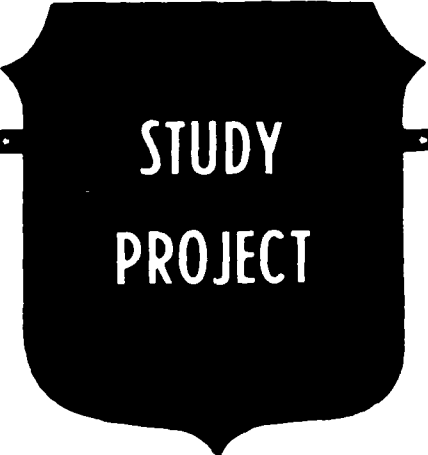


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STRATEGIC IMPORTANCE OF THE SOUTH ATLANTIC

BY

COLONEL HONORIO SILVIO CAMPORRO

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STRATEGIC IMPORTANCE OF THE SOUTH ATLANTIC
AN INDIVIDUAL STUDY PROJECT

by

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Project Adviser

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ABSTRACT

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A. INTRODUCTION

"The American people still believed that the distance factor established an adequate isolation between ourselves and any conflict existing in Europe or Asia. Only few people understood the direct relationship between prosperity in America and their physical security on the one hand, and the existence, on the other, of a free world beyond our shores." ¹

DWIGHT DAVID EISENHOWER
1940

Even in the modern era the great empires emerged from clashes between the armies of the most powerful nations, engaged in conquering new territories and increasing the extension of their domains.

The establishment of the English Empire, for instance, took place in America, Asia, Oceania and Africa, far from its territory and separated by huge masses of water which Britain had to dominate in order to consolidate its conquests. Thus, the Empire took possession successively of the West Indies (Antilles), New England, Gibraltar, Trafalgar, Cape City, Singapore, India, Australia and New Zealand.

In 1833 the British completed their expansion by occupying and dislodging the Argentine population from the Malvinas Islands. For a long time the possession of that maritime space enabled the empire to exercise control over the international trade in said region.

The Soviet Union, for its part, continues its unrelenting work of projecting itself in the seas. In fact, while the Soviets' main priority is the Pacific Ocean, their penetration in the Atlantic is becoming even more important today.

The Kremlin has never concealed its final objective to destroy the free Western world and knows that in order to attain said aim it requires enormous sea power. It would seem logical to suppose that the success of Soviet politics lies in nuclear deterrence rather than facing a risky adventure of unknown consequences; their emphasis lies in taking steps to further the subversive ideological expansion of Marxism in so-called Third World countries and in its preparation to win a conventional war.

Soviet activities were detected in the Middle East as soon as the Second World War drew to a close. They first exercised pressure on the Straits of Turkey and later in Yemen. Later they make incursions during the War of Six Days (1967). Soviet advances towards the Atlantic and Indian Oceans through Asia and Africa are also well known.

In today's world, some oceans which suffer the consequences of geopolitical competitiveness (Indian - North Pacific Oceans) have reached a point of saturation while others are strategically neglected (the Pacific and South Atlantic Oceans).

Since olden times, the enormous water masses have been used in four fundamental ways:

- as means of communication
- as resources
- as obstacles
- as battlefields

From a strategic point of view, it may be useful to watch at close range the vast water masses that make up a large portion of our planet. Thus, we may be able to prove that the only communication routes between the oceans are situated in the Southern Hemisphere (latitudes 0° to 60°), and it is precisely in Argentina where the South Atlantic has its narrowest inter-oceanic passage, located in its most southern region (see diagram #1).

On the other hand, International Maritime Law will be always subject to controversy and permanently debated at international fora, where the superpowers will use their rights to impose their interests, thus enforcing controversial resolutions.

The increasing development of some countries (Argentina, Brazil, South Africa) and the extensive use of the South Atlantic for international trade will clash with the interests of other nations that pretend to have a claim over said region.

These events and other facts which will eventually arise such as the question of Antarctica, will give shape to a complex picture of international politics in this region, to which the superpowers will certainly not remain indifferent.

This document does not pretend to present the South Atlantic as a dominant element in the eventuality of an East - West confrontation, since it will not be the Main Operations Theatre (in the long or short run), but we do wish to point out the countless possibilities it will offer in support of major operations.

The development of world technology is advancing with amazing speed and at times becomes almost uncontrollable. Distances become shorter and no longer are seen as unsurmountable obstacles. As Eisenhower would say: "... there is no longer a country in the world that can consider itself as being isolated." 2

The depths of the seas, unknown to us a few years ago, are no longer such. Large ships transport huge cargoes, incalculable sea resources can mitigate the world's hunger and stealthy submarines move secretly through unthinkable regions.

In fact, the SOUTH ATLANTIC is no longer so far off

B. GEOGRAPHIC FACTORS

1. Geographic delimitations

As a rule, the International Hydrographic Organizations use the Equator to divide the oceans (Pacific or North Atlantic - Pacific or South Atlantic Oceans). However, the most common division known today is based on the tropics as a dividing element.

- The Pacific or North Atlantic: Limited to the south by the Tropic of Cancer.

- The Pacific or Central Atlantic: Unfolding between the Tropic of Cancer and the Tropic of Capricorn.

- The Pacific or South Atlantic: Unfolding from the Tropic of Capricorn to Antarctica.

In this study we shall only consider those geographic aspects south of the Equator which, because of their importance, support the concepts of strategic level established or mentioned. Moreover, those geographic accidents that are closer to the interoceanic passages are explored more deeply, since they guide any strategic appreciation that may be made.

The Atlantic Ocean communicates with the Pacific only through the following four key maritime passages, one of which is artificial and three of which are natural:

- Panama Canal
- Magellan Straits
- Beagle Canal
- Drake Strait

The last three straits mentioned are located precisely in the southernmost region of the South Atlantic (refer to diagram #2).

2. Geographic aspects of the South Atlantic

a. The coastline

From the northern region of Brazil to Antarctica, the coastline presents great variety in its configuration:

1) Uruguayan - Brazilian Coast

Formed in some areas by deep chasms and mild slopes in other areas.

2) Buenos Aires Coast (Province of Buenos Aires - Argentina)

Formed by humid, mild slopes and vast amounts of marine sediments.

3) Patagonic Coast (Argentina)

It is a semiarid type of coast, greatly influenced by the continental land, with orographic accidents.

Generally speaking, the environment close to the interoceanic straits does not present optimum conditions for the establishment of natural ports (Patagonic Coast). Only some gulfs or bays can be used for that purpose.

b. The continental platform

The continental platform of the area investigated herein presents different characteristics. It widens in the north of Brazil, narrows in its central portion and extends vastly throughout the Argentine Patagonic region.

The relevance of this oceanic configuration is to be seen in the advantage it offers in the exploitation of its seabed.

c. Marine currents (see diagram #3)

The South Atlantic has currents of different temperature values, from extremely cold to extremely warm temperatures.

1) Equatorial southern currents

These are warm currents that originate in the African coast (Guinea). An extremely warm current is directed towards the Caribbean from Guiana, whereas another current from subequatorial Brazil is directed southwards and reaches the southern current (of the Malvinas).

2) Patagonic southern currents

These cold currents originate in Antarctica and are directed northwards (north of Malvinas) and north-eastwards (northeast of Benguela).

d. Climate and Temperature

The South Atlantic climate is influenced by the marine currents previously described. It varies from mild or temperate to tropical in most parts of Brazil, moderate in the Uruguayan - Buenos Aires zone and extremely cold in the south.

On the other hand, the southern region is subject to permanent rainstorms, snowstorms and winds, with extremely harsh conditions in the area of Drake Strait.

e. Maritime fauna and vegetation

1) Fish

The South Atlantic Ocean harbors more than 300 fish species and more than 1,500 invertebrata. From this total, only 45 types of fish and 12 of invertebrata (crustaceae and mollusca) are currently exploited.

Among the species that are commercially interesting, the following can be mentioned: hake, "zavalo", squid, prawn, shrimp, conger eel, sole, corvina, lobster, clams, anchovy.

Between the Malvinas Islands and Antarctica there are vast quantities of "krill" (a type of small shrimp), which nutrition specialists agree in considering the richest animal in vitamins among the marine fauna. It should be stressed that the fauna is enriched by a vast number of marine birds, which provide large amounts of droppings ("guano") or manure, an important fertilizing element.

The South Atlantic is an incalculable source of maritime resources, despite the dramatic depredation caused by the fishing ships in its waters.

2) Algae (Seaweed)

Algae mainly reproduce in the continental platform. They are considered to be a source of basic nourishment, since they generate hydrocarbons, which are largely applied in the preparation of medical and pharmaceutical products.

There are approximately 20,000 species of algae, all of which constitute the main nourishment of smaller fish.

The amounts of algae increase as we advance southwards, particularly in the surroundings of the Malvinas, State Islands and Tierra del Fuego.

f. Marine depths

The seabed features a huge submerged mountain chain, located between South America and Africa (Central Atlantic range), with an average depth of 2,500 meters.

Said mountain chain emerges in many points of its extension, giving origin to the islands of Ascención, Santa Helena, Tristao Cunha, Gough and Bouvet.

