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v.

PEOPLE’S REPUBLIC OF CHINA

MEMORIAL OF THE PHILIPPINES

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A Geographical Description of the Spratly Islands and an Account of Hydrographic Surveys Amongst Those Islands

David Hancox and Victor Prescott
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A Geographical Description of the Spratly Islands and an Account of Hydrographic Surveys Amongst Those Islands

by

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Captain David Hancox is an Australian with degrees in science and engineering. He became involved in the salvage industry and in 25 years he has worked in most facets of casualty salvage and wreck removal and acquired a high level of technical proficiency. Employed by a leading salvage company in the Far East his skills were recognised by promotion to Senior Salvage Master and Salvage Manager. Currently he lives with his family on the Bellarine Peninsula, near the entrance to Port Philip Bay, with a good view of Melbourne. He is a member of an international salvage consultancy based in Singapore, which gives regular opportunities to continue his association with the South China Sea.

Professor Victor Prescott holds a personal chair in geography at the University of Melbourne. International boundaries on land and sea have been the main focus of his research in the past thirty years. He has written books on those subjects and political geography in general and some have been translated into Arabic, German and Italian.

The opinions contained herein are those of the authors and are not to be construed as those of IBRU.
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A Geographical Description of the Spratly Islands and an Account of Hydrographic Surveys Amongst Those Islands

David Hancox and Victor Prescott

1. Introduction

Several scholars have described and analysed political and legal aspects of the Spratly Islands dispute. They include Djalal (1990), Chang (1991), Coquia (1990), Dzurek (1985), Hamzah (1993), Park (1981), Samuels (1982), Thomas (1989) and Weatherbee (1987). There is no corresponding collection of papers and books describing and analysing the physical characteristics of the Spratly Islands region. Useful studies of sedimentary basins by Emery and Ben-Avraham (1972), of oil and gas potential by Valencia (1985) and of the status of fisheries by Mansor Mat Isa and Raja Mohammad Noordin (1993) are notable exceptions to this generalisation.

This study seeks to make two contributions to the physical description of the Spratly Islands. First it provides a description of the islands and rocks that stand above high water, the reefs that uncover at low water and the shoals that are always submerged. These descriptions are based on sailing directions published by American, British and French authorities, on charts published by those countries and China, Japan and Taiwan, and by personal observations by David Hancox.

Second, because few people who write about the Spratly Islands have been able to visit them and because therefore they have to rely on charts of the region, this paper provides an account of hydrographic surveys throughout this region and a list of all known published charts.

It is hoped that the geographical description and the record of surveys and charts will provide a useful research tool for scholars interested in the physical, legal and political aspects of the Spratly Islands.

2. Geographical Description of the Islands, Rocks, Reefs and Shoals of the Spratly Islands Region

These descriptions are based on three complementary sources. First the sailing directions produced by Findlay (1869) in the 19th century and by American, British and French authorities since 1901 (US Naval Oceanographic Office, 1967 and US Defense Mapping Agency 1988 and 1994; Hydrographer of the Navy, 1975 and 1982; Service Hydrographie et Oceanographique de la Marine, 1982). It is salutary to realise that many of the current statements in sailing directions about the Spratly Islands are taken, sometimes without change, from Findlay’s publications. Second, the largest scale reliable charts, listed in Appendix II, have been used to augment the descriptions in the sailing directions and to calculate areas.
Third, David Hancox has visited parts of the Spratly Islands since 1966 to salvage stranded vessels and has observed some of the features and made sketches and taken photographs.

The descriptions are organised in two sequences. The first deals with features west of 115° 18’E; the second with features east of that meridian. This meridian was selected to represent a corridor that is not less than 30nm wide that trends north–south and divides the features into eastern and western sections. Livock Reef in the north of the eastern section straddles this meridian, as does Commodore Reef in the south of the western section. In each sequence the features have been described from north to south in such a way that each one is related by direction and bearing to the preceding feature. Each entry is numbered consecutively through the text and deals with either a single feature, such as Mariveles Reef, or a collection of features such as North Danger Reef. Appendix III provides an index to place-names and shows the number of the entry where they are described.

Coordinates for features represent their estimated geographical centre but distances between features are measured from their nearest limits. At the end of each entry a list of available Chinese, Malaysian, Filipino and Vietnamese names are given. The Pinyin and Wade-Giles versions are given for Chinese names; the Wade-Giles version appears second in parentheses. Thus the entry for Amboyna Cay shows:

<table>
<thead>
<tr>
<th>Feature</th>
<th>Chinese</th>
<th>Malaysian</th>
<th>Filipino</th>
<th>Vietnamese</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amboyna Cay</td>
<td>Anbo Shahzou (An-po Sha-Chou)</td>
<td>Pulau Kecil Amboyna</td>
<td>Kalantiyaw</td>
<td>dao An Bang’</td>
</tr>
</tbody>
</table>

These names have been prepared from various charts and lists of names published by Haller-Trost (1990) and an American map (United States National Technical Information Service, 1992). Li Shu, a doctoral student in the Geography Department at the University of Melbourne, provided invaluable assistance with the transliteration and translation of Chinese names and notes on charts.

Various writers have defined the Spratly Islands in different ways. In some ways it would be more accurate to produce a different name for the features in the South China Sea on which those writers focus, but that is now impossible. Since we are not writing only about islands we have referred, when necessary, to the Spratly Islands region. For us that region, with one exception, lies south of 12°N and seawards of the 200 metres isobath off the continental and insular coasts that define the South China Sea. The exception is the Luconia Shoals that lie just landwards of that isobath, 60 nautical miles (nm) from the coast of Malaysia and well within the claim published on Chinese maps. However we have not included the Elizabeth Shoals and associated features that lie within 30nm of the Malaysian coast and which fall just within the published Chinese claim.

Some modern charts of the Spratly Islands region continue to show some features which do not appear to exist. In this account there will be no reference to those features which appear on some charts but which are not recorded in either the latest British or American sailing directions. Proceeding from west to east these features are Duvalle, Owen and Stag Shoals, various Ganges Reefs, Cay Marino, Northeast Shea, Nanle Ansha, Glasgow Bank, North Viper and Viper Shoal, and Puning and Suilang Ansha. Nor is there reference to Jubilee and Coronation Banks that have a least depth of 280 metres.
The islands in the Spratly Islands region are usually described as cays. The International Hydrographic Organisation (1990: 37) describes a cay, kay or key as “A low flat island of sand, coral etc. awash or drying at low water, a term originally applied to the coral islets around the coast and islands of Caribbean Sea.” This definition indicates that cays might submerge at some stages of the tidal cycle. Bird (1994) a distinguished coastal geomorphologist has commented that the term cay is sometimes used for features better described as inter-tidal sand banks. He is of the opinion that such features tend to develop into sand islands or are the remains of a former sand island. This view conveys the impression of evolution and decay which is set out in some detail by Nunn (1994: 243-9).

He begins by describing cays as impermanent accumulations of sand and shingle on broad reef flats, usually devoid of vegetation and often overtopped by swash. He then continues to show how cays can achieve a level of permanence as they are converted to motus. The motu has a higher level of permanence than a cay and that is achieved by the development of beach rock along the ocean-facing swell, by the incorporation of shingle ridges into the fabric of the cays and colonisation by vegetation. Motu in monsoon regions tend to develop beachrock on both sides because of the change in direction of the principal swells. The following descriptions will refer only to islands and cays, but wherever possible it is indicated when they are vegetated, or when they are bare or when it is reported that they cover at high water. It is probably reasonable to assume that when islands or cays are reported to be occupied that measures will be taken by the residents to reduce any threat of erosion.

Finally it must be stressed that these descriptions are not intended to be sailing directions. They are designed for scholars interested in the physical, political and legal aspects of this region or in this region as a laboratory where rules for the definition of national maritime zones can be tested.

2.1 The Spratly Islands west of meridian 115° 18’ East

(i) North Danger Reef

North Danger Reef is located at 11°25’N, 114°21’E and is the most northerly feature in the Spratly Group. It lies 18nm north of Thitu Island and Reef. This oval coral reef measures 8nm along its main axis, which is aligned northeast–southwest, and its greatest breadth is 3.7nm. The perimeter of North Danger Reef measures 19nm and there is a sharp contrast between its northwest and southeast segments. The northwest segment joins North and South Reef, which uncover, and is marked by Northeast and Southwest Cays situated on drying reefs and Jenkins Patches. Jenkins Patches lies between Southwest Cay and South Reef; it has a least depth of 4.3 metres. The southeast segment between North and South Reefs does not dry at any point. It is defined by Day Shoal and Farquharson and Sabine Patches arranged from north to south, and they have least depths of 3, 7.1 and 5.1 metres respectively.

Northeast Cay is situated at the centre of an oval reef aligned in the same direction as North Danger Reef. The reef measures 1.2nm along its main axis and measures 0.5nm at its widest. It dries to 1 metre and there is a feature that stands 2 metres above high water. This feature is called Shira Islet and lies 320 metres south of Northeast Cay. It is a pronounced hummock with a circumference of about 90 metres and the reef between Northeast Cay and Shira Islet dries at low water. Northeast Cay is also aligned northeast–southwest and has a linear shape;
its area is about 7 hectares. The Chinese name for North Danger Reef translates to Twin Islands. Northeast Cay is the North Son Island while Southwest Cay is South Son Island. Both cays have a height of 3 metres and are reported to be occupied.

Southwest Cay with a length of 650 metres and a width of 280 metres has a more oval shape than Northeast Cay; it has an area of 12 hectares. Southwest Cay lies close to the eastern edge of an oval reef which has a long northeast–southwest axis of 1.3km and a maximum width of 680 metres. In 1889 (Findlay, 1889: 593) the vegetation on both cays was described as coarse grass, and specific mention was made of a solitary stunted tree on Northeast Cay. It was also noted that the cays were frequented by fishermen from Hainan who harvested bêche-de-mer and turtle shell and supplied themselves with water from a well near the centre of Northeast Cay. In 1937 the British sailing directions (Hydrographic Department, 1937: 119) noted that Northeast Cay was covered with coarse grass with low bushes around the perimeter with large bushes and a 10 metre coconut tree near the centre. Southwest Cay was still reported to be covered with coarse grass but additional information was provided about the cay being a breeding ground for seabirds and about a guano industry which had provided exports on a considerable scale. In the early 1980s both cays were heavily wooded with trees to 9.1 metres.

