on physical, economic and political geography. Moreover, the equitableness of the result may also be examined using criteria which can only be used for an *a posteriori* evaluation such as considerations based on human geography. One such example would be to see if the result produced serious economic repercussions for one of the states involved. A serious repercussion would be one catastrophic for the livelihood of a population. One of the most important *post* solution evaluations is the test of proportionality, the idea being that disproportion between allocated areas and coastline length is to be avoided.¹²⁵

Returning to the delimitation of the shelf between Namibia and South Africa in the Walvis Bay context, it is irrelevant whether both, one or neither are party to the 1958 CSC since Article 6 reflects customary law on the topic. Even if LOSC was in force, the issue of signature and ratification would not be relevant as Article 83 is also part of customary law.

International law requires an equitable solution. Naturally, ~~Namibia and South Africa~~ can agree on any division of the shelf. No third country is involved. If no agreement is reached, the parties are obliged to negotiate with a view to finding an equitable solution. This is achieved by considering relevant circumstances. In the area of Walvis Bay the coastline is regular, no concavity or convexity can be identified, no islands are located in the offshore area, no potential cut-off effects emerge, no deposits have been identified which could straddle a potential boundary line. Security aspects of Namibia and South Africa under whose sovereignty Walvis Bay resides are not 'special' features since the line suggested *infra* will ensure control of maritime spaces opposite their respective coasts.

125 Ibid; Libya/Tunisia Case (n111) 91 para 130, 131.

It is submitted that the equidistance line is the appropriate method of division though it is not, in customary law, obligatory.¹²⁶ The method can only be identified as equitable if the result it produces can boast that quality.

To test the equitableness of the solution produced by an equidistance line, account may be taken of criteria which feature as 'special circumstances' as well as other criteria. Regarding Walvis Bay, the solution must not produce disproportion between coastlengths (landmass being irrelevant) and allocated areas. Reference to diagram D2 reveals that the ratios are not incomparable, so the boundary is not suspect on these grounds. Furthermore, according to present surveys, geomorphological discontinuities (relevant if the shelf extends beyond 200 nm from the baseline) will not contribute to the lateral shelf delimitation between Namibia and South Africa.¹²⁷ The diagram also confirms that both states will have control over maritime areas opposite their coastlines so the solution remains equitable from a security point of view.

If a solution produces serious economic repercussions, it means that an economic dependency on the resource existed prior to the division. The Grisbadarna dispute between Norway and Sweden involved the course of a boundary in the area of the Grisbadarna banks which was a rich lobster resource.¹²⁸ The Permanent Court of Arbitration which decided the case in 1909, proposed a line perpendicular to the general direction of the coast. This line would have cut across the banks, a result unsuitable to both parties.

126 See diagram D2 *supra*.

127 G Erasmus and D Hamman 'Where is the Orange River Mouth? The Demarcation of the South African/Namibian Maritime Boundary' (1987-1988) 13 SAYIL 49 at 69.

128 Hague Court Reports (1916) (Ed J B Scott) 121.

The line was adjusted by one degree in favour of Sweden on the grounds of historic use, economic dependency and acquiescence. The tribunal made a particular note of the fact that Swedish fishermen had carried on the lobster fishing activity for a much longer time and to a much greater extent than Norwegian subjects and that fishing lobster in that area was much more important to the inhabitants of Koster, Sweden, than to the Norwegian community of Hvaler.¹²⁹ The factual circumstance of sedentary fishing was treated as supporting evidence for a slight adjustment rather than as an independent source of rights to a maritime territory.¹³⁰

The most instructive case entailing economic considerations in the form of dependence is the Gulf of Maine decision.¹³¹ The chamber remained unpersuaded that the scale of activities connected with fishing and other matters was eligible as a special circumstance. However, if the result was radically inequitable, as would be the case if catastrophic repercussions arose, consideration of economic factors could be pressed into service as a matter of a rule of law in order to engender an appropriate adjustment.¹³²

129 Ibid 130, 131.

130 S P Sharma 'The Relevance of Economic Factors to the Law of Maritime Delimitation Between Neighboring States' in *The UN Convention on the Law of the Sea: Impact and Implementation* (1987) (Ed E D Brown and R R Churchill) 248 at 258. It is worth noting that in the international dispute between Libya and Malta, the court did not regard elements of the economic zone regime such as an established fishing activity as relevant. See T L Mc Dorman 'The Libya-Malta Case: Opposite States Confront the Court' (1986) 24 *CYIL* 335 at 360 and K Fu 'Equitable Considerations Taken into Account in International Ocean Boundary Delimitation Cases' (1986-1987) 6 *CYILA* 1 at 16.

131 Case Concerning the Delimitation of the Maritime Boundary in the Gulf of Maine Area (Canada v USA) (1984) 23 *ILM* 119 hereinafter cited as the Gulf of Maine Case.