The marine soil and subsoil contain important amounts of raw materials such as coal, hydrocarbons and polly-metallic nodules (manganese, iron, nickel, cobalt and copper).

Some portions present actual submarine algae woods, from which the raw material used to produce "agar-agar" is extracted. Said material is used in the chemical and food industries or as a fertilizer in agriculture.

g. Approach accesses and ports (refer to diagram #4)

1) Points of access

a) From the North Atlantic: This access can be considered at the location of Cape Verde and Cape Las Palmas. It is a strait or narrowing of 3,300 kilometers in length, free from obstacles with the exception of the islands of Fernando de Noronha and Ascención.

b) From the Indian Ocean: A strait of 3,900 km. in length, located between Cabo de las Agujas and Antarctica. However, the existence of ice only makes it accessible in the area near Africa.

c) From the Pacific Ocean: There are three oceanic passages:

(1) Magellan Straits: It is a natural access located in the southern end of Chile and Argentina. It presents a length of 600 km. and a minimum width of 4 km., its depth being

between 20 and 300 meters. It is the passage that is best protected against winds and ice.

(2) Beagle Canal: While this canal is to be crossed through important geographic accidents and rough waters, it is an alternative route in the southern region.

(4) Drake Passage: It is a natural access located in the southernmost region of Chile and Argentina. Between Cape Horn and Antarctica it has a width of 450 km. Its rough waters are subject to the action of strong winds, rain and snowfalls.

2) Ports of operational value

a) Brazil: Recife, Salvador, Rio de Janeiro, Santos, Paranagua, Porto Alegre, Rio Grande.

b) Uruguay: Montevideo.

c) Argentina: Buenos Aires, Mar del Plata, Bahía Blanca, Puerto Madryn, Comodoro Rivadavia, Deseado, San Julián, Santa Cruz, Rio Gallegos, Rio Grande, Ushuaia.

h. Islands (refer to diagram #5)

The South Atlantic has very few islands, thus their importance not only as anchorages or spots of economic exploitation, but also as a base of territorial sovereignty and projection on the Antarctic continent.

1) Island of Ascención

It is located in the center of the area, on a submerged chain of mountains. The relevant position it occupies contributes to supporting control of the Atlantic between Brazil and Central Africa.

2) Islands of Santa Elena

These islands of British possession are situated in a privileged location and support control of the Atlantic between Brazil and South Africa.

3) Fernando de Noronha Island

Despite its small importance, it is situated in the mouth of access to the South Atlantic, close to the Brazilian coast.

4) Trinity and Martin Vaz Islands

Situated near the Brazilian coastline, they serve as that country's support to the oceanic control in the region.

5) South Sandwich Archipelago

Made up by a group of islands with an approximate surface of 300 square kilometers, the South Sandwich Archipelago is covered by ice during most of the year. Conditions are extremely harsh for human survival.

6) South Georgia Archipelago

This archipelago can be potentially important from a strategic point of view. Its surface is approximately 3,800 square kilometers. Access to same is possible throughout the year and it is an actual access to Antarctica.

7) Malvinas Islands

The Malvinas constitute the actual key to the South Atlantic in its communication with the South Pacific. An extension of 12,000 square kilometers (70% belongs to two large islands -- Gran Malvina and Soledad -- and the rest is made up approximately by 200 large and smaller islands). In general, their climate and meteorological conditions are as follows:

- a) Rainfall: It rains throughout the year, reaching an average of 600 mm., and snows frequently in winter.
- b) Temperature: It is normally low, especially during the night, reaching 10/15° centigrades below zero.
- c) Winds: They are common throughout the year, their average speed being 40/60 km. per hour.
- d) Visibility: Thick clouds and foggy days are frequent. There is sunlight only 8 hours daily.

Throughout most of the islands the terrain is flat with mild hills, reaching maximum heights of 700 meters. The soil is clayey and has little consistency (turf), which makes it unfit for traffic. Moreover, the few roads are not very transitable. Vegetation is scarce and the area's main breeding is sheep. The islands present numerous bays and inlets, as well as natural

ports. They are situated 600 km. from continental Argentina and 13,000 km. from Great Britain. The region is rich in fish and offers enormous possibilities for oil exploitation.

i. The Antarctic Region

Antarctica, a region that harbors incalculable richness, is probably the continental region less known to the world.

Many countries claim their rights over different portions of this vast continent. Within said portions there are permanent and semi-permanent population settlements (bases, shelters, etc.).

The Argentine Republic holds its sovereign rights over a portion that corresponds to a continental geographic continuity and where it maintains stable teams (families, schools, means of communication, etc.) throughout the year.

Despite the severe climate of the region, aircraft, helicopters and special ships can operate during most of the year.

Antarctica accounts for 90% of the world's ice masses, and its waters hold a variety of treasures.

C. THE SOUTH ATLANTIC: AN ANALYSIS

1. Political

a. Geopolitical structure of the South Atlantic (refer to diagram #6)

b. The American coast

Strictly considering the American coasts, which are bathed by the Atlantic waters, the riverside countries are only three. However, the participation of Paraguay and Bolivia through the River Plate basin should not be neglected.

Both the riverside countries and those that make use of the South Atlantic are very similar, since they present fairly common characteristics.

- an Ibero-American population (Spanish and Portuguese language)
- a pure Catholic spirit
- Western culture
- no racial problems

These conditions provide an important political base since an adequate political understanding can thus be reached, founded on said homogenization.

On the other hand, while in the past regional governments have alternated between civilian and the military ones, these are countries which have a deep democratic consciousness.

All three riverside countries are historically and traditionally western. They have mixed economies and their assets and private activities constitute the foundation of their development.

Their links to the Soviet Union are merely commercial. An important fact to be kept in mind is that Marxist subversion attempted to take root in all three countries, but suffered a resounding defeat.

The absence of antagonisms, the existence of common interests (both economic and cultural) and the previously mentioned characteristics form a solid foundation which cannot be neglected whenever addressing themes of international policy and, most importantly, in relation to the use of seas and oceans.

The claims made by the riverside countries over Antarctica, both in regard to transportation and communications and the exploitation of marine resources, is public knowledge.

Consequently, Brazil and Argentina have developed Naval Forces which have adequate power and are regionally important.

In the diplomatic sphere, they have sustained policies related to the Law of the Sea, which have proven to be workable.

c. The Islands

Compared to those of other oceans, the South Atlantic has a smaller number of islands. In general, these islands do not have either adequate population or the development that is needed to politically justify their existence as independent countries. Thus, they shall continue to belong, for a long time, to their respective countries. Among the previously mentioned islands, the Malvinas deserve special mention, since they shall continue to be a cause of interest and desired politically.

In 1833, these islands, over which Argentina legitimately claims its sovereignty, were occupied by a British armed force.

The Malvinas dispute has already caused a war and has hardened Britain's weak disposition to negotiate. Until a solution is found, this confrontation will prevent the Americas from adopting a coherent action in relation to the East - West conflict. This is the case because of the feeling in Latin America that the United States did not act in consonance with the Rio Treaty in the approach to the Malvinas conflict.

On the other hand, many countries exploit this situation by carrying out indiscriminate fishing treaties negotiated with Great Britain.

d. Antarctic Region

From a strictly international viewpoint this continent will begin to be of increasing interest in international fora. Interested countries will not be able to avoid discussion of this matter, as the renewed consultations will commence in 1991.

In 1949, the United States Government suggested to those countries that were interested in the Antarctic Region to submit the area to the administration of the United Nations, a proposal which was rejected by some nations, since it was evident that the actual intention was to internationalize the Antarctic continent.

A year later (1950), the Soviet Union issued a communiqué saying that it would not agree to any solution without its participation. Once this obstacle was overcome, the Soviet Union joined in Antarctic research together with new countries which became involved in the enterprise.

On December 1, 1959, the Antarctic Treaty (still in force today) was signed. Its main resolutions include the following:

- Non militarization of Antarctica
- Freedom of scientific research
- The establishment of a "statu quo ante" in relation to territorial claims
- A prohibition to carry out nuclear testing and the disposal of radioactive waste

The principle of mutual inspection or verification was also established.

This treaty is to be reviewed shortly and the signatory countries may wish to add suitable changes.

2. Economic

a. Economic jurisdiction

According to the pronouncements of the Third Sea Conference, all riverside and extra-regional countries with sovereignty over islands in the South Atlantic have given their consent to enlarge the width of the Exclusive Economic Zones (Zonas Económicas Exclusivas - ZEE) to 200 nautical miles. Every ZEE grants the South Atlantic contiguous countries the exclusive right to exploit

the marine bed and subsoils of the continental platforms up to 350 nautical miles. This resolution is very important in the South Atlantic since there are vast areas where the continental platform extends beyond the ZEE3.

This situation in which some continental platforms are vaster than the ZEE is found in Argentina, in its relation with the Malvinas Islands, which makes the conflict over sovereignty with Great Britain even worse.

b. Fishing

In recent years, fishing activities have increased considerably in South Atlantic waters.

There seems to be some contradiction between those who claim to be unfamiliar with this area but who still send their ships to exploit its fishing resources. The fact is that the South Atlantic accounts for 10% of fishing worldwide.