North and South Reefs have similar areas. North Reef has an area of 3km² and is shaped like the head of a mushroom with the dome facing outwards. It uncovers 0.5 metres in the south and 0.8 metres in the north and the east and north outward facing sections bear rocks and stones. South Reef is shaped like an axe-head; it has an area of 2.7km² and apart from the northeast section it bears rocks and stones along its edge.

Apart from the shoal patches already noted the remainder of the surrounding reef has depths of at least 10 metres except between North Reef and Northeast Cay.

The lagoon consists of two parts separated by Iroquois Ridge which extends from Northeast Cay to within 0.3nm of Day Shoal. The ridge has a least depth of 8.2 metres. South of the ridge lies the main part of the lagoon with a flat, mainly sandy bed at depths of 30 to 42 metres with only a few coral heads reaching to within 15 metres of the surface. Between Iroquois Ridge and North Reef lies the small remainder of the lagoon with depths of 21-31 metres. The bed of this northern section is more coral than sand.

The whole reef is steep-to and except off the southwest tip of South Reef the depths within 1nm of the reef are 700 to 1,000 metres. At that range the depths off the southwest tip are 250 metres.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Chinese</th>
<th>Filipino</th>
<th>Vietnamese</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Danger Reef</td>
<td>Shuangzi Qunjiao (Shuang-tzu Ch’un-chiao)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Northeast Cay</td>
<td>Beizi Dao (Pei-tzu Tao)</td>
<td>Parola</td>
<td>Dao Song Ta Dong</td>
</tr>
<tr>
<td>Southwest Cay</td>
<td>Nanzi Dao (Nan-tzu Tao)</td>
<td>Pugad</td>
<td>Dao Song Tu Tay</td>
</tr>
<tr>
<td>North Reef</td>
<td>Dongbei Jiao (Tung-pei Chiao)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>South Reef</td>
<td>Nailuo Jiao (Nai-lo Chiao) or Xinan Jiao</td>
<td></td>
<td>Da Nam</td>
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<tr>
<td></td>
<td>(Hsi-nan Chiao)</td>
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</tbody>
</table>
(ii) Trident and Lys Shoals

Although separated by a channel 2nm wide these two shoals can be considered together. They lie 23nm east of North Danger Reef at 11°28′N, 114°40′E and 11°19′N, 114°35′E respectively. Both reefs are submerged atolls. Trident Shoal is shaped like a keyhole and the long axis, tending north–south has a length of 9.5nm. Lys Shoal is circular with a diameter of 5nm. The shoals are steep-to and several patches on the outer reefs rise to within 18 metres of the surface. One patch in the northwest of Trident Shoal is awash at low water; the least recorded depth on Lys Shoal is 4.9 metres. No indication could be found of the depths of the lagoons.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Chinese</th>
<th>Vietnamese</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trident Shoal</td>
<td>Yongdeng Ansha (Yung-teng An-sha)</td>
<td>Bai Dinh Ba</td>
</tr>
<tr>
<td>Lys Shoal</td>
<td>Lesi Ansha (Le-ssu An-sha)</td>
<td>Da Men Di</td>
</tr>
</tbody>
</table>

(iii) Thitu Island and Reefs

This feature is composed of two steep-to coral reefs centred on 11°3′N, 114°16′E lying 18nm south of North Danger Island. Both reefs are aligned west–east. The narrow channel that separates them is 0.75nm wide, and no bottom could be found at 182 metres. The western reef measures 7.3nm along its west–east axis and has a maximum width of 3nm; the eastern reef measures 4.7nm west–east and has a maximum width of 1.8nm.

The western reef is marked by six drying patches along its north side and by reefs along its south side at depths of 5.5 to 12.8 metres. The northern edge of the western reef measures about 9nm, while the southern edge which does not dry measures 6nm. They surround an elongated lagoon 3.5nm long with a maximum width of 1.1nm. The depths in the lagoon vary from 20 to 32 metres and there are few coral heads. The eastern edge of the western reef is marked by an almost circular drying reef with a diameter of 0.9nm. Thitu Island is located on the southern edge of this reef; it has an area of about 32 hectares and is reported to be occupied. This island, with an elevation of 3.6 metres, was originally covered with low bushes, coconut palms and plantain trees. A circular drying reef with a diameter of 0.5nm lies 1.5nm northwest from Thitu Island. A further 1.4nm westwards, along the northern edge of the western reef, lies a more extensive linear drying patch with a length of 1.4nm and a width of 0.5nm. Located at the centre of this patch is a tiny sand cay with a length less than 200 metres. Two small drying reefs lie in the channel 1.1nm wide that separates the linear patch from the large drying reef that defines the western edge of the western reef. Shaped like a thick letter C this reef has a maximum width of 0.6nm.

The eastern reef consists of a confused platform of coral with three drying patches but without any lagoon. Two main patches that uncover mark the western and eastern edges of this roughly oval platform. The western patch is shaped like an arrow head pointing westwards with twin barbs. The barbs measure 1.4nm each. The small triangular drying patch close to this western patch has a longest side of 550 metres. A large compact reef shaped like an equilateral triangle with sides measuring 1.1nm marks the eastern edge of the eastern reef.
(iv) Subi Reef

Subi Reef lies 7.5nm southwest from Thitu Reefs at 10°54’N, 114°6’E. This reef is shaped roughly like a diamond with the long axis, aligned east–northeast, measuring 3.7nm and the shorter axis 2.7nm. The coral reef is continuous and surrounds a lagoon which has a maximum width of 1.9nm. The reef which dries is usually marked by breakers; it has a maximum width of 370 metres in the southeast and a maximum width of 1,800 metres in the southwest. The reef is steep-to and the maximum recorded depth between Subi Reef and Thitu Reefs is 1,018 metres. Subi Reef is reported to be occupied.

(v) Loaita Bank and Reefs

Loaita Bank lies 25nm east of Subi Reef at 10°47’N, 114°27’E. The bank’s long axis is aligned southwest–northeast and its shape viewed on the charts resembles a turtle on its back. The fairly straight long axis of 20nm along the northern edge marks the base of the shell. The southeast shore provides the shell’s dome and the head is marked by the largest drying reef that marks the southwest tip of the Bank. The maximum width of the bank is 7nm. Loaita Bank has a lagoon with its northern half surrounded by shoals with a least depth of 9.1 metres and its southern half surrounded by shoals and seven drying reefs. The perimeter of the bank measures about 48nm.

Five of the seven drying patches lie along 12nm of the bank’s southern shore. Proceeding from the northeast to the southwest the first drying reef is rectangular in shape and has an area of about 50 hectares. A further 1nm to the south lies a triangular reef that occupies 27 hectares. The triangular reef bearing Lankiam Cay is located a further 2.5nm southwest; it has an area of about 60 hectares. Lankiam Cay is situated close to the centre of the reef; it is sandy, has an area of only a few hectares and is reported to be occupied. There is a small linear patch 4.4nm southwest from Lankiam Cay with an area of about 25 hectares. The last drying patch along this southern sector lies a further 1.9nm west. This circular reef has an area of about 50 hectares of which Loaita Island occupies 6 hectares. The island is located in the southeast quadrant of the reef and originally it stood 1.5 metres above high water and was covered with mangroves and coconut palms. It is reported to be occupied.

The other two drying patches in the southern section of the bank lie 4.8nm northwest from Loaita Island. The largest of the two reefs marks the western tip of the bank. It has an area of about 2.3km² in the shape of an isosceles triangle with the base facing the lagoon. A smaller
A Geographical Description of the Spratly Islands

reef, with an area of 1.5km², lies 0.8nm to the northeast across a channel 7 metres deep. There is a sand cay located just south of the centre of this reef. Until 1951 sailing directions usually noted that "...there was a sand cay in 1868...". Recent editions are unequivocal that there is a cay. The seven drying patches and intervening channels define 22nm of the lagoon’s rim; the remaining 22nm of that rim are defined by reefs that vary in depth from 9 to 64 metres.

The sand and coral floor of the lagoon is flat with depths mainly in the range 53 to 63 metres and a few coral heads close to the reef.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Chinese</th>
<th>Filipino</th>
<th>Vietnamese</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loaita Reefs</td>
<td>Daoming Qunjiao (Tao-ming Chun-Chiao)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loaita Island</td>
<td>Nanyue Dao (Nan-yueh Tao)</td>
<td>Kota</td>
<td>Dao Loai Ta</td>
</tr>
<tr>
<td>Lankiam Cay</td>
<td>Yangxin Shazhou (Yang-hsin Sha-chou)</td>
<td>Panata</td>
<td>Bo Loai Ta</td>
</tr>
</tbody>
</table>

Menzies Reef, which is awash at low tide is located at 11°9’N, 114°48’E, 18nm from the northern tip of Loaita Bank. A ridge of foul ground extends most of that distance between the two reefs, with depths ranging from 3.7 to 48 metres. The narrow channel of 1nm between Loaita Bank and the ridge has a least depth of 32 metres. This reef is shaped like a barbed arrowhead pointing northeast; both barbs measure 4 to 5nm and the area of the reef is 15km².