132 Sharma (n130) 262. ✓

Sedentary fisheries, like the lobster industry of the West Coast, may thus play a role in the delimitation process. If the proposed boundary line places the resource in the exclusive territory of one of the parties and this produces catastrophic repercussions for the other party eg destroying the livelihood of a population or portion of the community, the solution will not be equitable and should not be adopted.¹³³ As a result, it is important to identify the existence and importance of the rock lobster resource in and around the port and settlement of Walvis Bay. It must be determined who is exploiting the resource and to what degree. If the resource provides an economic livelihood for a South African community (including one located in Walvis Bay), the proposed limits will not interfere with the economic activity. If a Namibian community is dependent on the resource, and by placing Walvis Bay in South African territory, catastrophic repercussions for that community arise, the proposed boundary may well require modification.

The Namibian rock lobster quota for the 1988/1989 season was set at 2000 tons with large handling facilities located in Windhoek and Lüderitz.¹³⁴ Rock lobster has to date not been a commercial activity in the area of Walvis Bay, exploitation of the crustacean taking place north and south of Lüderitz up to 25° South of the port.¹³⁵ The proposed equidistance line will clearly not produce radical inequity in the form of catastrophic economic repercussions for any Namibian communities.

133 Gulf of Maine Case (n131) 1245 para 237.

134 South African Shipping News and Fishing Review (1988) 43 No 5 33 and No 6 48.

135 Personal interview with Dr D E Pollock, Assistant Director, Sea Fisheries Research Institute, Department of Environmental Affairs, Cape Town 24 January 1991; Moorsom (n4) 58. No statistics on the minimal lobster catches at Walvis Bay are available because exploitation of the resource is negligible in the area.

Other sectors of the Walvis Bay fishery are estimated to be worth approximately a quarter of the wholesale value of the South African fisheries industry.¹³⁶ Namibia, having declared a 200 nm exclusive economic zone, has increased its overall fishing grounds considerably which offsets potential disadvantages arising from an equidistant boundary line on both sides of Walvis Bay. No catastrophic repercussions will arise. No adjustment of the proposed boundary line is necessary on these grounds.

(v) Exclusive economic zone

Article (74) of LOSC provides that delimitation of the EEZ between adjacent states must be effected by agreement on the basis of international law in order to achieve an equitable result, identical wording to Article 83 dealing with adjacent shelf delimitations.¹³⁷ The relationship between the EEZ and the shelf is an intricate one and the International Court of Justice has stated that in shelf delimitation, principles and rules relevant to EEZ delimitation cannot be ignored since the two concepts are linked in modern law.¹³⁸ Seeing that it is impractical to have different boundaries for the seabed below and the superjacent water column, coalescence of the lines is attractive.¹³⁹ The coincidence of the lines is determined by the order of negotiation. If the shelf is dealt with first, the EEZ delimitation line should coincide and vice

136 South African Shipping News and Fishing Industry Review (1988) 43 No 5 35; Moorsom (n4) 31.

137 Caution is advised before concluding that identical wording produces identical results, part of the reason being the vagueness inherent in the references to 'international law' and 'equitable solution'. Also, concepts like natural prolongation play no part in EEZ delimitation. See O'Connell (n109) 728, 729.

138 Case Concerning the Continental Shelf (Libyan Arab Jamahiriya/Malta) (1985) 24 ILM 1189 at 1199 para 33 hereinafter cited as the Libya/Malta Case; see discussion Chapter IV (3) D (b) (i).

139 O'Connell (n109) at 729, 730 suggests that this is the reason for the identical wording of Articles 74 and 83.

versa.¹⁴⁰

According to the Libya/Malta judgement, the EEZ is a part of international customary law.¹⁴¹ This happened without the benefit of state practice regarding delimitation between neighbouring claimants other than a general trend towards the median line in several examples of municipal legislation.¹⁴² Does Article 74 represent customary law? Apart from the few examples of municipal legislation opting for the median line, little has been officially expressed on the topic. Proposals at UNCLOS III confirmed a lack of consensus, there being suggestions ranging from the median line for both opposite and adjacent states (failing agreement) to equitable delimitation and unspecified calls on international law.¹⁴³ The only conclusion to be drawn is that state practice will clarify the issue and this means that the median line will play an important role although it is acknowledged that the practice is not widespread.

State practice is thin, customary law not clear. Although LOSC is not yet in force, the United Nations Council for Namibia ratified the Convention on behalf of Namibia while South Africa is a signatory to the document.¹⁴⁴ Because customary law is not helpful on the topic, it is predicted that both states will approach the EEZ delimitation along the lines set forth in Article 74. There is thus the obligation to conclude an agreement on the basis of

140 Ibid 730.

141 Libya/Malta Case (n138) 1199 para 34.

142 O'Connell (n109) 727.

143 Ibid 731.

144 Article 144 of the Namibian Constitution provides that '... the general rules of public international law and international agreements binding upon Namibia ... shall form part of the law of Namibia'. However, despite ratification by the Council, LOSC is not yet in force and cannot be said to be 'binding' on Namibia. This does not relate to those provisions which have achieved the status of customary law. }

international law in order to produce an equitable result. This agreement must be reached within a reasonable time.¹⁴⁵ Subarticle (3) provides that until a final arrangement is agreed upon, Namibia and South Africa are required to enter into provisional arrangements during the transitional period.