In the area we are considering, the intense exploitation begins approximately at 34°S and embraces the sea and continental platform in front of Argentina.

It should be stressed that it has become habitual to bear the incursion of foreign fishing vessels from third-party countries, which cause international incidents and have sometimes forced the security patrols of the riverside nations to capture said ships, seize their cargoes and even sink the vessels whenever the latter failed to obey the local regulations.

It is somehow inexplicable that this region should find itself navigated by fishing vessels belonging to countries from the Far East as well as from Northern and Eastern Europe.

c. Oil

Undoubtedly, the Atlantic coast presents basins rich in hydrocarbons. In the Argentine coast there are at least eight oil basins which offer great possibilities of exploitation.

- the Salado Basin
- the Colorado Basin
- the Valdez Basin
- San José Gulf
- San Julián Gulf

- Piedrabuena
- Malvinas Islands
- Marina Austral (Southern seascape)

While the drop in international prices has so far hindered its exploitation, regional oil is still important in terms of future utilization. Along the Brazilian coast there are various basins from which this country extracts the greatest amount of oil it has at its disposal so far.

d. Metals

The Argentine platform presents important polymetallic nodules. These are composed of manganese, iron, cobalt and nickel, but the depth at which they are found is the main obstacle in their extraction.

e. Maritime communication lines

Most foreign trade developed by the countries along the South American and African coasts is carried out by sea.

1) International traffic from South America (see diagram #7)

- Iron ore from Brazil and Argentina
- Agricultural products from Uruguay, Brazil and Argentina
- Industrial products from Brazil and Argentina

From among the countless number of export products, Argentine cereals and Brazilian tropical and subtropical products, as well as their meats, occupy an important position. The bulk of exports is directed to the North Atlantic bordering Brazil, or across the ocean directed to Asia (Cape of Good Hope).

2) International traffic toward South America (see diagram #8)

- Oil directed to Brazil (Persian Gulf)
- Siderurgical coal directed to Argentina and Brazil
- Oil by-products directed to Argentina, Uruguay and Brazil
- Industrial consumables directed to Argentina and Brazil (Europe, Russia, United States)

This maritime traffic follows the same routes as do exports.

3) International traffic within the area

While automotive traffic has greatly increased between Brazil, Uruguay and Argentina in recent times, maritime traffic also has acquired greater importance, especially due to trade, fishing, and the presence of major oil tankers in regional waters.

3. Military

Since the central theme of this work is the strategic value of the South Atlantic, the analysis of the military component is focused on the maritime power of South American countries.

The naval capacity of the regional powers that may be involved in a conflict shall also be looked into.

a. American countries in the South Atlantic region

1) Argentina

The Argentine Navy is perhaps the most powerful navy in the Southern continent. It has a carrier capable of operating attack and antisubmarine aircraft, and with a relatively modern fleet. Considering that Argentina is a country with extensive marine borders and a developed trade network (both international and domestic), it can be defined as a South American country with a larger and clearer awareness of maritime interests.

Its ability to operate with oceanic concepts and doctrines which are common to the more developed navies enables it to develop combined actions without difficulty with the United States or any NATO power. The Argentine navy exercises periodically with the American Fleet and carries out joint annual operations with Uruguay and Brazil.

2) Uruguay

The naval development of this country is moderate and its small fleet performs supervisory and security missions. Moreover, it is capable of operating with Argentina and Brazil in combined actions, and its doctrine is similar to theirs.

3) Brazil

Brazil is developing an important fleet. It is the country that has perhaps the most extended marine borders and that carries out most of its international trade by sea. Moreover, it is presently developing an advanced aeronautic industry with high technology machinery. Like Argentina, Brazil is capable of operating jointly with the fleets of any western country, since it has similar procedures and doctrines.

b. The Superpowers and Extra-regional Nations

1) United States of America

Its sophisticated naval power endows the U.S.A. with enough capacity to project itself to any place in the world.

Its power is unquestionable in the four branches of its navy (surface - submarines - air-sea - marines).

One single task force with a carrier has greater power than any South American fleet. The atomic propulsion of its large units ensures its independence and prolonged logistic support. Its large number of ships enjoy the most advanced technology.

2) United Kingdom

While the United Kingdom is no longer the sea power that once dominated international waters, it still has a moderate sea force.

Its decline was partly concealed by the success obtained by the British in the Malvinas War.

According to the author of this study, the need to keep the British Navy strong and avoid further cutbacks was one of the main causes that provoked the above mentioned war.

Its destiny within NATO is influenced by the United States of America.

3) NATO countries (outside the USA)

NATO's power, even though inferior to that of the USA, is considerable and rests within its area of action. Its forces are permanently trained in combined operations and

its doctrine would allow operations with any South American navy.

4) Soviet Union

The Soviet Union has developed a powerful naval fleet comparable to that of the United States, and its capacity is enough to cover all potential conflict areas.

Its submarine force is significant and conditions in the South Atlantic are especially apt for its deployment. Its surface fleet, while important, has difficulties in fueling itself in prolonged operations, since its ships are conventionally propelled.

5) Warsaw Pact countries (outside the Soviet Union)

Any projection of Warsaw Pact countries in the South Atlantic would be difficult since, with the exception of the Democratic Republic of Germany, Poland and Rumania, the Pact countries do not have significant naval fleets.

6) Maritime support bases

South Atlantic countries have countless logistic support bases along their maritime borders. Said bases, conveniently distributed, can serve as support to different naval fleets. There are more than twenty ports in relatively deep waters, which are also widely active in trade. (refer to diagram #4).

4. Strategic Areas (see diagram #9)

Each area is attributed strategic value according to its use.

On this basis, a strategic and focal area may exist:

- to support trade and resupply routes;
- as a projection of the military power over the continental area;
- as a source of wealth.

Within this characterization and visualizing the possibility of conflict, the value of each strategic area may be actual or potential.

a. Actual strategic value

The areas that have actual strategic value are the narrow areas or passages that must be necessarily used to have access to a region. An example is the maritime route that passes by the Cape of Good Hope (South Africa), which is perhaps the busiest area in the world as far as sea traffic is concerned.

On the other hand, as long as the Panama Canal remains in operation, none of the South American coasts will have much strategic value.

b. Potential strategic value

In the eventuality of closure of the Panama Canal (either political, economic or subversive), maritime traffic would probably have to be channelled through the South Atlantic. In that case, the Magellan Straits and the Drake Passage in that order will achieve greater strategic relevance.

c. Regionally important areas

1) Cape San Roque (Brazil)

This is a vitally important area, where all traffic between Argentina, Uruguay and Brazil and the Caribbean, the Panama Canal, North America and Europe, converges.

2) Rio de Janeiro (Brazil)

This area, vitally important for Brazil, also lodges its main naval base.

3) Santos (Brazil)

Santos is the most important trade port in Brazil.

4) Río de la Plata (Argentina - Uruguay)

This area gathers all the commercial traffic from Uruguay, Paraguay, Bolivia and part of Argentina, en route to Brazil, Panama, the Caribbean, North America, Europe and Africa.

5) Bahía Blanca (Argentina)

Most Argentine exports exit through this area. Moreover, the country's main naval base is located in Bahía Blanca.

6) San Jorge (Saint George) Gulf (Argentina)

This is the departure point of a huge portion of Argentina's oil traffic. It is also a point of convergence for all traffic originating from southern Argentina, Antarctica and Chile.

d. Production Areas

The South Atlantic provides two products of great strategic-economic value: oil and fish. In general, oil is extracted from wells located on or close to the coastline.

Argentine oil is very important for the country since it has contributed to its autonomy, and has helped Brazil reduce its imports.

Fishing is also important for the countries of the Atlantic Basin even though they are not great consumers. On the whole, the South Atlantic represents a potential source of energy.

Although they do not fall into the category of sea products, we should mention here the importance of Argentine, Uruguayan and Brazilian meats and cereals, since the Atlantic is their marketing instrument.

e. The Islands

Islands are strategically important when they offer significant advantages due to their geographic location and their ability to support maritime operations.

Despite their dependence on the continent, the islands of Fernando de Noronha, Trinidad and Martin Vaz can be excellent support bases.

Just as the Ascension Island has strategically important characteristics at the entrance of the South Atlantic, as we proceed farther south, the Malvinas are also key to passage from the South Atlantic to the Pacific Ocean. This viewpoint may not be shared by strategic thinkers in the United States, probably because of the islands' temporary occupation by England. However, they are certainly important to the Soviet Union, especially since the Soviets do not have an ally close to the South Atlantic region.

f. Area of nuclear controversy

Potentially, the South Atlantic could represent an atomic threat to South America and Africa, given the possibility that the area would be used as a common launching area by submarines from both blocks. Therefore, should a world war break out and reach the Southern Hemisphere, the nuclear threat could come from a small number of submarines, located somewhere in the vast South Atlantic Ocean, a place where an anti-submarine search would be expensive to carry out.

5. Identifying conflicts

a. World conflicts

The South Atlantic represents an important area for the Western world, given its maritime routes, its growing trade, its inter-oceanic communications and its closeness to Antarctica. Based on these strategic considerations, the Soviet Union represents the main threat. In fact, a Soviet attack with nuclear submarines should be considered the main threat. Their power can operate in any sea of the world and South Atlantic waters offer one more possibility.