<table>
<thead>
<tr>
<th>Feature</th>
<th>Chinese</th>
<th>Vietnamese</th>
</tr>
</thead>
<tbody>
<tr>
<td>Menzies Reef</td>
<td>Mengzi Jiao (Meng-tsu Chiao)</td>
<td>Da Mon Di</td>
</tr>
</tbody>
</table>

(vi) West York Island

This island lies 14nm southwest from Menzies Reef at 11°5’N, 115°E. It is bordered by a reef 2nm wide to the north; elsewhere the reef does not exceed 0.8nnm. The measurements of the island have been recorded as about 500 metres long and 320 metres wide, giving an area of about 15 hectares. It was originally covered with trees and bushes and is reported to be occupied.

<table>
<thead>
<tr>
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<tr>
<td>West York</td>
<td>Xiyue Dao (Hsi-yueh Tao)</td>
<td>Likas</td>
<td>Dao Ben Loc</td>
</tr>
</tbody>
</table>

(vii) Irving Reef

This reef lies 11nm southwest from West York Island at 10° 52’N, 114°55’E. It has an oblong shape with the long axis aligned southwest–northeast measuring 2nm. It dries in patches when a central lagoon is revealed. There is a very small sand cay at the northern end of this reef.

<table>
<thead>
<tr>
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<tr>
<td>Irving Reef</td>
<td>Huo’ai Jiao (Huo-ai Chiao)</td>
<td>Balagtas</td>
<td>Dao Ca Nham</td>
</tr>
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</table>
**Tizard Bank and Reefs**

This large coral bank is located at 10°28′N, 114°27′E and lies 30 nm southwest from Irving Reef. Its principal axis measures 32 nm and is aligned east-northeast–west-southwest; the maximum width is 11 nm. The perimeter of the bank measures about 80 nm and it is outlined by reefs that dry in eight patches. The reefs enclose a lagoon with a bottom mainly of coral with small patches of sand and shell. The drying reefs occupy only 16% of the perimeter and the greatest distance between any two adjacent drying reefs is 20 nm. Except in the vicinity of the drying reefs, the reef that does not dry generally has a least depth of 10 metres. Most of the lagoon has depths of 50 to 80 metres, although there are some coral heads in the central section reaching to within 7 metres of the surface.

Three of the eight drying reefs are surmounted by islands. Itu Aba is the largest island in the whole of the Spratly Islands with an area of 50 hectares; it has a length of 1,400 metres, a width of 370 metres and is occupied. The island, with a height of 2.4 metres, is situated near the centre of the northern edge of Tizard Bank and centred with the same alignment as the bank on an elliptical reef that has a length of 1.4 nm and a width of 0.5 nm. The surrounding reef uncovers 1.5 metres and there is a rock south of the island standing 0.9 metres above high water. Situated 6.5 nm east of Itu Aba Island is an un-named sand cay with an area of 7 hectares; it is reported to be occupied. The cay, 3 metres high, is located near the centre of a circular reef with an area of 132 hectares, that uncovers to 1.3 metres. There are some small rocks on the reef that stand above high water. Namyit Island lies 11.8 nm due south of Itu Aba Island towards the western end of the southern reef that defines Tizard Bank. It has an area of about 9 hectares, stands 18.6 metres high, and lies on the eastern half of an elliptical reef aligned east–west; it is occupied. This reef with a length of 2 nm and a width of 0.5 nm uncovers to 1.4 metres. There are some small rocks that stand above high water on this reef and one large rock that stands 1.1 metres above high water at its eastern end.

The remaining five reefs that uncover are located at the eastern and western termini of Tizard Bank and on its northeast perimeter. At 10°21′N, 114°41′48″E the eastern terminus is marked by Eldad Reef which is the largest of the reefs that uncover on Tizard Bank. Viewed from the west the shape of the reef resembles a giraffe. The back and neck mark the eastern edge of the reef for 3.5 nm. The neck, chest and forelegs mark the northeast edge of the reef for 3.5 nm and the rump and hind-legs mark the southeast perimeter of the bank for 1.6 nm. This reef dries from 0.4 metres at the south end to 1.4 metres at the northern end. There are some large rocks on the reef that stand up to 1.3 metres above high water. The low-water mark around Eldad Reef lies 12 pm east of the low-water mark around the un-named sand cay. Lying 5.7 nm northeast of the un-named sand cay is Petley Reef at 10°25′36″ N and 114°34′50″ E. This reef is almost circular with an area of about 172 hectares. It uncovers 1 metre and is surmounted by some small rocks that might stand above high water. Petley Reef marks the northern terminus of a tongue of submarine reef that projects northeasterly from the northern perimeter of the bank. This reef is reported to be occupied. Located between Itu Aba Island and the un-named sand cay is a small reef of 24 hectares that uncovers to 0.5 metres. It lies 2.1 nm east of the low-water mark surrounding the reef on which Itu Aba stands.

The two remaining features are called Gaven Reefs and they mark the western edge of Tizard Bank. The larger northern reef, roughly diamond-shaped with an area of 86 hectares, is located at 10°12′48″N, 114°13′9″E. It dries in parts to 1.2 metres and has one large rock that stands 1.9 metres above high water. This rock is not mentioned by any British or American
sailing directions that have been inspected. However, while both sets of sailing directions remark that this reef covers at high water, the American sailing directions (Defense Mapping Agency Hydrographic/Topographic Center, 1994: 13) includes the information that this reef is marked by a white sand dune 1.8 metres high. An earlier American pilot (US Naval Oceanographic Office, 1967: 88d) refers to a “small white dune”. The north Gaven Reef is reported to be occupied. The smaller southern reef has an area of 67 hectares and dries to 1 metre. Both the Gaven Reefs lie more than 12nm from the low-water mark around Itu Aba and the un-named sand cay, and less than 12nm from the low-water mark around Namyit.

Examination of the depths around Tizard Bank reveal that within 1nm of most of the edge of the reef the depth of water is 700 to 800 metres. The exceptions to this generalisation are found off northeast Petley Reef and between Itu Aba and the northernmost Gaven Reef. At 1nm from the reefs in these areas the depths are 500 to 600 metres.

When this description is compared with that contained in the directory compiled by Findlay (1889: 589-90) it appears that the islands have not changed in size or their location on the reefs. There is only one notable difference. The difference arises from the statement by Findlay that the reef between the unnamed cay and Itu Aba was the same size as the reef on which the cay is located. On modern charts and from observation this intermediate reef is only one-fifth of the extent of the reef bearing the un-named sand cay.

<table>
<thead>
<tr>
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<th>Vietnamese</th>
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<tbody>
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<td>Zheng He Qunjiao (Cheng-Ho Chun-chiao)</td>
<td></td>
<td></td>
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<tr>
<td>Itu Aba</td>
<td>Taiping Dao (T’ai-p’ing Tao)</td>
<td>Ligaw</td>
<td>Dao Ba Binh</td>
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<tr>
<td>Namyit Island</td>
<td>Hongxiu Dao (Hung-hsiu Tao)</td>
<td>Binago</td>
<td>Dao Nam Yet</td>
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<tr>
<td>Sand Cay</td>
<td>Dunqian Shazhou (Tun-ch’ien Sha-chou)</td>
<td></td>
<td>Dao Son Ca</td>
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<tr>
<td>Petley Reef</td>
<td>Bolan Jiao (Po-lan Chiao)</td>
<td></td>
<td>Da Nui Thi</td>
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<tr>
<td>Eldad Reef</td>
<td>Anda Jiao (An-ta Chiao)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gaven Reef (N)</td>
<td>Nanxun Jiao (Nan-hsun Chiao)</td>
<td></td>
<td>Da Gaven</td>
</tr>
<tr>
<td>Gaven Reef (S)</td>
<td>Xinan Jiao (Hsi-nan Chiao)</td>
<td></td>
<td>Da Gaven</td>
</tr>
</tbody>
</table>

(ix) Flora Temple or Western Reef

This circular steep-to reef lies 37nm west from Tizard Bank at 10°15’N, 113°36’E. It has an area of about 40 hectares. There is no report that this reef uncovers although some rocks reach within 1.8 metres of the surface.
(x) **Discovery Great and Small Reefs**

Discovery Great Reef lies 18nm southwest from Flora Reef at 10°5’N, 113°51’E. It is a narrow steep-to reef that is aligned north–south. None of the recent sailing directions consulted give the size but Findlay (1889: 588) gives the length as 10nm and the width up to 1nm. The lagoon has no entrance; it appears to be shallow and constrictions of the reef and coral heads effectively divide it into three reaches of equal length. This information is derived from a sketch map, lacking any scale, in the American sailing directions (Defense Mapping Agency, 1994: 15). The reef dries and some large rocks stand above high water. It is reported to be occupied. Discovery Small Reef is circular and lies 10nm east of the southern tip of Discovery Great Reef at 10°1’N, 114°1’E. It dries exposing an area of about 1km².

<table>
<thead>
<tr>
<th>Feature</th>
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<tr>
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<td>Daxian Jiao (Ta-hsien Chiao)</td>
<td>Paredes</td>
<td>da Lon</td>
</tr>
<tr>
<td>Discovery Small Reef</td>
<td>Xiaoxian Jiao (Hsiao-hsien Chiao)</td>
<td></td>
<td>Da Nho</td>
</tr>
</tbody>
</table>

(xi) **Union Bank and Reefs**

This large bank lies 17nm southeast from Discovery Small Reef at 9°57’N, 114°25’E. It rises steeply on all sides and the summit is defined by at least 31 charted drying coral patches. The maximum distance between any two adjacent shoals is 5nm. These patches enclose a linear area where vessels can anchor although there would be little shelter in bad weather. This elongated shoal measures 29nm along the main axis which is aligned southwest–northeast. The maximum width of 7.5nm is found in the southwest, the northeast section has a width of about 4nm. The total area of reefs and enclosed bank amounts to 470km². The largest patches are found in the northeast and southwest extremities. Johnson Reef marks the southwest extremity; it has an area of 7km². This reef is U-shaped with the entrance to a shallow lagoon from the north. The American sailing directions report that the edge of the lagoon is defined by white coral while the outer edge of the reef is composed of brown volcanic rocks. It is not known whether this identification was made from collected specimens. If it was simply observed then there is the greater likelihood that the outer reef consists of coral that has been darkened by accumulations of coralline algae (*sp. Lithothomnian*). A number of large rocks show above high water in the southeast of the reef; the largest stands 1.2 metres. This reef is reported to be occupied. A rectangular reef called Collins lies 1nm northwest of Johnson Reef across a navigable channel. It is reported in the American sailing directions that a coral dune is located at the southeast corner of Collins Reef. It is not clear whether this is a dune formed from coral debris or a coral ridge in the shape of a dune. According to Bird (1994) the former explanation is more likely. Collins Reef is reported to be occupied.