Thus, if both Namibia and South Africa take their interim obligations seriously, one can expect a committed effort to reach agreement on EEZ delimitation within a reasonable time coupled with an undertaking to conclude provisional arrangements in the interim. As discussed *supra*, the sequence of negotiations is decisive. Since it is possible for a state to have a continental shelf without an EEZ but not the reverse, it is likely that the two states will negotiate the shelf boundary first.¹⁴⁶ This would mean that the water column above the shelf would be part of the EEZ, thereby satisfying the practical requirements of coalescence between the two zones. The EEZ would commence at the outer limit of the territorial seas, both Namibia and South Africa having claimed the maximum belt of 12 nm, and extend to a line 200 nm from the baseline, in both cases, the low-water mark.¹⁴⁷

145 Article 74(2) states that if agreement is not reached within a reasonable time, the parties shall resort to procedures provided for in Part XV. Since LOSC is not yet in force, it is doubtful whether Namibia and South Africa will follow Part XV procedures.

146 See discussion Chapter IV (3) D (b) (i); Libya/Malta Case (n138) 1199 para 34.

147 The South African definition of the low-water mark is 'the lowest line to which the water of the sea recedes during periods of ordinary spring tides' according to Section 1 of the Territorial Waters Act 87 of 1963 (as amended by Act 98 of 1977). The Namibian definition of low-water line is the 'lowest astronomical tide' according to Section 1 of the Territorial Sea and Exclusive Economic Zone of Namibia Act 3 of 1990.

(vi) Single maritime boundary (SMB)

The first decision to deal with an SMB was the Gulf of Maine decision in which it was held that a delimitation of this nature was governed by international law in which the few basic principles on an SMB merely provide guidelines in pursuit of an equitable result.¹⁴⁸ The rules making up the fundamental norm which is the starting point of an SMB include no unilateral delimitation, bona fides in negotiations, recourse to third parties where agreement is unattainable and the pursuit of an equitable result using equitable criteria and methods.¹⁴⁹ It also emerged that customary law does not require an SMB to protect existing fishing patterns nor that the boundary should ensure optimum conservation and management of living resources.

Different combinations of methods may be used for different segments of the line. Because it is a boundary for two or more zones, it is necessary to exclude criteria exclusively connected to one of the zones. In other words, only 'neutral' criteria such as geographical factors are to be taken into account.¹⁵⁰

Criteria used to evaluate the result can include new circumstances based on economic and human geography. For example, a result producing catastrophic repercussions for the livelihood of one of the populations or portion of the community would be an inequitable solution.¹⁵¹

The international customary law on the topic of an SMB was further developed in the Guinea/Guinea-Bissau Case where a

148 Gulf of Maine Case (n131) 1219 para 81, 1220 para 87-89.

149 Ibid 1224 para 112; see discussion Chapter IV (3) E.

150 Ibid 1238 para 197. This has been criticized - see L E Claim 'Gulf of Maine - A Disappointing First In The Delimitation of a Single Maritime Boundary' (1984-1985) 25 VJIL 521 at 587-599.

151 Gulf of Maine Case (n131) 1245 para 237.

single boundary was sought for territorial waters, an EEZ and continental shelf zone.¹⁵² The decision advocated the 'macro-geographic' approach which involves taking the overall shape and potential future delimitations into account.¹⁵³

The two decisions, apart from each individual contribution as discussed *supra*, confirm that there are no conventional principles on an SMB; that an SMB is, as are other boundaries, a prolongation of land territory; that an SMB delimitation must produce an equitable result by taking neutral criteria into account.¹⁵⁴

The Namibian/South African relationship in the area of Walvis Bay is one of adjacency. If both states elect an SMB delimitation, customary law requires it to be governed by the fundamental norm beginning with negotiations in good faith with a view to securing an agreement. This agreement must embody an equitable solution. The neutral criteria are geographical factors. From a geographical perspective, the coast of and surrounding Walvis Bay is not marked by concavity or convexity and there are no islets, rocks or low-tide elevations to consider.

The method selected ought to be the most practical. It is submitted that the method of equidistance will be appropriate. Potential enclavement and cut-off effects are not a risk as the coast is regular. It does not appear that a combination of methods will be necessary as there are no islands in the area capable of distorting what would otherwise be an equitable solution. The method of apportionment would be inappropriate - there are no overlapping areas in the Walvis Bay port and settlement

¹⁵² Guinea/Guinea-Bissau Case (n119).

¹⁵³ Ibid 291 para 93, 94; 297 para 108.

¹⁵⁴ See discussion Chapter IV (3) E.

situation. Abatement is not an alternative method since there are no offshore features able to push the equidistant line in unexpected directions. In addition, equidistance has the added advantage of being easy to apply.

Whatever the method employed, the result must be equitable. Factors related to human and economic geography as well as usual factors can be used to test the outcome. An SMB based on an equidistance line will guarantee control by Namibia and South Africa of maritime areas opposite their coasts. No enclavement arises. The result appears equitable. The distribution of the fishing and other resources in the area will not be materially affected. The equidistance line for all zones will not produce catastrophic repercussions for the economies of Namibian nationals and the Walvis Bay community.