This threat would block the supply traffic from the Middle East and South Africa on one hand, and from Argentina and Brazil on the other, which would force the Western forces to use their naval potential.

Another risk factor could be atomic "blackmail" with ICBM submarines exercised near regional countries, especially on the opposite coast (South Africa), because of the latter's strategic minerals.

A threat of this type in South America would block any kind of support this continent could offer to Western warfare efforts. It would also mean the stagnation of foreign trade.

b. Regional conflicts

1) Argentina - Great Britain

Unfortunately for the Western world, this conflict continues.

The 1982 Malvinas war was only one phase of a confrontation caused by British stubbornness and for which an urgent solution must be found.

In my opinion, said solution lies in the United States, in England, and in Argentina.

a) In the United States

By virtue of its being leader of the free world, the United States must fight for the sovereign rights of all peoples. Argentina is a Western and Christian country by heritage, and therefore shall not give up its rights and beliefs.

b) In England

England must be convinced that its domains are not within range of the Malvinas Islands and that, in the same way it invaded them, it must retreat lest its stubbornness cause future confrontations.

c) In Argentina

Argentina must demonstrate to the world that it has a coherent definition toward the Malvinas Islands, which is based on fairness, honesty and regard to historical rights.

2) The Antarctic conflict

This subject, apparently resolved by the Antarctic Treaty, should not be neglected as a potential area of conflict.

The world population grows relentlessly and in some countries the pace is uncontrollable. On the other hand, hunger is causing universal problems. Due to the world's technological development, the Antarctic continent is everyday closer to every country, the world is becoming better acquainted with it and is discovering that it is a source of incalculable wealth.

Some countries, because of their proximity or other reasons, are rightfully entitled to claim portions as sovereign. There are others that have no rights whatsoever. However, they do have force to exercise their claims. Throughout the history of mankind it always has been extremely difficult to harmonize legitimate rights with illegitimate force.

6. Military Defense capability

The above-mentioned facts enable us to establish a course of strategic thinking.

- a. The South Atlantic supply routes which extend south of the African continent can only be defended by NATO forces, since no African country will be equipped to protect its jurisdictional maritime zone.
- b. The maritime routes of said ocean within South American areas can be defended by Argentina and Brazil as long as they have the support of the United States (T.I.A.R.).
- c. The passage connecting the South Atlantic and the South Pacific (Magellan Straits - Beagle Canal - Drake Strait) should be coordinated by the navies of Argentina and Chile, and supported by the United States.
- d. The Soviet nuclear threat in the region can only be opposed by the American nuclear threat (deterrence).

7. Vulnerabilities

By vulnerabilities we refer to those faults or weaknesses that can be found in the South Atlantic, and of which an opponent may take advantage:

- a. Dependence without any alternative on the part of the American countries (especially the USA) on the route south of South Africa for oil (refueling) and its minerals.
- b. The possibility of causing or ordering the shutdown of the Panama and Suez Canals in a world conflict would significantly enhance the maritime traffic in the South Atlantic straits or passages.
- c. The absence of naval power in the African coasts and the need to reinforce Brazil and Argentina's naval power in the event of a world conflict.
- d. Advanced Soviet naval technology in relation to that of South American navies.
- e. The existence of maritime areas that are clearly defined and easily located.

- f. Difficulties in finding and locating ICBM submarines in this extremely vast area.
8. Argentine objectives in the South Atlantic 4.
- a. To establish geographic, oceanographic and meteorological research.
 - b. To participate in agreements of international or regional policy related to the area.
 - c. To increase trade relations with the riverside countries and increase their productive capacity and maritime transportation.
 - d. To intervene actively in Agreements and Treaties related to Security, Defense and Control of Maritime Transit.
 - e. To revitalize the geopolitical position of and its unquestionable responsibility for interoceanic control.
 - f. To struggle untiringly in every international field for a definite recuperation of the Malvinas, Georgia and South Sandwich Islands.
 - g. To demonstrate in every international fora Argentine rights in Antarctica, and maintain a growing activity in said continent.
 - h. To maintain and increase the Argentine presence in the interoceanic passages between the Pacific and South Atlantic Oceans.
 - i. To maintain adequate naval power, capable of guaranteeing an efficient defense of Argentine sovereignty.
 - j. To develop and foster a patriotic maritime awareness.

In his book "ARGENTINA AND THE SOUTH ATLANTIC" (Argentina y el Atlántico Sur), Rear-Admiral JOSE A. FRAGA, a renowned Argentine historian, clearly sums up the Argentine objectives in relation to the Great National Interests. "An adequate Naval Power, provided with ships, aircraft and marines, capable of watching over, supervising and, if necessary, defending said

interests, is necessary in view of the desires of others. A continuous presence, both in its seas, coasts and islands, is what will enable the country to keep its banner high wherever it is called to exercise its national sovereignty ... a maritime consciousness in the population so that it may understand the dangers that lie ahead of us in and from the sea, from which we shall draw our victory or our frustration ..." 5

D. CONCLUSIONS

1. Maintaining freedom of maritime traffic in the South African sector is of vital importance to all the countries in the Western Hemisphere, since vast volumes of strategic materials circulate in the area.
2. The maritime routes bordering the coast of Brazil, Uruguay and Argentina are decisively important for these nations since most of their foreign trade circulates through them. Blockage of the routes would paralyze activity and prevent any type of South Atlantic Nations support to the defense effort of the Western world.
3. In the event of closure of the Panama Canal because of technical or political difficulties or sabotage, the South American maritime routes would become much more critical routes in reference to the traffic to and from the Northern Hemisphere.
4. The South Atlantic offers an adequate projection platform to any power with submarine launch capacity, since, from a central position, it can threaten the countries of both coasts simultaneously.
5. In the event of a conventional conflict, the South Atlantic is an access and transit route for military power projected towards the South Pacific.
6. The South Atlantic is an ever more important sea from a strategic viewpoint, since it is the only interoceanic passage to accommodate large international oil tankers, mineral and grain vessels.
7. The incalculable wealth of Antarctica will gradually acquire greater importance and attention of world powers, with the South Atlantic being the only route to reach it.
8. Both superpowers (USA - Soviet Union) will certainly need to use this ocean to attain their goals. A clear indication of this can be found in the Soviet air-sea installations in Guinea Bissau and Angola.
9. The effort of the countries that make up the Atlantic region to impose their thesis of a "Peace and Cooperation Zone" in international fora always encounters the resistance of the powerful countries, which insist in freedom of navigation in every sea throughout the world.

10. The existence of few obstacles in the South Atlantic enables us to consider it as a mass of almost pure waters, which makes it highly vulnerable, due to the fact that its strategic areas are easily identified.
11. The South Atlantic is an ocean that has had few treaties, pacts or agreements. With the exception of the Malvinas War, this immense water mass has not been taken into strategic considerations. The only exception has been the temporary concern which England has recently given it.
12. Those countries that have long maritime shores should have naval power proportionate to their needs. Moreover, they should foster in their people a responsible consciousness in regard to the use and sovereign interest over their seas.
13. As long as the British usurpation of the Malvinas lasts, the South Atlantic nations will not be able to implement consistent and reliable measures related to transit, trade and security in the Southern waters of the world.