A further 5nm north of Collins Reef is a small drying patch called Loveless Reef. The small coral patch that bears Sin Cowe Island is located 3.5nm northeast from Loveless Reef and 9nm northeast from Johnson Reef. The small island near the middle of the reef stands 3.6 metres.

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1 Union Bank and Reefs were surveyed by HM surveying ship *Herald* in April and May 1931 and all names of features are derived from names of surveying officers aboard *Herald* (Cmdr. N.A.C.Hardy) or the church calendar. The *Herald* survey of Union Bank and Reefs has never been published by the Hydrographer of the Navy.
high. There are thirteen coral patches between Sin Cowe Island and Whitsun Reef which marks the eastern tip of Union Bank. Only two of these reefs are named in sailing directions. McKennan Reef lies 9.5nm east of Sin Cowe Island at 9°54′N, 114°28′E. It has an area of about 2.5km² and is reported to be occupied. There is some confusion whether McKennan Reef is the occupied reef. Haller-Trost (1990), Shephard (1993) and the United States National Technical Information Service (1992) report that McKennan Reef is occupied. Only the United States National Technical Information Service (1992) gives the Chinese name for McKennan Reef and it is recorded as Dongmen Jiao. Chinese sources use the name Dongmen Jiao for Hugh or Hughes Reef with the coordinates of 9°55′N, 114°30′E. The Chinese and British report that the adjacent reef to the west is called McKennan Reef. The next feature to be named is Holiday Reef that lies 14nm northeast from Sin Cowe Island. There is no evidence from the charts or the sailing directions that either McKennan Reef or Holiday Reef are in any way distinguished from the other patches on Union Bank.

The northeast limit of the bank’s summit is defined by Whitsun Reef. Shaped like the number seven, with an area of 10km², this is the largest coral reef on the bank. In 1957 American sailing directions reported the presence of a small cay that Japanese and Taiwanese charts indicate is situated 2.5nm from the northeast tip of Whitsun Reef. In the 1988 and 1994 American sailing directions there is no reference to any cay on Whitsun Reef. Lying 3nm west from the southern tip of Whitsun Reef is Grierson Reef that supports a small sandy cay and some large black boulders. Lansdowne Reef lies 13nm southwest from Grierson Reef and 8nm northeast from Johnson Reef at 9°46′N, 114°22′E. A white sand dune is recorded on this reef which is reported to be occupied. There is confusion about the Chinese name for Lansdowne Reef. Chinese sources call the reef Qiong Jiao; that is the name Shepard uses while Haller-Trost is silent on this name. The United States National Technical Information Service (1992) gives the Chinese name of Lansdowne Reef as Quyuan Jiao. The Chinese identify Quyuan Jiao as Higgens Reef at 9°48′N, 114°24′E. Some Chinese and British maps name another seven of the reefs surrounding Union Bank. Whitsun, Grierson and Lansdowne Reefs are reported to be occupied.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Chinese</th>
<th>Vietnamese</th>
</tr>
</thead>
<tbody>
<tr>
<td>Union Bank and Reefs</td>
<td>Jiuzhang Qunjiao (Chiu-chang Chun-chiao)</td>
<td>Sinh Ton Dong</td>
</tr>
<tr>
<td>Johnson Reef</td>
<td>Chigua Jiao (Ch’ih-kua Chiao)</td>
<td>Da Gac Ma.</td>
</tr>
<tr>
<td>Collins Reef</td>
<td>Guihan Jiao (Kuei-han Chiao)</td>
<td>Bai Vung May</td>
</tr>
<tr>
<td>Loveless Reef</td>
<td>Hua Jiao (Hua Chiao)</td>
<td></td>
</tr>
<tr>
<td>Sin Cowe Island</td>
<td>Jinghong Dao (Ching-hung Tao)</td>
<td>Dao Sinh Ton</td>
</tr>
<tr>
<td>McKennan Reef</td>
<td>Ximen Jiao (Hsi-men Chiao)</td>
<td></td>
</tr>
<tr>
<td>Hugh or Hughes Reef</td>
<td>Dongmen Jiao (Tung-men Chiao)</td>
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</tr>
<tr>
<td>Holiday Reef</td>
<td>Changxian Jiao (Ch’ang-hsien Chiao)</td>
<td></td>
</tr>
<tr>
<td>Whitsun Reef</td>
<td>Niu’e Jio (Niu-o Chiao)</td>
<td>Da Ba Dau</td>
</tr>
<tr>
<td>Grierson Reef</td>
<td>Ranqing Shazhou (Jan-ch’ing Chiao)</td>
<td>Sinh Ton Bong</td>
</tr>
</tbody>
</table>
(xii)  Tennent or Pigeon Reef

This is a steep-to triangular drying reef 55nm south of Union Bank at 8°51′N, 114°E; it has an area of about 3.4km². There are some rocks that stand above high water, the largest being in the southeast sector. The lagoon appears to be deep with only one coral head but there is no entrance. The American sailing directions refer to white coral lining the edge of the lagoon on the inner side of the reef while the outer edge is brown suggesting volcanic rock. As noted earlier, unless the rock was identified as being volcanic from samples, the outer edge of the reef is likely to be darkened coral. This reef is reported to be occupied. Tennent Reef is used by British sources and Pigeon Reef by American sources.

<table>
<thead>
<tr>
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</tr>
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<tbody>
<tr>
<td>Tennent Reef</td>
<td>Wumie Jiao (Wu-mieh Chiao)</td>
<td>Da Tien Nu</td>
</tr>
</tbody>
</table>

(xiii)  Cornwallis South Reef

This reef lies 24nm southwest from Tennent/Pigeon Reef at 8°42′N, 114°11′E. It is almost oblong in shape, aligned north–south, with an area of about 35km². The reef dries exposing a lagoon with depths down to 9 metres; it is reported that it can be entered from the south through a channel 360 metres wide with some coral heads and a depth of 9 metres. Cornwallis South Reef is reported to be occupied.

<table>
<thead>
<tr>
<th>Feature</th>
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<tbody>
<tr>
<td>Cornwallis South Reef</td>
<td>Nanhua Jiao (Nan-hua Chiao)</td>
<td>Da Nui Le</td>
</tr>
</tbody>
</table>

(xiv)  Alison Reef

This reef lies 6nm northwest from Cornwallis South Reef at 8°48′N and 114°E. It is oval in shape aligned southeast–northwest; its long axis measures about 10nm and its area is about 75km². This submerged atoll dries in patches defining a shallow and foul lagoon. The northern reef is about 1nm wide and is pierced by one entrance 640 metres wide with a depth of 9 metres. The southern reef is about 0.5nm wide and has many narrow entrances with depths about 9 metres. The Chinese name is translated as Six Entrances Reef. This reef is reported to be occupied.

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Alison Reef</td>
<td>Limen Jiao (Liu-men Chiao)</td>
<td>Bai Toc Tan</td>
</tr>
</tbody>
</table>
(xv) Pearson Reef

This steep-to coral reef lies 14nm northwest from Alison Reef in 8°57’N, 113°40’E. The reef consists of a central rectangular section aligned east–west from which project a southwestern promontory and a narrow northeastern peninsula, the whole length being about 5nm. The lagoon, for which no soundings have been found, contains many coral heads and lacks any entrance; it lies in the central rectangular section. The northwest and southwest extensions provide the widest sections of reef and on each there is a sand cay dotted with small rocks. The cay in the northeast stands two metres high while that in the southwest has an elevation of one metre. The southwest cay is reported in the American sailing directions but not in the British version of 1982. Pearson Reef is reported to be occupied.

<table>
<thead>
<tr>
<th>Feature</th>
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<tbody>
<tr>
<td>Pearson Reef</td>
<td>Bisheng Jiao (Pi-sheng Chiao)</td>
<td>Hizon</td>
<td>Dao Vanh Vinh</td>
</tr>
</tbody>
</table>

(xvi) Maralie Reef or Bittern Reef

This steep-to circular reef lies 14nm north of Pearson Reef at 9°12’N, 113°40’E. It is regarded as a very dangerous feature because it is small with a diameter of 0.3nm. Estimations of the least depth over it vary from 12.8 metres in the British sailing directions to 0.9 metres in the American sailing directions, which also reports that the reef does not generate breakers, and appears to be formed of brown volcanic rock only covered with coral in the southwest sector.

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Maralie Reef</td>
<td>Shipean Zai (Shih-pan-tsai)</td>
<td>Da Nui Mon</td>
</tr>
</tbody>
</table>

(xvii) Fiery Cross or Northwest Investigator Reef

This steep-to reef lies 46nm northwest from Maralie Reef at 9°57’N, 112°58’E. It has a linear shape aligned southwest–north east and its long axis measures 14nm while the maximum width is 4nm, giving a total area about 110km². Reefs 1nm wide surround a lagoon. Several patches of coral uncover and between them there are channels with depths from 15 to 40 metres. However none of the sailing directions refers to any specific entrance or mentions possible anchorages in the lagoon. Soundings in the lagoon give depths of 1.4 to 39 metres. The American and British sailing directions agree that at high water the reef is covered except for a prominent rock 1 metre high on the the southwest section. In calm weather the sea does not cover the reef. It is reported that the reef is occupied.