Thus the solution produced by an equidistance line is not inequitable when evaluated in the light of factors drawn from a pool wider than that available for the purpose of *establishing* the line. It is suggested that if Namibia and South Africa agree on an SMB in the Orange River mouth section, they may agree on a multi-purpose boundary in the Walvis Bay area. The same caution in selecting relevant criteria in order to establish the line in the Orange River mouth area is recommended for the Walvis Bay maritime delimitation.¹⁵⁵

(vii) New trends: implications for Walvis Bay

New trends to emerge on the subject of maritime delimitation have been discussed at length.¹⁵⁶ As a result, it is proposed to deal with Prosper Weil's framework for delimitation based on the Primacy of Equidistance and the recommended two-phase ^B procedure. The Equiratio Method can

155 Ibid.

156 See discussion Chapter IV (3) F.

be used in cases where the equidistance line is a possible method but is rejected because of the distortive effects of features such as concavity or the presence of islands. Neither characteristic exists off the West Coast of Namibia in the region of Walvis Bay. The Factor Analysis Approach can be described as a five-step procedure aimed at systematizing and clarifying the 'obscure' law in the field of maritime delimitation in order to encourage negotiated boundary settlements. The Management Function Approach is an appeal to states to view their boundaries from a functional perspective which will lead to more settlements based on a co-operative approach similar to the agreements relating to Jan Mayen Island and to the Papua New-Guinean Islands.¹⁵⁷ It is submitted that such an approach would require both Namibia and South Africa to set aside current attitudes to boundary delimitation and to enter into delimitation negotiations with an acute awareness of managerial needs as opposed to notions of territory and fixed lines.

Prosper Weil's theory of the necessity of using the equidistance line, at least as a provisional line of delimitation, has been discussed in detail.¹⁵⁸ As postulated *supra*, the line of equidistance produces an equitable solution regarding division of the territorial sea, contiguous zone, EEZ and continental shelf. Indications are that the equidistance line will also lead to an equitable result if Namibia and South Africa agree on an SMB in the Walvis Bay area.

157 R D Lumb 'Australia and the Law of the Sea: Recent Developments' (1980) 29 ICLQ 151 at 157; Clain (n150) 604, 605; R R Churchill 'Maritime delimitation in the Jan Mayen area' (1985) 9 No 1 Marine Policy 16 at 19-25.

158 See Chapter IV (3) F (d).

According to Weil, the initial equidistance line is the point of reference for assessing the equity of outcome. Only if the result is equitable, and this is determined by confronting the line with relevant circumstances, will the equidistance line be definitive. If not, it will have to be modified. Modification can be by way of a simplified equidistance line, by enclavement, by adjusting the basepoints or by transpositioning the line.

Does the equidistance line reserving permissible zones to South Africa via Walvis Bay survive the evaluation to become the definitive line? Security considerations as a relevant circumstance are satisfied, both states controlling areas opposite their coasts. If the shelf exists beyond 200 nm from the baseline, the requirement of natural prolongation will have been complied with. No geomorphological discontinuities have to date been identified which could influence shelf delimitation beyond the 200 mile mark.¹⁵⁹ Regarding sedentary fisheries, the equidistance line will not have a disastrous effect on the economic livelihood of the coastal community. No enclavement or cut-off effects are produced by the provisional line. A macro-geographic approach is not required as no future delimitations with third parties are likely to arise since Walvis Bay is sandwiched on both sides by the same state.

The test of proportionality requires further discussion. This factor is based on the notion that a state's title to maritime areas is based on coastal projection. The longer the coast, the greater the seaward projection. Thus a state with a longer coastline is entitled to more extensive zones than one with a shorter coastline, though the ratio need not be mathematical.¹⁶⁰ It is disproportion that must be

¹⁵⁹ Erasmus and Hamman (n127) 69.

¹⁶⁰ Guinea/Guinea-Bissau Case, (n119) 300, 301, para 118-120; see discussion Chapter IV (3) C (d)(iii).

avoided.



Diagram D2 *supra* reveals that an equidistance line allocates a relatively thin band of sea space to the port and settlement of Walvis Bay. The gentle tapering of the band is due to the gentle curves on the coastline adjacent to the port. It is submitted that no severe disproportion can be identified. The limited coastline length of Walvis Bay is reflected in the reasonably narrow maritime band allocated to it.

The outcome is not inequitable when evaluated with reference to relevant circumstances. According to Weil, the provisional line produced by using the equidistance line as a legal *requirement* in the process of delimitation, does not need adjusting and is therefore the definitive line.

(d) Conclusions

An examination of constitutional and legislative events reveals that South Africa's claim to sovereignty over Walvis Bay is a valid one. From a maritime delimitation viewpoint, the Bay is wedged between the same foreign state on either side. The delimitation is one between adjacent states. The states involved could agree on the territorial sea division. If not, the equidistance-special circumstances rule will apply. There are no islands in the vicinity, no shared deposits and no other geographical features which must be considered. As a result, the equidistance line is definitive since no special circumstances arise.

The same set of principles applies to the contiguous zone. For this zone, there is no special circumstances exception, so if no agreement to the contrary is reached, the equidistance line will separate the contiguous zones.

The CSC also recommends agreement on continental shelf delimitation and resorts to the equidistance - special circumstances rule in the absence thereof. Article 83(1) of LOSC introduces a change in the wording of the formula, offering scant detail but requiring an equitable solution. Customary law must be looked to for the detail, and the international judicial decisions point to coincidence between Article 6 of CSC, customary law and Article 83(1) of LOSC. It is an equitable solution which must be sought (by taking relevant factors into account) through the process of agreement.