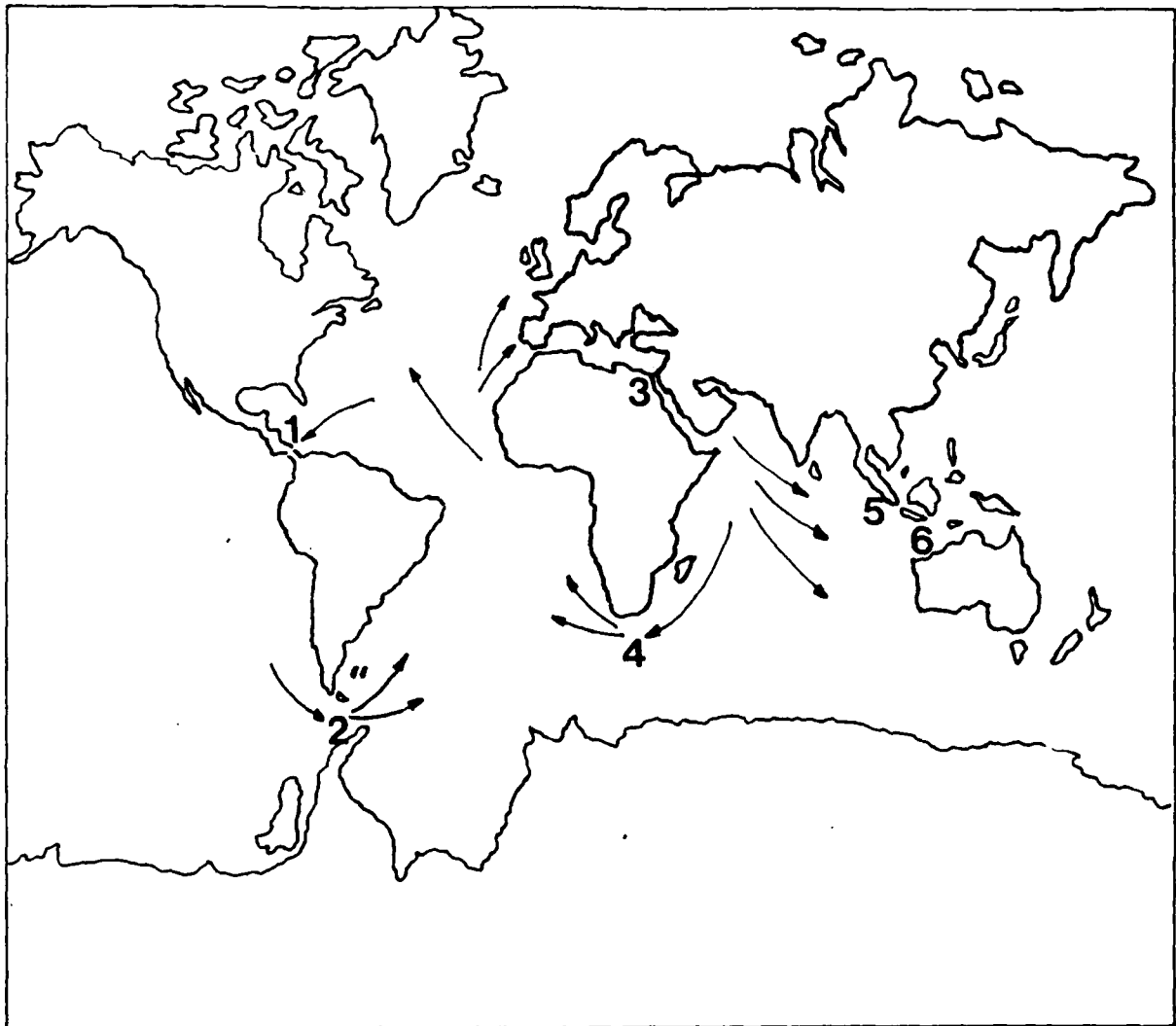
"The maritime power of a nation is determined not only by its weapons and its naval forces, but also by its merchant marine, its fishing and oceanographic fleet, as well as by its maritime perspectives and traditions."6

SERGEI G. GORSHKOV
Admiral of the Soviet Union

ANNEXES

- Diagram #1: Locations of Choke Points.
- Diagram #2: Maritime Passages in the South Atlantic.
- Diagram #3: Marine Currents.
- Diagram #4: Accesses and Ports.
- Diagram #5: South Atlantic Islands.
- Diagram #6: South Atlantic Geopolitical Structure.
- Diagram #7: Trade Routes from South America.
- Diagram #8: Trade Routes to South America.
- Diagram #9: Strategic Areas.

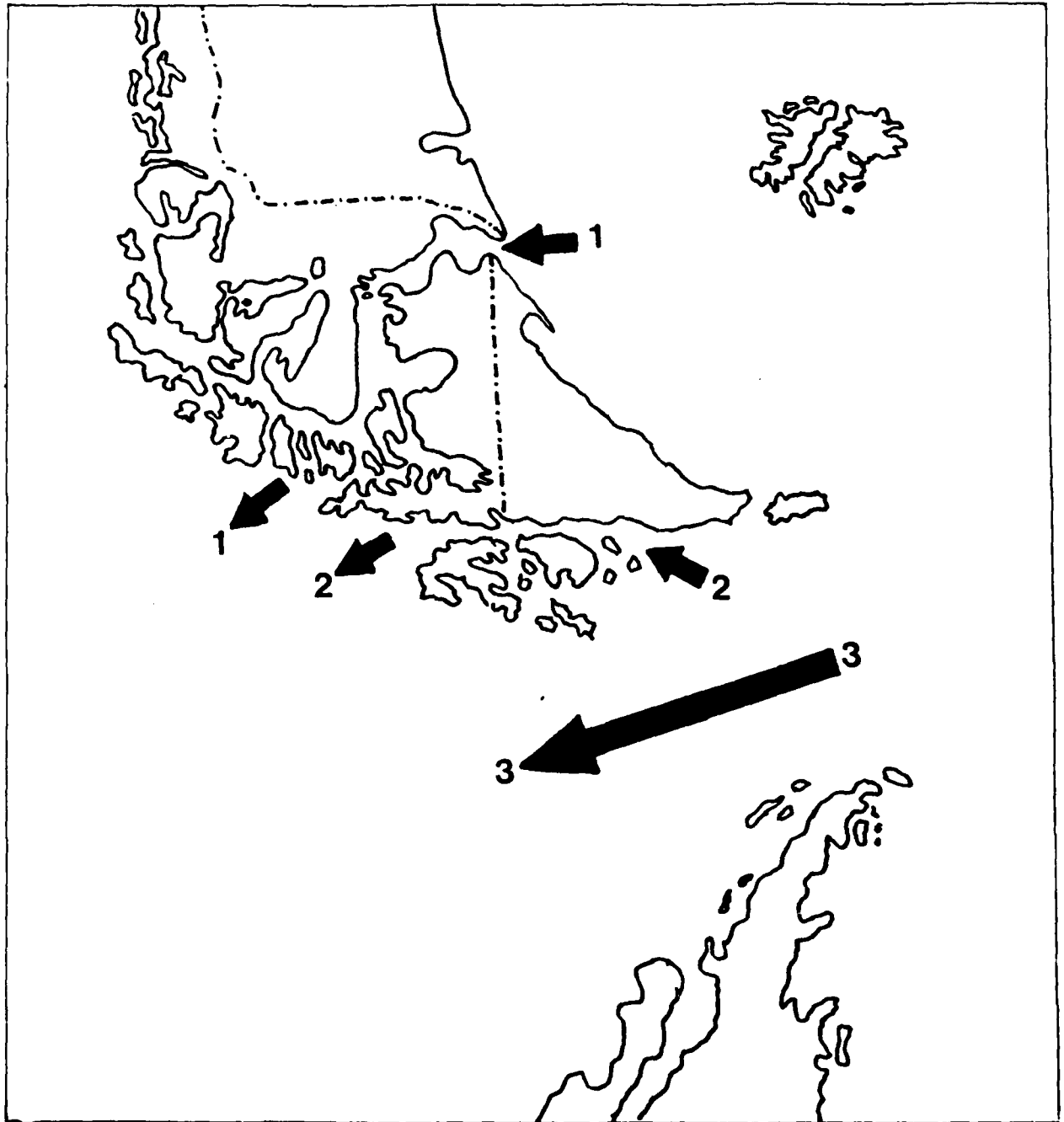
Locations of Choke Points



References:

1. Panama Canal
2. Cape Horn
3. Suez Canal
4. Cape of Good Hope
5. Strait of Malacca
6. Strait of Sunda

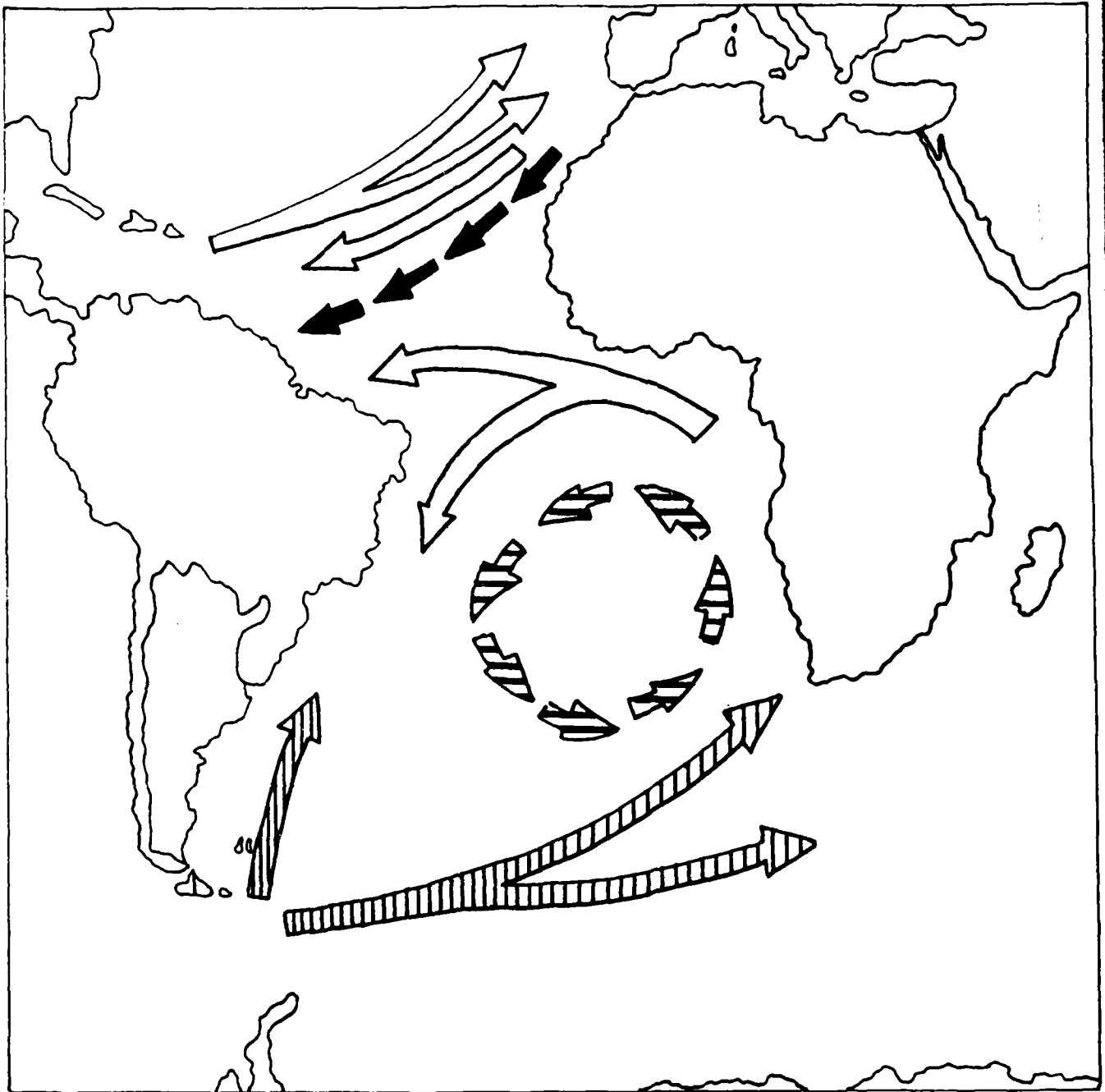
Maritime Passages in the South Atlantic






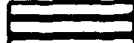
References:

1. Strait of Magellan
2. Beagle Channel
3. Drake Passage

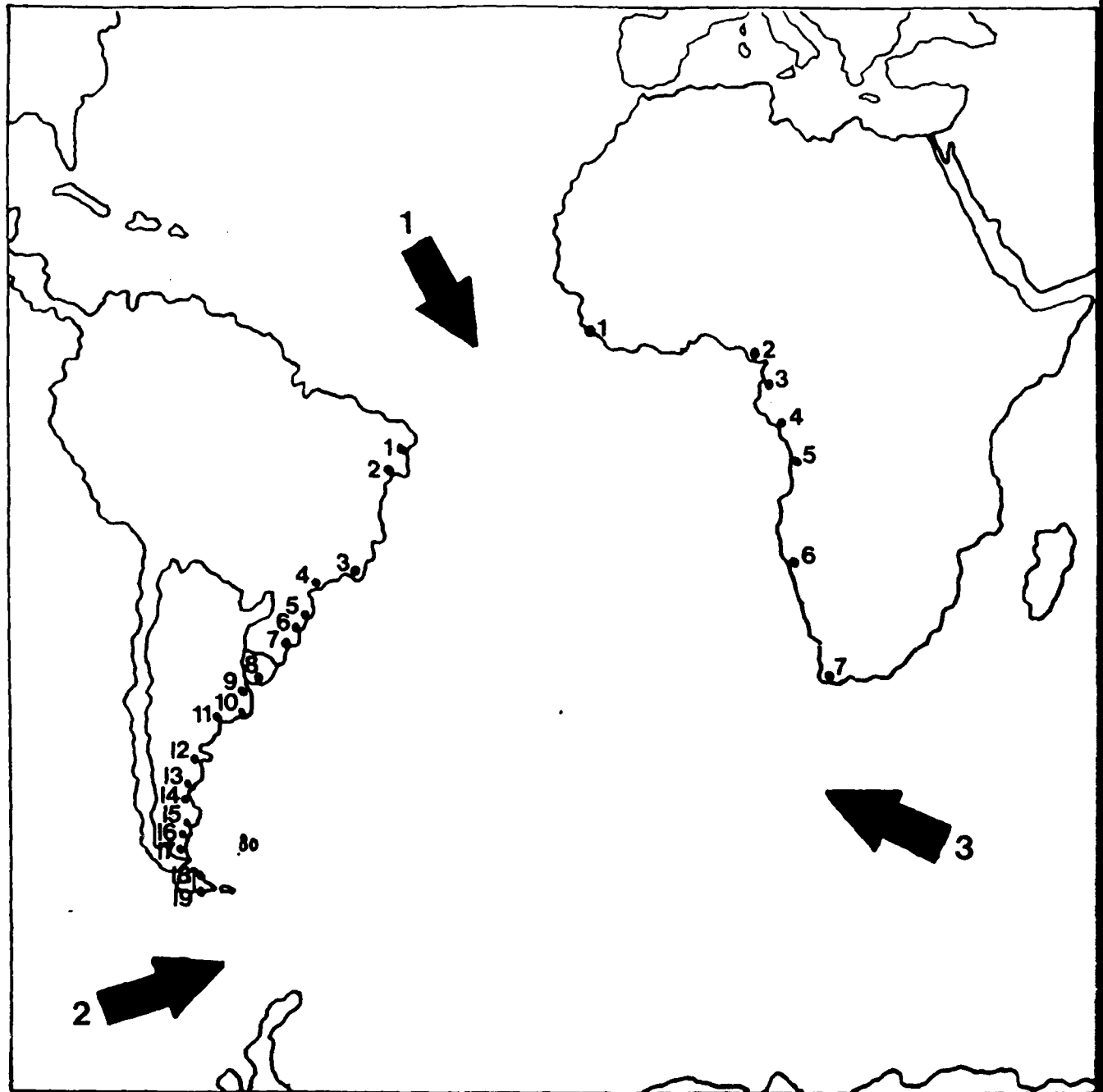
Marine Currents



References:

- | | | |
|----|---|----------------------------------|
| 1. |  | Warm Atlantic Currents |
| 2. |  | Cold Atlantic Currents |
| 3. |  | Northern Hemisphere Air Currents |
| 4. |  | Southern Hemisphere Air Currents |

Approach Acces and Ports



South America:

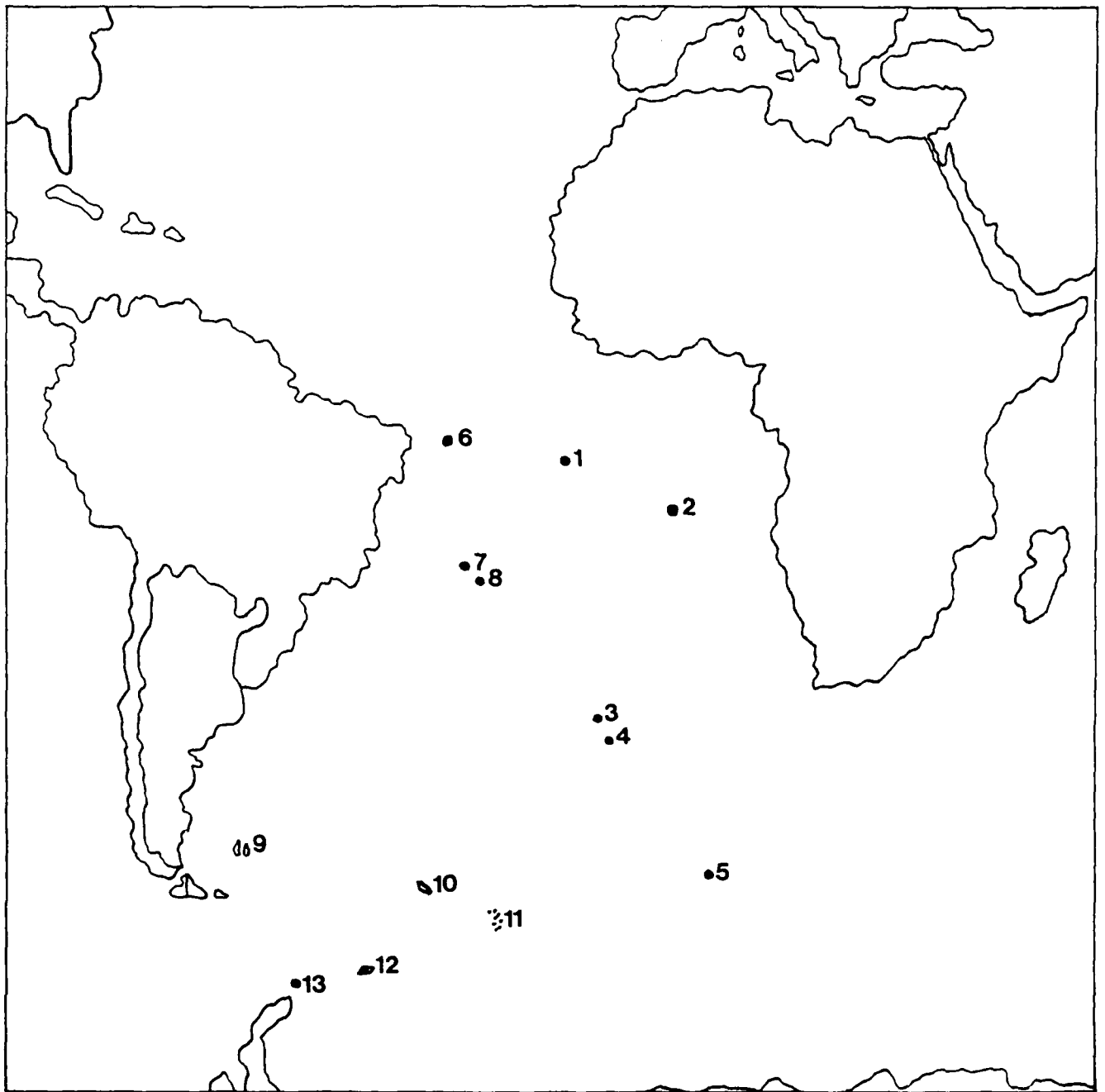
1. Recife
2. Salvador
3. Rio de Janeiro
4. Santos
5. Paraguana
6. Porto Alegre
7. Rio Grande
8. Montevideo
9. Buenos Aires
10. Mar del Plata