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Fiery Cross Reef</td>
<td>Yongshu Jiao (Yung-shu Chiao)</td>
<td>Kalingan</td>
<td>da Chu-Thap</td>
</tr>
</tbody>
</table>
(xviii) London Reefs

The four reefs that make up this feature are arranged over 40nm between parallels 8°50’ and 8°57’N from 112°11’E in the west to 112°52’E in the east. The reefs are called West, Central, East and Quateron; this latter reef lies 39nm south from Fiery Cross Reef. All the London Reefs are reported to be occupied.

West Reef is an oval coral atoll with its long axis of 5.5nm aligned southwest–northeast; its maximum width is 3nm. and the total area about 40km². The reef dries at its east and west extremities and on the eastern section there is a long narrow cay which stands 0.6 metres above high water. The lagoon is cluttered with coral heads but there are depths of 14.6 metres. The circular Central Reef is the smallest of the four with an area about 1km²; it lies 5nm northeast from West Reef. When it uncovers a shallow lagoon is exposed. The British sailing directions follow Findlay (1889) and refer to a sandy cay in the southwest that might cover at highwater spring tides. The American directions refer to two cays in the southwest and east but makes no mention of possible submergence.

East Reef lies 13nm southeast from Central Reef; it has an area of about 40km². This linear reef has a long axis aligned west–east of 7nm and a maximum width of 2.5nm. The unbroken reef surrounds a lagoon containing many coral heads with a recorded depth of 14 metres. Near the western edge there are rocks that seldom cover; one stands 1 metre high.

Cuarteron Reef lies 10nm east from East Reef. This feature is shaped like a bean with a length of 3nm aligned east–west; it has an area of 8km². There is no entrance to the small shallow lagoon and on the north side of the reef there are some rocks standing 1.6 metres high that do not cover.

<table>
<thead>
<tr>
<th>Feature</th>
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<tbody>
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<td></td>
<td>Con Tay</td>
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<tr>
<td>West Reef</td>
<td>Xi Jiao (Hsi Chiao)</td>
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<td>da Tay</td>
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<tr>
<td>Central Reef</td>
<td>Zhong Jiao (Chung Chiao)</td>
<td>Silangan</td>
<td>Dao Sa Truong Dong</td>
</tr>
<tr>
<td>East Reef</td>
<td>Dong Jiao (Tung Chiao)</td>
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<td>da Dong</td>
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<tr>
<td>Cuarteron Reef</td>
<td>Huayang Jiao (Hua-yang Chiao)</td>
<td></td>
<td>bai Chau Vien</td>
</tr>
</tbody>
</table>

(xix) Spratly Island and Ladd Reef

The island, which by custom provides the collective name to the islands, reefs and shoals of the South China Sea, is located 21nm southwest of West Reef in the London Group. Its position is 8°38’30”N, 11°54’50”E. The island has the shape of an isosceles triangle with a base aligned northeast–southwest measuring 750 metres and the apex 350 metres distant; the area is 13 hectares. At the three corners there are reefs that uncover; they have widths up to 200 metres. This low island stands 2.4 metres above high water and lies at the southeastern edge of a coral bank which has an area of 1.8km² out to the 18 metre isobath. This island is occupied.
Captain Doyle of Australia and Captain Campbell of the Hydrographic Office provided information about the naming of this island. It can be pinpointed to 9 am on 29 March 1843. At that time Richard Spratly, master of the whaler *Cyrus* was sailing southeast from the direction of Ladd Reef which he had sighted the previous day. The story continues in a letter Spratly wrote to the Hydrographic Office on 1 April 1843:

“...at 9 h. A.M. a low sandy island was discovered from the masthead, bearing S.E.bE. four leagues. On nearing the beach was visible to the water’s edge, the top appearing to be covered with small bushes, and about the height of a Ship’s hull, with a black patch dividing the sandy beach in nearly two equal parts to the water’s edge...One [of these two dangers] I call Ladd Reef, after Captain Ladd of the Ship Austen, who appears first to have seen it; the other Spratly’s Sandy Island.” (Nautical Magazine, 1843: 697).

Findlay noted that Spratly Island was Horsburgh’s Storm Island. In view of their present status Storm Islands might have been a more appropriate name for the whole group! Commander Ward reported that there was not even a blade of grass on Spratly Island and that Spratly had been deceived by the mirage effect associated with seabirds standing erect (Findlay, 1889: 586).

Ladd Reef lies 15nm west from Spratly Island at 8°39’N, 111°40’E. This oval reef has a length of 3nm and a maximum width of 1nm. The drying reef is covered with boulders and defines a lagoon, with a bottom of white sand, which does not seem to have any entrance. The reef is reported to be occupied.

<table>
<thead>
<tr>
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<td>Lagos</td>
<td>Dao Truong Sa</td>
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<tr>
<td>Ladd Reef</td>
<td>Riji Jiao (Jih-chi Chiao)</td>
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<td>da Lat</td>
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</tbody>
</table>

(xx) The Southwest Banks

There are six shoals of varying size lying between Ladd Reef and the continental margins of Vietnam, Indonesia and Malaysia. Prince of Wales, Prince Consort, Alexandra, Grainger, and Vanguard Banks lie in a cluster about a point at 7°50’N, 110°10’E. Rifleman Bank, larger than the others, lies 80nm to the east. There are reports that structures have been erected on Prince of Wales Bank, Grainger Bank, Prince Consort Bank and Vanguard Bank.

**Prince of Wales Bank**

This coral bank lies 70nm southwest from Ladd Reef at 8°10’N, 110°32’E. It has an irregular shape with a length of 10nm aligned southwest–northeast and a maximum width of 6nm. Depths over the bank vary in an irregular manner with the least depth recorded being 7.3 metres on the western margin.
Alexandra Bank

This bank lies 2nm southeast from Prince of Wales Bank at 8°N, 110°37’E. This oval bank is aligned north–south with the long axis measuring 5nm within the 18 metre isobath and a width of 3nm. The coral bottom is visible and the least recorded depth is 5.5 metres.

Grainger Bank

Grainger Bank lies 11nm southwest from Alexandra Bank at 7°49’N, 110°29’E. This almost circular coral bank has a diameter of about 4nm and a least recorded depth of 11 metres.

Prince Consort Bank

This Bank lies 28nm west of Grainger Bank at 7°55’N, 109° 58’E. With a bottom of sand and coral the least depth recorded is 18.3 metres in the northwest.

Vanguard Bank

Vanguard Bank lies 22nm southwest from Prince Consort Bank at 7°32’N, 109°45’E. The linear crest of this bank is aligned west–east and within the 18.3 metres isobath measures 16nm long and 3nm wide. The least recorded depth is 16.5 metres.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Chinese</th>
<th>Vietnamese</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prince of Wales Bank</td>
<td>Guangya Tan (Kuang-ya T’an)</td>
<td>bai Phuc Tan</td>
</tr>
<tr>
<td>Alexandra Bank</td>
<td>Renjun Tan (Jen-chun T’an)</td>
<td>bai Huyen Tran</td>
</tr>
<tr>
<td>Grainger Bank</td>
<td>Lizhun Tan (Li-chun T’an)</td>
<td>bai Que Duong</td>
</tr>
<tr>
<td>Prince Consort Bank</td>
<td>Xiwei Tan (Hsi-wei T’an)</td>
<td>bai Phuc Nguyen</td>
</tr>
<tr>
<td>Vanguard Bank</td>
<td>Wan’an Tan (Won-an T’an)</td>
<td>bai Tu Chinh</td>
</tr>
</tbody>
</table>

Rifleman Bank

This bank lies 94nm east from Vanguard Bank and 41nm south from Ladd Reef at 7°45’N, 111°35’E. The Chinese name translates as Golden Shield Bank and aptly describes its shape as a large oval. The crest of the bank is marked by more than a dozen shoal patches with least depths from 3 to 11 metres. The shield is defined by Bombay Castle, Kingston Shoal, Orleana Shoal and Johnson Patch at the north, south, east and west extremities of the shield. They have least depths of 3, 11, 8.2 and 7.3 metres respectively. It is reported that Bombay Castle is occupied.
(xxi) Amboyna Cay

Amboyna Cay lies 71nm east from Rifleman Bank at 7°53’30"N, 112°55’E. Modern sailing directions do not give the size of the cay but Shepherd (1993) gives the area as 1.58 hectares. If the island was roughly rectangular the area indicated by Findlay (1889: 622) was 1.55 hectares. The height of the cay above high water is about 2.4 metres. In 1864 there was one metre of guano at the western edge of the reef. More than a century later the British sailing directions of 1988 still describe the western half of the cay as being covered with a bed of guano. This must be unpleasant for the present occupants of this small island. The cay is encompassed by an irregular coral platform up to 360 metres wide that dries in parts. Coral banks extend 800 metres and 550 metres respectively from the northwest and northeast edges of the reef surrounding the cay.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Chinese</th>
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<th>Filipino</th>
<th>Vietnamese</th>
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</thead>
<tbody>
<tr>
<td>Amboyna Cay</td>
<td>Anbo Shazhou (An-po Sha-chou)</td>
<td>Pulau Kecil Amboyna</td>
<td>Kalantiyaw</td>
<td>dao An Bang</td>
</tr>
</tbody>
</table>

(xxii) Barque Canada Reef

This reef lies 21nm northeast from Amboyna Cay at 8°10’N, 113°18’E. It is shaped like a seal with the head represented by the northeast reef, the tail by the southwest reef and the body by the lagoon. Barque Canada Reef is 15.5nm long and 2nm at its widest. The reef dries defining a narrow, apparently deep, lagoon to which there is no entrance. A large rock at the southwest extremity stands 4.5 metres and another group of rocks to 2 metres occupies the centre of the reef extending north from the lagoon. Barque Canada Reef is reported to be occupied.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Chinese</th>
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<th>Vietnamese</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barque Canada Reef</td>
<td>Bai Jiao (Pai Chiao)</td>
<td>Terumbu Perahu</td>
<td>bai Thuyen Choi</td>
</tr>
<tr>
<td>North rocks</td>
<td>Niao-yu Dingshi (Niao-yu-ting Shih)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>South rock</td>
<td>Danzhu Shi (Tan-chu Shih)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
(xxiii) Mariveles Reef