There are no special features such as geographical irregularities or shared deposits. No cut-off effects arise. The equidistance line, when evaluated, produces an equitable result. For example, no significant disproportion is produced. The location of the equidistance line does not have economic repercussions of a catastrophic nature for the inhabitants.

Adjacent EEZ delimitation is not well developed through state practice despite the ~~zone~~ being a customary law concept. Though Article 74 of LOSC is not binding on the parties, it is practical to have the EEZ and shelf boundaries coincide. Since Articles 74 and 83 (on shelf) are replicas of each other, it is submitted that the EEZ delimitation mirror the shelf allocation.

If Namibia and South Africa agree on an SMB for the Walvis Bay area, the equidistance line will produce an equitable result as required by international law. Naturally, Namibia and South Africa can agree on some basis of division other than a line of equidistance.

Of the new trends to have recently emerged, it is likely that the Primacy of Equidistance will be most relevant.

This theory requires equidistance as a starting point, only becoming the definitive line if the result produced is equitable. In the area of Walvis Bay, the starting point - namely the equidistance line - does produce an equitable outcome. No adjustment is necessary so the equidistance line is definitive.

CHAPTER VI

CONCLUSIONS

Conclusions are at best tentative. This is so because they inevitably reflect only a small proportion of the various considerations which may ultimately influence the long-term solutions proposed. In addition, any conclusions would be overshadowed by the existence of the provisions of Article 1(4) of the Namibian Constitution. Territorial claims by Namibia to Walvis Bay, all the offshore islands and the northern half of the Orange River represent political attitudes on the part of Namibia. Agreement or arbitration based on other premises might be difficult. Nevertheless, with this caveat in mind and on the basis that South Africa has sovereignty over Walvis Bay, the Penguin Islands and the northern half of the Orange River, the following conclusions are presented.

The Anglo-German Treaty of 1890 whereby both banks of the Orange River were allocated to South Africa created an exceptional terrestrial boundary. Unfortunately, the document failed to elaborate on the actual *demarcation*. Is the boundary the low or high-water mark? Juristic opinion, judicial precedent (though not *international* precedent) and a presumption in favour of communal use of boundary rivers support the view that the demarcation ought to be based on the low-water mark. If the South African interpretation - the high-water mark - prevails, it is suggested that the two states negotiate an agreement regarding rights of use as the very existence of both farmers active on the north bank and nomadic Bushmen is at risk.

The actual *demarcation* of the boundary line on the north bank ought to be entrusted to a combined or mixed commission, both states enjoying equal representation on this body. It is also submitted that the commission's mandate include a discretion to determine the exact line.

This discretion ought to be exercised having due regard to all legitimate interests and claims by the states involved.

If Namibia and South Africa elect the process of arbitration to settle the north bank dispute, the result, considering the supportive arguments for both the high and low-water marks, could be a line between the two extremes. Whatever the outcome, whether achieved *via* agreement or arbitration, the recipient of favourable rights as a consequence of demarcation will be expected to uphold the international law principle relevant to *all* international rivers, namely, that rights must be exercised in good faith. However, in view of the Namibian Constitution it is possible that no arbitration may take place and that no agreement on the delimitation may be reached.

The first aspect of the *maritime* boundary between Namibia and South Africa is the boundary at the mouth of the Orange River. Both the position and nature of the mouth are evidence of a mouth *stricto sensu*. It is a river which flows directly into the sea. Article 13 of LOSC permits closure by means of a straight baseline whereafter the enclosed waters will have the status of internal waters. Because the mouth migrates, the points on both banks at the mouth ought to be selected with the sole purpose of achieving a practical and permanent solution. If the low-water mark is the northern boundary, the straight baseline will connect this point to the low-water mark on the south bank in accordance with Article 13. If the high-water mark is the north bank dividing line, the straight baseline must still connect the low-water marks on both banks. In this scenario, the baseline for the small portion of coastline between high and low-water marks on the north bank will be the normal baseline, namely the low-water mark. Besides legal arguments supporting the theory that the low-water mark is the dividing line on the north bank, the practical

advantage of having the terminus of the land boundary at the coast and the connecting point for the straight line across the mouth coinciding is obvious.

However, South Africa has to date not made use of straight baselines, not even to close off bays. The South African baseline, for all purposes, is the low-water mark. This is defined as the lowest mark to which the sea recedes during ordinary spring tides and will apply to and around the Orange River mouth up to the boundary line, be it the low or high-water mark.

The territorial sea boundary between Namibia and South Africa at the mouth of the Orange River is a delimitation between adjacent states. Both conventional and customary law prescribe the equidistance-special circumstances rule if no agreement is reached. The migrating mouth of the Orange River is a special circumstance and, therefore, the equidistance line ought to be modified. The starting point of the equidistance line will be related to selection of the fixed point representing the mouth on the north bank of the Orange River.

South Africa's claim to sovereignty over the twelve Penguin Islands is unassailable. The landward delimitation between Namibia and these islands is one between opposite states. Because all the islands are located within 12 nautical miles of the Namibian mainland, the landward delimitation only involves a territorial sea division.