11. Bahia Blanca
12. Madryn
13. Como Rivadavia
14. Deseado
15. San Julian
16. Santa Cruz
17. Rio Gallego
18. Rio Grande
19. Ushuaia

Africa:

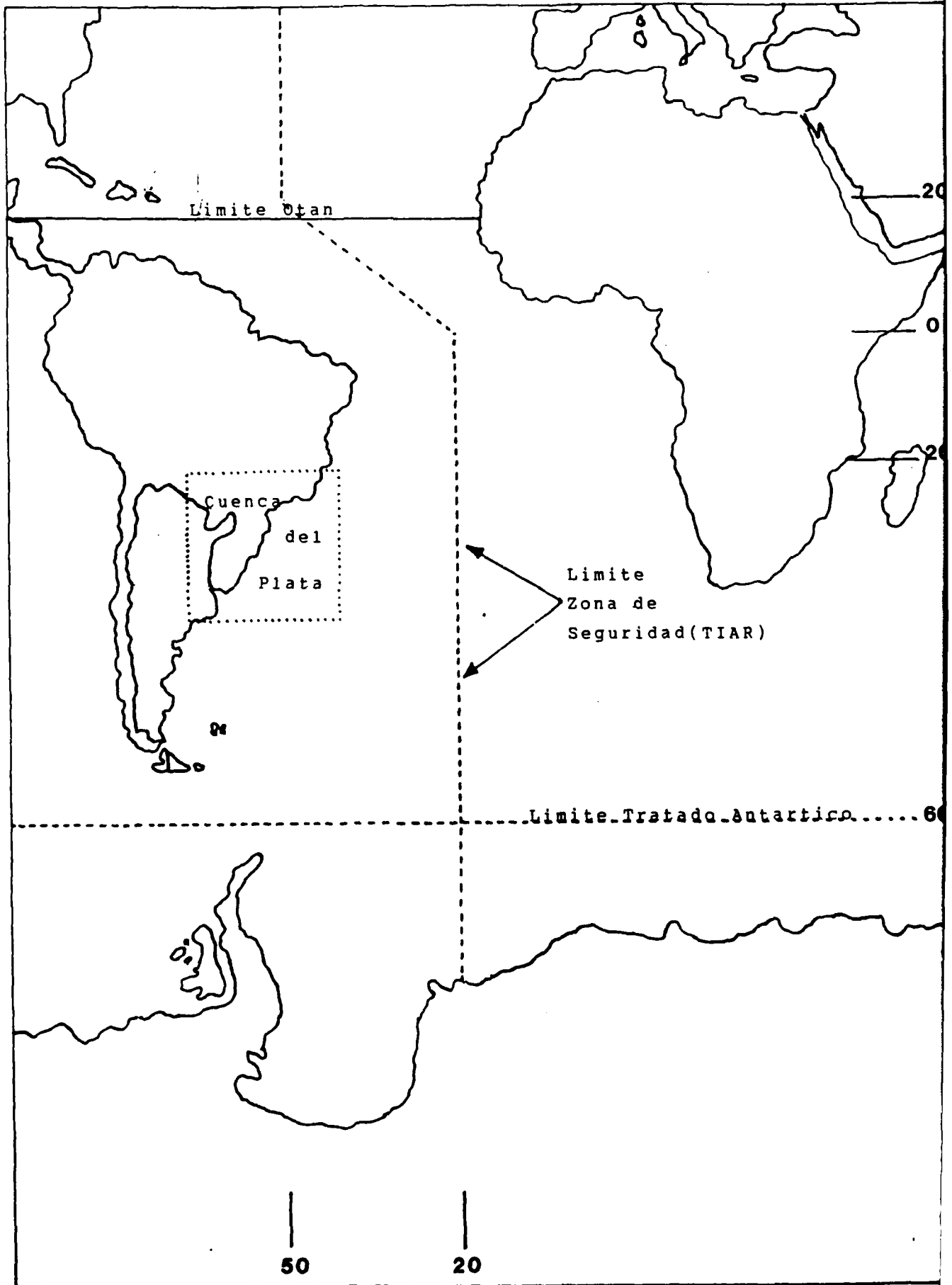
1. Freetown
2. Duala
3. Libreville
4. Banana
5. Angola
6. Wolvis Bay
7. Ciudad del Cabo

Islands

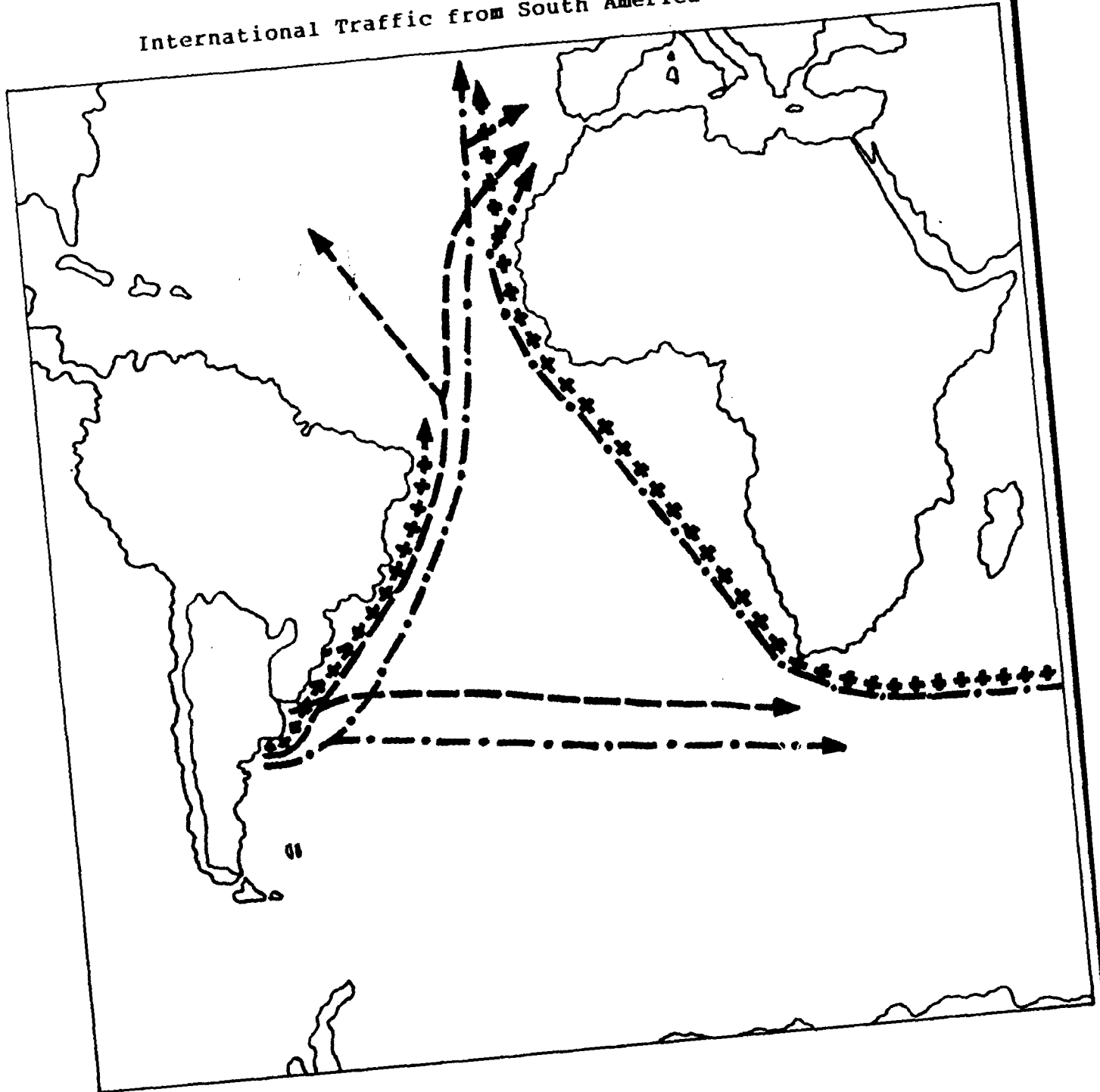


- | | | |
|---------------------|----------------------|----------------------|
| 1. Ascension | 6. F. de Nornha | 11. Sandwich del Sur |
| 2. Santa Elena | 7. Trinidad | 12. Orcadas del Sur |
| 3. Tristan da Cunha | 8. Martin Vaz | 13. Shetland del Sur |
| 4. Gough | 9. Malvinas | |
| 5. Bouvet | 10. Georgias del Sur | |