This drying reef lies 35nm southeast from Barque Canada Reef at 7°59’N, 113°55’E. Its shape resembles a tea-spoon with the handle pointing southeast. The total area of reef and lagoons is 17km². This steep-to reef completely encloses a lagoon at each end although the southeastern lagoon is only one-third the size of the northwest lagoon. There is a sand cay 1.5 metres high between the two lagoons. This cay with some rocks stands above high water and is reported to be occupied.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Chinese</th>
<th>Malaysian</th>
<th>Vietnamese</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mariveles Reef</td>
<td>Nanhai Jiao (Nan-hai Chiao)</td>
<td>Terumbu Mantanani</td>
<td>da Ky Van</td>
</tr>
</tbody>
</table>

(xxiv) Erica Reef

This small oval reef lies 14nm northeast from Mariveles Reef at 8°7’N, 114°8’E. The reef, which is unbroken, dries to enclose a shallow lagoon. Some isolated rocks on the eastern edge might stand above high water.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Chinese</th>
<th>Malaysian</th>
</tr>
</thead>
<tbody>
<tr>
<td>Erica Reef</td>
<td>Boqi Jiao (Po-chi Chiao)</td>
<td>Terumbu Siput</td>
</tr>
</tbody>
</table>

(xxv) Investigator Shoal

This shoal lies 20nm east from Erica Reef at 8°8’N, 114° 40’E. It is a large submerged atoll with the shape of a club with the narrow handle pointing westwards; its total area is about 205km². Except for the narrow western portion the reef surrounds a lagoon which has depths of at least 45 metres. Less than half the reef dries in patches; the remaining sections lie at depths of 5 to 18 metres. The drying reefs are found along the north side of the atoll.

No names are given for these patches in the American or British sailing directions but there are Chinese names. The largest drying reef marking the western tip and northwestern edge for about 12nm is called Langkou Jiao (Lang-k’ou Chiao) which translates as Wave Frontier Reef. The third largest section of drying reef lies in the middle of the northern edge and is called Erjiao Jiao (Erh-chiao Chiao) which translates as Two Horn Reef. The second largest drying reef marks the eastern tip and is called Xiantou Jiao (Hsien-t’ou Chiao) which translates to Head of the Reef. There are reports that large fishing vessels enter the lagoon, through a southeast entrance 365 metres wide and 37 metres deep, and find good anchorage but no shelter, and that some large rocks at the western end might be visible at high water.
(xxvi) Commodore Reef

This reef lies 28nm northeast of Investigator Shoal in 8°2’N, 115°13’E. It is a linear reef aligned west–east and has the appearance of two circular atolls with diameters of 1.7nm joined by a reef 2.5nm long and 0.75nm wide. The whole feature has an area of 20km². The western end of the reef dries 1.5 metres and many other patches uncover. The western lagoon is accessible and depths are down to 14 metres. The eastern lagoon is reported to be shallow and foul. There is a sand cay that stands 0.3 metres at high water on the central connecting reef, and Flat Rock has the same elevation on the eastern tip of this feature. The cay is reported to be occupied.

(xxvii) Ardasier Bank

This extensive bank lies 10nm southwest from Investigator Shoal at 7°43’N, 114°15’E. It has a linear shape with the long axis of 38nm aligned southwest–northeast and the maximum width of 10nm. The summit of the bank is edged by more than 30 coral patches only one of which dries; the total area enclosed by these patches is 850km². The depths over the patches that do not dry vary from 3.7 to 18.3 metres. Depths within the coral ring vary from 41 to 65 metres but sailing directions say the bank has not been closely examined. The translation of the Chinese name is Safe Crossing Shoal. The drying coral patch is appropriately called Ardasier Reef. It is shaped like an isosceles triangle with the base facing seawards. It encloses a small shallow lagoon for which the 1994 Malaysian chart shows two entrances. The total area of this feature is about 8km²; it is reported to be occupied.

Dallas Reef can be considered with Ardasier Bank for two reasons. First it lies only 5nm west from Ardasier Reef at 7° 37’30”N, 113°48’E; second its Chinese name translates as Bright Star Reef, while Ardasier Reef is Little Bright Star Reef. Dallas Reef has a linear shape aligned west–east and measures 5nm by 1nn; its total area is about 17km². It dries completely exposing a narrow lagoon to which there is no entrance.
(xxviii) Swallow Reef

This reef is located 14nm south from Dallas Reef at 7°23’N, 113°48’E. The narrow belt of coral 3.5nm in length encloses a shallow basin and there are some rocks which stand above water on the east and southeast sections of the reef. There is a small apparently rocky island standing 2 metres high on the south rim of this reef. It is noteworthy that when the latest Malaysian chart is compared with maps produced in 1979 the name for Swallow Reef has been changed from Terumbu [Reef] Layang Layang to Pulau [Island] Layang Layang.

<table>
<thead>
<tr>
<th>Feature</th>
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</thead>
<tbody>
<tr>
<td>Swallow Reef</td>
<td>Danwan Jiao (Tan-wan Chiao)</td>
<td>Pulau Layang Layang</td>
<td>da Hoa Lau</td>
</tr>
</tbody>
</table>

(xxix) Royal Charlotte Reef

This reef lies 30nm southwest from Swallow Reef at 6°56’N, 113°36’E. It has a rectangular shape with sides about 1nm long. Boulders up to 1.2 metres high show above high water on the northeast and southeast edges, and the reef dries enclosing a small basin.

<table>
<thead>
<tr>
<th>Feature</th>
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<th>Vietnamese</th>
</tr>
</thead>
<tbody>
<tr>
<td>Royal Charlotte Reef</td>
<td>Huanglu Jiao (Huang-lu Chiao)</td>
<td>Terumbu Semarang Barat Besar</td>
<td>da Sac Lot</td>
</tr>
</tbody>
</table>

( xxx) Louisa Reef

Louisa Reef lies 41nm southwest from Royal Charlotte Reef at 6°19’N, 113°14’E. This quadrilateral reef has sides about 1.2nm in length and has a number of rocks on its surface. Two clusters in the northeast and southwest do not cover and stand one metre above water level. The tiny central basin is shallow.

<table>
<thead>
<tr>
<th>Feature</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Louisa Reef</td>
<td>Nantong Jiao (Nan-tung Chiao)</td>
<td>Terumbu Samarang Barat Kecil</td>
</tr>
</tbody>
</table>
North Luconia Shoal lies 49nm southwest from Louisa Reef at 5°40’S, 112°30’E. This is a dangerous area of shoal reefs and no safe passage through is recorded. As Findlay (1889: 611) noted, “These dangers were examined by HMS Rifleman, and were found to consist of a mass of coral reefs and shoals, among which no vessel should venture.” These dangers occupy an area shaped like an isosceles triangle with a base of 40nm facing east. The whole area comprises about 1,400km², with Hayes Reef, Moody Reef and Friendship Shoal marking the south, west and north points respectively. There are eight named features. From north to south they are Friendship Shoal, Hardie, Aitken, Buck, and Moody Reefs, Seahorse Breakers and Tripp and Hayes Reefs. Only Hayes Reef and Seahorse Breakers dry; the other reefs have least depths varying from 3.7 to 9.6 metres.

South Luconia Shoals lie 12nm south from North Luconia Shoals at 5°5’N, 112°38’E. This area of shoals is shaped like an egg aligned east–west about 30nm long by 15nm wide. It has an area of about 900km². There are six named coral reefs which from west to east are Stigant, Connell and Herald Reefs, Luconia Breakers, Richmond Reef and Comus Shoal. Only Luconia Breakers dry; the least depths over the other reefs vary from 4.6 to 8.2 metres.

<table>
<thead>
<tr>
<th>Feature</th>
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<th>Malaysian</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Luconia Shoals</td>
<td>Beikang Ansha (Pei-k’ang An-sha)</td>
<td>Gugusan Beting Raja Jarum</td>
</tr>
<tr>
<td>Friendship shoal</td>
<td>Mangyi Ansha (Meng-i An-sha)</td>
<td>Beting Rentap</td>
</tr>
<tr>
<td>Hardie Reef</td>
<td>Haikang Ansha (Hai-k’ang An-sha)</td>
<td>Terumbu Asun</td>
</tr>
<tr>
<td>Aitken Reef</td>
<td>Jijing Jiao (I-ching Chiao)</td>
<td>Terumbu Datak Landih</td>
</tr>
<tr>
<td>Buck Reef</td>
<td>Faxian Ansha (Fa-hsien An-sha)</td>
<td>Terumbu Linggir</td>
</tr>
<tr>
<td>Moody Reef</td>
<td>Kangxi Ansha (K’ang-hsi An-sha)</td>
<td>Terumbu Permaisuri</td>
</tr>
<tr>
<td>Seahorse Breakers</td>
<td>Nan’an Jiao (Nan-an Chiao)</td>
<td>Hampasang Dang Ajar</td>
</tr>
<tr>
<td>Tripp Reef</td>
<td>Bei’an Jiao (Pei-an Chiao)</td>
<td>Terumbu Litong</td>
</tr>
<tr>
<td>Hayes Reef</td>
<td>Nanping Jiao (Nan-p’ing Chiao)</td>
<td>Terumbu Lang Ngindang</td>
</tr>
<tr>
<td>South Luconia Shoals</td>
<td>Nankang Ansha (Nan-k’ang An-sha)</td>
<td>Gugusan Beting Patinggi Ali</td>
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<tr>
<td>Stigant Reef</td>
<td>Hai’an Jiao (Hai-an Chiao)</td>
<td>Terumbu Sahap</td>
</tr>
<tr>
<td>Connell Reef</td>
<td>Yinbo Ansha (Yin-po An-sha)</td>
<td>Terumbu Dato Talip</td>
</tr>
<tr>
<td>Herald Reef</td>
<td>Haining Jiao (Hai-ning Chiao)</td>
<td>Terumbu Saji</td>
</tr>
<tr>
<td>Comus Shoal</td>
<td>Huanle Ansha (Huan-le An-sha)</td>
<td>Beting Merpati</td>
</tr>
<tr>
<td>Richmond Reef</td>
<td>Tanmen Jiao (T’an-men Chiao)</td>
<td>Terumbu Balingian</td>
</tr>
<tr>
<td>Luconia Breakers</td>
<td>Qiongtai Jiao (Ch’iung-t’ai Chiao)</td>
<td>Hampasan Bentin</td>
</tr>
</tbody>
</table>
Figure 1: The Spratly Islands west of meridian 115° 18’ East
Figure 2: The Spratly Islands east of meridian 115° 18' East