Both treaty and customary law prescribe, in the absence of agreement, the equidistance line unless special circumstances exist whereupon modification or an alternative method would be appropriate. The Lüderitz Bay islands, Penguin and Seal, constitute special circumstances because of their geographic location. Equidistance could produce

enclavement. Enclavement is a special circumstance. An adjustment to the equidistance line is proposed which would secure access for Penguin and Seal to the open sea. The adjustment could take the form of a navigable corridor of territorial sea being allocated to each island offset by subtracting a proportionate amount of the territorial sea produced by enclavement. For the rest of the islands, the median line effects the territorial sea delimitation between these insular formations and the mainland directly opposite.

The territorial sea boundary *seawards* of the mainland and the Penguin Islands involves a division of sea spaces between adjacent states. This is so because the land territories both face seawards towards an outer maritime zone beyond the islands towards the Atlantic Ocean. In the absence of agreement, the equidistance-special circumstances rule must be applied. Special circumstances arise in the form of security interests. Therefore, the equidistance line ought to be modified in order to accommodate these special interests of both the Namibian mainland and some of the islands. The modification involves a narrow corridor of territorial sea in a seaward direction for Mercury, Plumpudding and Sinclair enabling access to the open sea through their own territorial waters. The bands of territorial sea allocated to Hollamsbird and Ichaboe ought to be narrowed in order to protect the security interests of the mainland. For the remaining islands, the equidistance line produces an appropriate result.

State practice on contiguous zone delimitation is inconsistent. Treaty law prescribes the equidistance rule in the absence of agreement. The presence of special circumstances does not initiate adjustment. LOSC is silent on the topic, presumably because a contiguous zone solution will depend on the EEZ delimitation. Both South Africa and Namibia have claimed contiguous zones which exceed the

permissible maximum breadth. Both ought to amend their respective domestic legislation in order to harmonize their claims with international law.

The two states could agree on contiguous zone delimitation at the mouth of the Orange River, failing which the equidistance line will be mandatory with no recourse to prevailing special circumstances. The delimitation between the Penguin Islands and the mainland will be governed by the same principles. In practice, the contiguous zone division will depend on EEZ delimitation. Obviously, the islands cannot have a contiguous zone which would overlap the mainland's EEZ. As a result, the contiguous zone of the islands would be theoretical only in that it would be co-extensive with their territorial waters. Where the islands interpose themselves, the Namibian contiguous zone will commence at the outer limit of island territorial waters and will extend to a line 24 nautical miles from the baseline. This 'interrupted' contiguous zone may be unorthodox but it is still in line with the requirement of contiguity, there being a continuous strip albeit of inconsistent width.

Regarding the continental shelf, both customary law and conventional law principles advocate agreement producing an equitable solution. This kind of solution is obtained by considering various factors regarded as relevant in the circumstances.

At the mouth of the Orange River, the coastline is regular. There are no offshore features such as islands or rocks. It is uncertain whether a shared deposit is a relevant factor. It is also not clear whether a relevant factor is synonymous with a special circumstance. On the assumption that both queries are answered in the affirmative, then the Kudu-9A1 gasfield, likely to straddle the shelf line, must be considered. If South Africa and Namibia negotiate the

boundary and agree that common deposits will not influence the *fixing* of the boundary, the matter of exploiting the cross-boundary resource can be dealt with in any number of ways such as joint venture. Irrespective of the method applied, the result must be an equitable one and it is posited that in order to achieve this, cognizance must be taken of the shared deposit.

The shelf delimitation between the mainland and South African islands will depend on South Africa's attitude with respect to Article 121 of LOSC. The Convention is not yet in force. South Africa has not ratified it but is a signatory. Article 121(3) does not represent customary law.

If South Africa discounts Article 121(3) and legally speaking, this is not contrary to international law, ten of the twelve islands will be entitled to a continental shelf. Customary law demands an equitable solution taking all relevant factors into account. The islands have a distorting effect, denying the mainland substantial areas of shelf which would normally accrue to it. The geographic screening effect of the islands causes gross inequity. Proportionality is also at stake. The cumulative length of the coasts of the islands is minuscule compared to that of the mainland. Disproportion is inequitable. For Halifax and Long Islands, equidistance produces an equitable result. For the remaining islands, a combination of abatement and proportionality is recommended so that the shelf allocated to each island coincides with the territorial sea of each formation. The outcome, evaluated on the basis of proportionality, security, enclavement and economic repercussions, is equitable.

If South Africa takes into account its possible obligations as a signatory and elects not to adopt a policy contrary to Article 121(3), only three of the islands, namely Ichaboe,

Possession and Halifax are entitled to a continental shelf. The extent of the shelf is based on the abatement-proportionality method for the first two and on an equidistance line for Halifax.

Both Namibia and South Africa have claimed resource zones of maximum breadth, Namibia an EEZ and South Africa a fishing zone 200 nautical miles in width. The EEZ is a customary law concept. However, state practice on the topic of delimitation is scarce. Lack of consensus is apparent. Conventional law requires states to reach agreement on the basis of international law in order to achieve an equitable result.