South Atlantic Geopolitical Structure



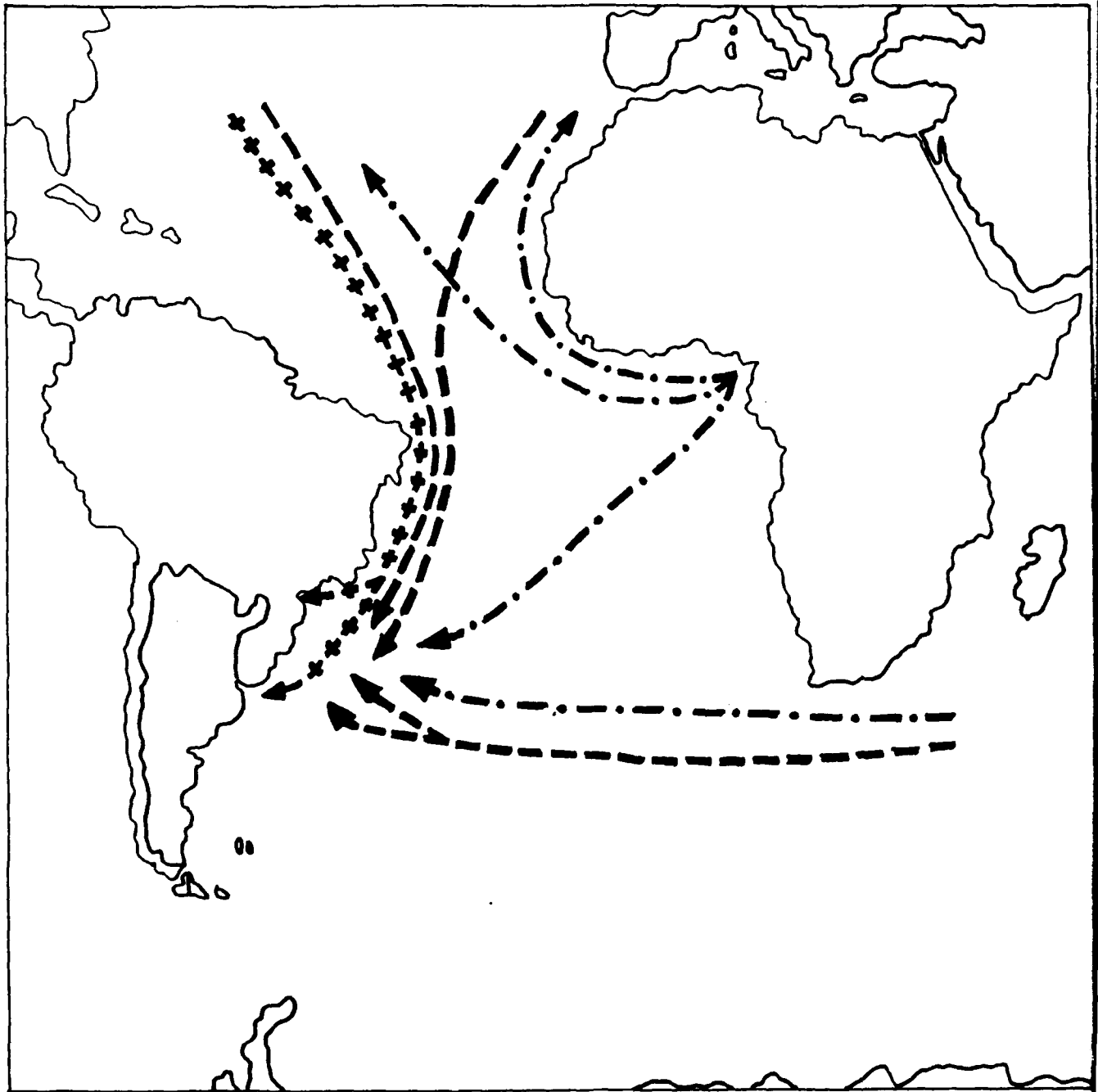
International Traffic from South America



References:

- +++++ Coal
- Grains / Meats
- . - Iron

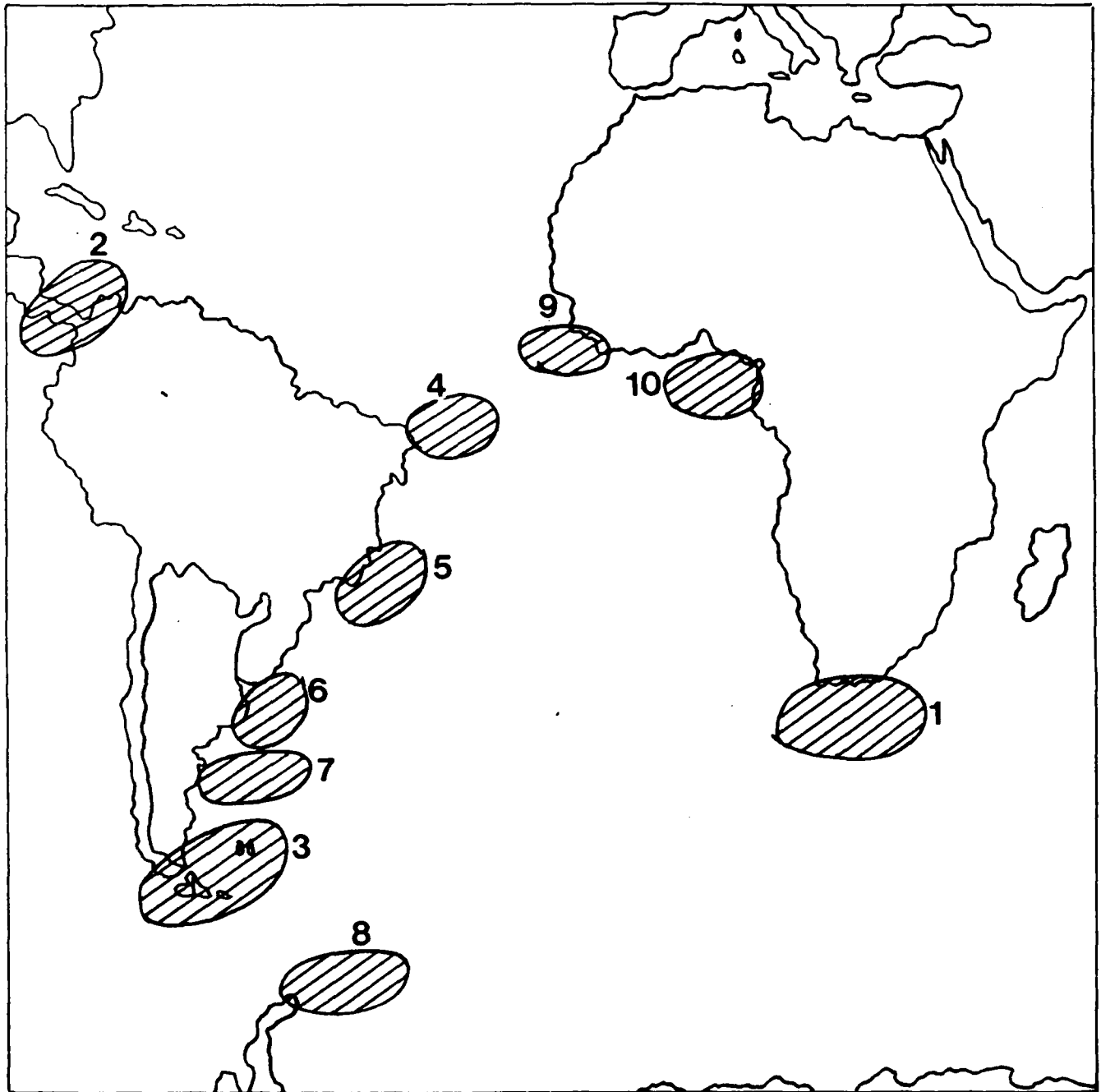
International Traffic Towards South America



References:

- Petroleum
- ++++ Coal
- Industrial Products

Strategic Areas



A. Of present importance:

- 1. Cape of Good Hope
- 2. Canal de Panama

B. Of potential world importance:

- 3. Cape Horn.

C. Of potential regional importance:

- 4. San Roque
- 5. Rio de Janeiro-Santos
- 6. Rio de la Plata
- 7. Comodoro Rivadavia
- 8. Antartida
- 9. Freetown
- 10. Guinea

ENDNOTES

1. Jose Aguirre, La Sepunda Guerra Mundial, Barcelona, Ed. Argos, 1963, p. 407.
2. Ibid., p. 407.
3. Jorge Fraga, La Argentina y el Atlantico Sur, Buenos Aires, Instituto de Publicaciones Navales, 1983, p. 40.
4. Ibid., p. 191.
5. Ibid., p. 193.
6. Ibid., p. 67.

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3. Capdevila, Ricardo and Comerci, Santiago. Historia Antartica Argentina. Buenos Aires: Direccion Nacional del Antartico: 1986.
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