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A Geographical Description of the Spratly Islands

Annex 256
2.2 The Spratly Islands east of meridian 115° 18’ East

(i) The Northwest Banks

The northwest area of the Spratly Islands region is bounded by 12°N and 10°20’N and meridians 116° and 118°E and is characterised by some very large shoals and a lack of any islands. The principal feature is Reed Bank, named after Lieutenant Reed who carried out extensive surveys in the 1860s. Reed Bank is bounded on the southwest and west by Amy Douglas Bank and Nares Bank respectively. To the south of Reed Bank lies the detached large Southern Bank and to the southeast is located a cluster of seven much smaller shoals. Most of the banks have not been carefully surveyed as the following quotations indicate:

“Caution. It is strongly emphasised that this portion of the area is for practical purposes unsurveyed although the positions and approximate limits of numerous shoals have been determined.” (Hydrographer of the Navy, 1975: 134).

“Caution. Nothing can be added to the information shown on the charts covering Dangerous Ground east [from Nashan Island] to Lord Auckland Shoal and N to Sandy Shoal. The area is relatively unexamined [and] subject to conflicting reports; hence considered dangerous to navigation.” (Defense Mapping Agency, 1988: 14).

Reed Bank is the largest single feature in the Spratly Islands region; it is centred on 11°20’N, 116°40’E. This bean-shaped shoal extends about 70nm from Pennsylvania North Reef in the south to Mary Louise Bank in the north; these features have least depths of 16.5 and 27 metres respectively. The maximum width is about 30nm and the total area about 7,000km². Charts show depths over the bank varying from 16 metres (11°22’N, 116°27’E) to 90 metres (11°1’N, 116°54’E).

Amy Douglas Bank abuts the southwest edge of Reed Bank in the vicinity of 11°N, 116°30’E about 10nm north of Hiranie Shoal. This shoal is on the northeastern edge of the Amy Douglas Bank and has a least depth of 1.8 metres. Amy Douglas Bank is centred about 10°50’N, 116°18’E. Its north–south axis measures about 37nm and its maximum width is about 12nm; the shoal has an area of about 1,070km². In addition to Hiranie shoal there are two named drying reefs that mark the southwestern edge of Amy Douglas Bank. Iroquois Reef marks the southern tip. It is shaped like the letter ‘V’ with an approximate area of 8km². Baker Reef lies 5nm north of Iroquois Reef; it is circular with an approximate area of 20 hectares. Depths shown for the bank as a whole vary from 11 to 75 metres.

There are depths of 1,200 metres in the waters, 12nm wide, that separate northwest Reed Bank from Nares Bank. This detached bank has the shape of a tear drop measuring about 40nm north–south and 10nm at its widest point; its area is about 780km². Very few soundings are recorded for Nares Bank; they vary from 18.3 to 75 metres.

Southern Bank lies 6.5nm south of Pennsylvania North Reef. It is located about 10°30’N, 11°40’E, with its southwest–northeast axis measuring about 30nm and its maximum width 16nm. The shoal has an area of about 1,030km². It has an irregular shape with the widest patches of reef up to 3nm in the southwest and north. Depths over the bank vary from 13 to 84 metres.
The seven small banks that lie in the zone bounded by 10°36' and 11°8’N and 117°8’ and 117°
50’E vary in size and the detail with which they have been charted. Proceeding from north to
south there are three features, Templer Bank, Leslie Bank and Sandy Shoal arranged from west
to east along parallel 11°2’N. Templer Bank lies 13nm east of Reed Bank; it is shaped like an
egg measuring 9nm north–south and 5nm in width. The area of Templer Bank is about
115km² and the least depth recorded on it is 18.3 metres. Leslie Bank stands 6nm east of
Templer Bank; it is circular with an area about 40km². The least recorded depth on Leslie
Bank is 16.5 metres. Sandy Shoal is reported to lie 9nm east of Leslie Bank. It is steep-to and
very small and it is regarded as being “doubtful”.

Next there is a line of four reefs between 10°35’ and 10°51’N; they are Wood Bank, Brown
Bank, Fairie Queen Shoal and Seahorse or Routh Shoal arranged from west to east. Wood
Bank is an oval shoal aligned northwest–southeast; it is located at 10°37’N, 117°10’E. Its
length is about 4nm and its width 2nm, giving an area of about 15km². The least reported
depth is 18.3 metres. Brown Bank lies 8nm north of Wood Bank. It appears to have a
complex pattern of reefs occupying an area of about 60km². It measures 8nm along the main
north–south axis with a width of 3.7nm. The least depth shown is 14.6 metres. Fairie Queen
is a small shoal with a least depth of 16.5 metres lying 14nm west of Brown Bank. Finally
Seahorse or Routh Shoal lies 9nm northeast from Fairie Queen Shoal at 10°47’N, 117°47’E. It
has the form of a submerged atoll with depths over the fringing reef of 8 metres and depths
near the centre of 31 metres. This shoal has an area of about 80km².

<table>
<thead>
<tr>
<th>Feature</th>
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<th>Vietnamese</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reed Bank</td>
<td>Liyue Tan (Li-yueh T’an)</td>
<td>Bai Co Rong</td>
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<tr>
<td>Pennsylvania North Reef</td>
<td>Yangming Jiao (Yang-ming Chiao)</td>
<td></td>
</tr>
<tr>
<td>Hirane Shoal</td>
<td>Antang Jiao (An-t’ang Chiao)</td>
<td></td>
</tr>
<tr>
<td>Iroquois Reef</td>
<td>Houteng Jiao (Hou-t’eng Chiao)</td>
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</tr>
<tr>
<td>Baker Reef</td>
<td>Gongzhen Jiao (Kung-chen Chiao)</td>
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</tr>
<tr>
<td>Mary Louise</td>
<td>Xiongnan Jiao (Hsiung-nan Chiao)</td>
<td></td>
</tr>
<tr>
<td>Amy Douglas Bank</td>
<td>Antang Tan (An-t’ang T’an)</td>
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<td>Dayuan Tan (Ta-yuan T’an)</td>
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<td>Southern Bank</td>
<td>Nanfang Qiantan (Nan-fang Ch’ien-t’an)</td>
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<td>Templer Bank</td>
<td>Zhongxiao Tan (Chung-hsiao T’an)</td>
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<tr>
<td>Sandy Shoal</td>
<td>Shenxian Ansha (Shen-hsien An-sha)</td>
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</tr>
<tr>
<td>Brown Bank</td>
<td>Zong Tan (Tsung T’an)</td>
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</tr>
<tr>
<td>Wood Bank</td>
<td>Zi Tan (Tzu T’an)</td>
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<tr>
<td>Seahorse or Routh Shoal</td>
<td>Haima Tan (Hai-ma T’an)</td>
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</tr>
<tr>
<td>Fairie Queen Shoal</td>
<td>Xianhou Tan (Hsien-hou T’an)</td>
<td></td>
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</tbody>
</table>
(ii) Flat and Nanshan Islands and Hopkins Reef

Flat and Nanshan Islands are located on a steep-to bank of about 120km² that has not been closely examined. It is shaped like a parallelogram with a long axis lying north–south. It is centred at 10°43’N, 115°50’E, 15nm west from Amy Douglas Bank. Flat and Nanshan Islands mark the northern and western points of this unnamed bank respectively. The southern point of the bank lies about 7nm south from Nanshan Island while the eastern point is 5.5nm southeast from the same island. Depths over the bank are reported to be 45 to 48 metres. The two islands lie at the centre of circular reefs that have areas of about 2km². They are both sandy islets and are reported to be occupied. Nanshan is reported to be 575 metres long standing 2.4 metres above the reef; originally it was covered with coarse grass. Flat Island is smaller with estimates of its length ranging from 90 to 210 metres. The variations might be explained by reports that the cay lacks vegetation and is subject to erosion. There is a shallow shoal reef reaching from Flat Island to within 1nm of Nanshan Island.

Hopkins Reef, which is sometimes awash, lies 16nm east of Flat Island. It is steep-to and is usually marked by breakers. At the centre of the reef there is only 0.9 metres of water but the submarine slopes have a gradient of 60° so that 91 metres from the shallowest point there is 150 metres of water.

<table>
<thead>
<tr>
<th>Feature</th>
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<th>Vietnamese</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flat Island</td>
<td>Feixin Dao (Fei-hsin Tao)</td>
<td>Patag</td>
<td>Dao Binh Nguyen</td>
</tr>
<tr>
<td>Nanshan Island</td>
<td>Ma Huan Dao (Ma-huan Tao)</td>
<td>Lawak</td>
<td>Dao Vinh Vien</td>
</tr>
<tr>
<td>Hopkins Reef</td>
<td>Huoxing Jiao (Huo-hsing Chiao)</td>
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<td></td>
</tr>
</tbody>
</table>

(iii) Jackson Atoll

Jackson Atoll lies 12nm south of Nanshan Island in 10°30’N, 115°45’E. It has a roughly rectangular shape and the diagonals measure 6.3nm and 5.9nm. The Chinese name for this atoll means that reefs can be found in five directions. Five drying coral patches outline the lagoon. Proceeding clockwise from the northeast they are called Dickinson, Petch, Hampson, Deane and Hoare Reefs. Their respective areas are 110, 120, 7, 190 and 140 hectares. Petch and Hoare Reefs uncover one metre, Dickinson and Deane Reef uncover 0.6 metres and Hampson Reef is awash at low water.