The two concepts, namely continental shelf and EEZ, are inextricably linked. Rules applicable to EEZ delimitation cannot be ignored in shelf matters; the converse does not apply. An entity can have a shelf without an EEZ but not an EEZ without the underlying seabed. Overlapping jurisdictions between the two zones is usually solved by the order of negotiation. Namibia and South Africa will assess their interests and then select the sequence of negotiation.

At the mouth of the Orange River, Namibia and its southerly neighbour co-exist in a relationship of adjacency. The sequence of negotiation must be decided upon. There are no factors capable of complicating negotiations with a view to reaching consensus. If the two interested parties view LOSC provisions seriously, consensus must be reached within a reasonable time and both states are expected to commit themselves to provisional arrangements in the interim.

The EEZ delimitation between the South African islands and Namibia will depend on the status accorded to Article 121(3) by South Africa, as did the shelf delimitation. Depending on South Africa's attitude, either ten or only three insular

formations will have a legitimate claim to an EEZ or fishing zone. It is submitted that a division identical to that proposed for the continental shelf will be appropriate. As a result, Ichaboe, Halifax and Possession are entitled to an EEZ, each resource zone to coincide with the shelf allocation. The EEZ for each island is that area within 200 nautical miles of its baselines but beyond 200 nautical miles from the mainland.

If South Africa does claim an EEZ for the islands without considering Article 121(3), it is submitted that the EEZ's coincide with the shelf delimitation. The result must be an equitable one. The method of equidistance would produce distortion and disproportion between coastline lengths and sea space. Both consequences are inequitable. For Halifax and Long Islands, equidistance does produce an equitable result. For the remaining islands, a combination of abatement and proportionality as a method of division is proposed. The result will then exhibit the quality of reasonableness in all the circumstances.

Lastly, if Namibia elects to use the island of Black Sophie as a basepoint for measurement of its maritime zones, the Namibian EEZ (and other zones) could 'bulge' as a result.

If Namibia and South Africa agree on the establishment of a single maritime boundary, international customary law applies. The fundamental norm to govern this type of delimitation is made up of rules such as no unilateral delimitation, use of neutral criteria, *bona fide* negotiations, macro-geographic approach and the pursuit of an equitable result.

The two states may opt for a single delimitation line in the area of the Orange River mouth. Multi-purpose, neutral criteria must be taken into account before settling on a

line. Particular resources such as oil, gas, diamonds, fish and energy will have to be ignored, for they are sole-purpose orientated, being primarily connected to either the EEZ or shelf. It is the geographical features which are neutral. However, at the mouth of the Orange, there are no geographical features such as islets, uninhabited rocks, low-tide elevations, concavity or convexity. The tentative line must be evaluated and found to be equitable. Resource criteria play an important role in the evaluation. Factors based on human and economic geography may be used in the process of evaluation. The tentative line must produce an equitable distribution of all the resources. The line must not lead to the destruction of the economic livelihood of communities or populations. There must be no significant disproportion.

A single maritime boundary at the mouth of the Orange River based on equidistance would produce an equitable result. There is no marked difference in coastline lengths - disproportion is not likely to occur. The security interests of both states are accommodated. The entire West Coast boasts considerable fishing resources and the equidistance line does not adversely affect the distribution thereof. If the single maritime boundary severs the Kudu-9A1 gasfield and the two states could agree on joint exploitation, the boundary would be equitable. If the single maritime boundary allocated the entire field to either party, the result may be inequitable depending on potential future discoveries based on current data.

A single maritime boundary is probably less appropriate for the Penguin Islands because of their geographic location in relation to the mainland. Two of the islands are situated within a Namibian bay. Furthermore, the provisions of Article 121(3), though not obligatory, may play a role in island zone generation. Nevertheless, South Africa and

Namibia may agree on a single line for all purposes.

No one aspect of a South African/Namibian maritime delimitation has invited as much comment as the South African claim to Walvis Bay. However, based on a legislative and constitutional examination, it appears that the South African claim to sovereignty is unassailable.

Walvis Bay is capable of generating all recognized sea zones. South Africa does not, at present, make use of straight baselines to close off legal bays, so these zones will be measured from the low-water mark. The vertical dimensions of the zones are not drawn from the natural entrance points of the bay but emanate from terminal points of the international boundary around the port and settlement on either side of the bay.

The delimitation is between adjacent states. Failing agreement on the territorial sea boundary, the equidistance-special circumstances rule applies. There are no special features. There are no islands, no shared deposits, no concavity or convexity. The equidistance line defines the boundary.

Though both states have a contiguous zone which exceeds the maximum allowable breadth, this will not affect the delimitation as such. It is recommended that both states taper their legislation to reflect current international law principles. If no agreement is reached, the equidistance line will apply, there being no special circumstances exception. LOSC does not prescribe delimitation principles for adjacent contiguous zones as an EEZ delimitation will cover both aspects.

Article 6 of CSC provides that the division of the shelf beneath the port and settlement of Walvis Bay and the

adjoining Namibia must be the result of agreement. In the absence of consensus, the equidistance-special circumstances rule applies. LOSC requires agreement based on international law in order to arrive at an equitable solution. Detail emerges from international decisions. Both customary and conventional law require an equitable solution by taking special circumstances into account.

Namibia and its neighbour could agree on a method of shelf allocation. If not, both are obliged to negotiate with a view to finding an equitable solution. The equidistance line has been suggested as a tentative line. There are no special circumstances such as islands, an irregular coastline, security interests at risk or straddling deposits. Evaluated, the result appears equitable. No significant disproportion arises. Both states have control over immediately opposite sea spaces. No catastrophic economic repercussions for a community flow from the equidistance division. The result is equitable.

The EEZ delimitation is interwoven with a shelf delimitation. The view has been expressed that it is not practical to have two different boundary lines. The sequence of negotiation chosen by Namibia and South Africa will determine which of the two zones is settled first. Because state practice on adjacent EEZ delimitation is limited, it is hoped that the two states, though LOSC is not yet in force, will approach negotiations with Article 74 in mind. Article 74 advocates agreement in order to produce an equitable result. It is submitted that the EEZ delimitation should coincide with the shelf allocation. Thus the equidistance line can be used to delimit the adjacent EEZ boundary between Walvis Bay and Namibia on both sides of the port.

If the two interested parties agree on a single maritime

boundary delimiting all zones generated by Walvis Bay, ~~customary law principles will~~ provide the guidelines. ~~Neutral criteria are to be considered in~~ establishing the line. The tentative line must emerge, after an evaluation using other criteria, as offering an equitable solution.

The equidistance line offers such a solution. Apportionment and abatement are not realistic alternatives. There are no overlapping areas and no offshore features able to push an equidistant line in unexpected directions. Evaluated from a security perspective, the result appears equitable. No enclavement is produced. No catastrophic repercussions arise. Thus the result produced by the equidistance method is equitable.

New trends to emerge on the subject of maritime delimitation include the Equiratio Method, the Factor Analysis Approach, the Management Function Approach and the Primacy of Equidistance theory. The Equiratio Method is based on alternative mathematical ratios (of which the equidistance $\frac{1}{2}$ is an example) which are useful to achieve partial effect measures especially where the influence of an offshore island has to be accounted for.

~~The Factor Analysis Approach~~ is a two-pronged approach. On the one hand, it is an appeal to courts and tribunals to contribute to certainty on the subject of delimitation by developing an explicit format for considering the arguments and for formulating the basis of its decision. To a lesser degree, it is an appeal to states to follow a five-step procedure in negotiations. If adhered to, clearer guidelines will emerge.

~~The Management Function Approach~~ would require Namibia and South Africa to approach boundary negotiations acutely aware of ocean uses and the need for an attitude to negotiations

based on management needs of zones, with less emphasis on the acquisition of territory. However, Namibia and South Africa have claimed maximum zones, sometimes even advocating claims in excess of recognized maximum widths, where possible. Neither did so on *management* grounds. But it is possible that both states will adopt a functional approach to ocean *uses*, and where management calls for it, do so on a regional co-operative basis.

The Primacy of Equidistance is particularly relevant to the Namibian situation. Most of the solutions advocated have been based on equidistance and, where alternative methods are proposed, these proposals have been necessitated by the presence of special circumstances. The emergence of equidistance as a method *required* by law and not merely recommended along with others can be traced to the dominant role played by distance in delimitation of sea zones. According to Weil, equidistance *must* be part of the delimitation process.

It has been a feature of all the solutions proposed for the Namibian/South African delimitation. Naturally, equidistance is a starting point. The second part of the two-step process is to evaluate the result. If equitable, no adjustments need be made. If not, modification is compulsory.

This process has been applied. In most instances, the equidistance line has become the definitive line. Where the result was inequitable as it was found to be in the case of adjacent territorial sea delimitation between the islands and Namibia because of security interests, the line was adjusted. Where the equidistance line produced enclavement as occurred in the case of Penguin and Seal, the line was adjusted to make way for a 'corridor' solution. Where disproportion was a consequence of the equidistance line,

the necessary modification took place. For example, where islands deprived the Namibian mainland of a shelf and EEZ which would normally accrue to it, the equidistance line did not prevail but was modified in order to eliminate the obvious disproportion.

The maritime delimitation between South Africa and the newly independent Namibia poses unique challenges to negotiators. Circumstances vary from a migrating mouth at the point where the Orange River expels itself into the Atlantic Ocean to the inhospitability and miniscule size of the twelve Penguin Islands strung out along the West Coast. Detached islands are usually denied full effect in view of their potential for gross displacement. Totally detached islands like the Penguin Islands require solutions aimed at mitigating their capacity to screen the extension of Namibian jurisdiction to the EEZ and shelf lying west of the islands. It is not unusual for islands like these which face a foreign state to receive full value. However, their weight as factors to be considered when allotting maritime space tends to diminish the more seaward the spaces at stake.

The port of Walvis Bay, wedged on both sides by the same foreign state, will require careful application of principles reserved for relationships of adjacency. The hope is expressed that agreement will lead to permanent, stable and equitable solutions in the immediate future without the need for costly and drawn out legal procedures.

Postscript. At present, the governments of Namibia and South Africa are negotiating the future of Walvis Bay, the Penguin Islands and the Orange River boundary. No official announcement has been made. According to newspaper reports (The Argus 28.03.1991 17 and Rapport 19.05.1991 4) the middle of the Orange River is likely to emerge as the southern boundary of Namibia and joint administration of Walvis Bay is being considered.

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