The lagoon has depths varying from 25 to 46 metres with a few coral heads in Fly Patches between Hoare and Dickinson Reefs, on the northern perimeter. There are four entrances to the lagoon. Two lie on either side of Hoare Reef and the other two lie between Dickinson and Petch Reef and they are separated by Middle Shoal with a least depth of 7 metres. While the bottom of coral and sand provides good holding ground the lagoon provides no shelter from rough weather.
(iv) **Southampton Reefs**

This system consists of two drying coral reefs. Livock Reef is located at 10°11’N, 115°19’E, 28nm southwest from Jackson Atoll. The Chinese name appropriately translates as Triangular Reef, for that is its shape. It surrounds a lagoon and has a total area of 10km². When it uncovers some large rocks appear and there are reports that a few are still visible at high water. Hopps Reef lies 3nm northeast from Livock Reef. It is circular with an area of 85 hectares and unlike Livock Reef there is no lagoon and no large rocks.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Chinese</th>
<th>Vietnamese</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hopps Reef</td>
<td>Lusha Jiao (Lu-sha Chiao)</td>
<td>da Hop</td>
</tr>
<tr>
<td>Livock Reef</td>
<td>Sanjiao Jiao (San-chiao Chiao)</td>
<td></td>
</tr>
</tbody>
</table>

(v) **Hardy Reef**

This reef is located 48nm east from Livock Reef at 10°8’N, 116°8’E. The reef uncovers and a strip of sand is reported to lie at its centre. The Chinese translation of the name means Half-way Reef. Hardy Reef is 27nm from Jackson Reef and 26nm from Sabina Shoal and these three features are on a straight line on a Mercator projection.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Chinese</th>
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</thead>
<tbody>
<tr>
<td>Hardy Reef</td>
<td>Banlu Jiao (Pan-lu Chiao)</td>
</tr>
</tbody>
</table>

(vi) **Lord Auckland Shoal**

This shoal lies 70nm east of Hardy Reef at 10°19’N, 117° 18’E. It has an area of about 70 km² and a least depth of 14.6 metres.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Chinese</th>
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<tbody>
<tr>
<td>Lord Auckland Shoal</td>
<td>Elan Ansha (O-lan An-sha)</td>
</tr>
</tbody>
</table>
(vii) Carnatic Shoal

This shoal lies 11nm south from Lord Auckland Shoal at 10°6’N, 117°20’E. It is a small circular reef with a least depth of 6.4 metres.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Chinese</th>
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<tbody>
<tr>
<td>Carnatic Shoal</td>
<td>Hongshi Ansha (Hung-shih An’sha)</td>
</tr>
</tbody>
</table>

(viii) Sabina Shoal

Sabina Shoal lies 56nm southwest from Carnatic Shoal at 9° 45’N, 116°27’E. It consists of two main parts that occupy an area of 115km². The larger western part is rectangular aligned northwest–southeast; from the southeastern corner there is a narrow eastern extension. This shoal is inclined from east to northwest so that the reefs in the eastern section are awash while the western margin records a least depth of 3.7 metres.

The western section encloses a lagoon with depths to 29 metres.

<table>
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<tr>
<th>Feature</th>
<th>Chinese</th>
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<tbody>
<tr>
<td>Sabina Shoal</td>
<td>Xianbin Jiao (Hsien-pin Chiao)</td>
</tr>
</tbody>
</table>

(ix) Boxall Reef

This reef lies 18nm southwest from Sabina Shoal at 9°36’N, 116°10’E. The Chinese name translates to Oxcart Wheel Reef and this drying circular coral reef covers an area of 2.7km². There is no lagoon on Boxall Reef nor any rocks visible at high water.

<table>
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<tr>
<th>Feature</th>
<th>Chinese</th>
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</thead>
<tbody>
<tr>
<td>Boxall Reef</td>
<td>Niuchelun Jiao (Nieu-ch’e-lun Chiao)</td>
</tr>
</tbody>
</table>

(x) Second Thomas Shoal

This shoal is shaped like a carrot aligned north–south with an area of 60km². It lies 19nm west from Boxall Reef at 9°43’N, 115°50’E. The shoal measures 9nm along its main axis and has a maximum width near the northern tip of 3nm. A reef 1,300 metres wide dries in patches and encloses a lagoon with depths to 27 metres. While the eastern side of the reef is broken no entrances are reported into the lagoon which has many coral heads. At low-water large rocks are visible at the southern end of the reef.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Chinese</th>
<th>Vietnamese</th>
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<tbody>
<tr>
<td>Second Thomas Shoal</td>
<td>Ren’ai Ansha (Jen-ai An-sha)</td>
<td>bai Co May</td>
</tr>
</tbody>
</table>
(xi) Mischief Reef

Mischief Reef lies 50nm east of Union Banks and Reefs at 9° 55’N, 115°32’E. The reef is roughly circular measuring 3nm from north to south and 4.2nm from east to west. The reef is awash and dries in patches to 0.6 metres; along the north and northeast segments it is about 0.4nm wide whereas elsewhere the width is not more than 0.2nm. There are three entrances into the lagoon in 1.6nm of the southwest section of the reef. They are all narrow and the most westerly and easterly passages, with least depths of 26 and 9.1 metres respectively, are only suitable for boats. The westernmost passage is the deepest of the three but its inner end is almost closed by a coral ridge; the eastern entrance is only 18.3 metres wide. The central passage has a least depth of 18 metres and a navigable width of 37 metres. It leads to a lagoon with depths varying from 18.3 to 29.2 metres. The bottom is sand and coral and the southwest half of the lagoon lacks the coral heads that encumber the northeast half, some of which uncover to 0.3 metres.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Chinese</th>
<th>Vietnamese</th>
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<tbody>
<tr>
<td>Mischief Reef</td>
<td>Meiji Jiao (Mei-chi Chiao)</td>
<td>da Vanh Khan</td>
</tr>
</tbody>
</table>

(xii) Alicia Annie Reef

Shaped like an axehead aligned north–south this reef lies 29nm south from Mischief Reef at 9° 22’N, 115°27’E. The unbroken reef and lagoon have an area of 14km². There are conflicting reports on whether the lagoon is deep or shallow. All the reef dries to at least 0.3 metres but the north and south ends stand well above that level. There is a sand or coral cay at the north end that stands 1.2 metres above high water. At the southeast corner some large rocks are just visible at high water.

<table>
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<tr>
<th>Feature</th>
<th>Chinese</th>
<th>Filipino</th>
<th>Vietnamese</th>
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<tbody>
<tr>
<td>Alicia Annie Reef</td>
<td>Xian’e Jiao (Hsien-o Chiao)</td>
<td>Arellano</td>
<td>da Suoi Ngoc</td>
</tr>
</tbody>
</table>

(xiii) First Thomas Shoal

This shoal lies 27nm east from Alicia Annie Reef at 9°20’N, 115°51E. This steep-to narrow shoal is aligned west–east and occupies an area of 11km². When the reef dries rocks standing one metre high help delineate a shallow linear lagoon.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Chinese</th>
<th>Vietnamese</th>
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<tbody>
<tr>
<td>First Thomas Shoal</td>
<td>Xinyi Jiao (Hsin-i Chiao)</td>
<td>bai Soui Nga</td>
</tr>
</tbody>
</table>
(xiv) **Bombay Shoal**

This circular steep-to shoal lies 57nm northeast from First Thomas Shoal at 9°27’N, 116°56’E. It has an area of 2.5km². Rocks on the reef dry to 0.6 metres defining a lagoon with a sandy bottom where depths reach 33 metres. The tidal amplitude is 1.2 metres.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Chinese</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bombay Shoal</td>
<td>Pengbo Ansha (P’eng-po An-sha)</td>
</tr>
</tbody>
</table>

(xv) **Northeast Investigator Shoal**

This submerged coral atoll lies 32nm southwest from Bombay Shoal at 9°10’N, 116°28’E. The feature has a surface area of 2km² and the reef dries to expose a lagoon that might be accessible to boats at high water. Some rocks might be visible at high water at the western end of the reef.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Chinese</th>
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<tbody>
<tr>
<td>Northeast Investigator Shoal</td>
<td>Haikou Jiao (Hai-k’ou Chiao)</td>
</tr>
</tbody>
</table>

(xvi) **Royal Captain Shoal**

This shoal lies 16nm southeast from Northeast Investigator Shoal at 9°2’N, 116°40’E. This feature is steep-to and rocks on the reef dry to 1.2 metres defining a lagoon with depths to 31 metres; it contains several coral heads. The total area of this feature is 8km².

<table>
<thead>
<tr>
<th>Feature</th>
<th>Chinese</th>
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<tbody>
<tr>
<td>Royal Captain Shoal</td>
<td>Jianzhang Jiao (Chien-chang Chiao)</td>
</tr>
</tbody>
</table>

(xvii) **Half Moon Shoal**

This shoal, called Crescent Reef by Chinese cartographers, lies 25nm southwest from Royal Captain Shoal at 8°52’N, 116°16’E. Rectangular in shape the shoal measures 5.5nm along its main north–south axis and 4nm along the northern edge and 2nm along the southern limit. A steep-to reef varies in width from nearly 1nm in the northeast to 0.4nm around most of the perimeter. The reef is awash and one inclined rock on the east side stands one metre above high water. Parts of the reef dry exposing a lagoon with depths down to 27 metres. There is one break in the reef; a narrow channel in the northeast has a width of 182 metres and a depth of 12 metres. The tidal amplitude is 1.2 metres.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Chinese</th>
<th>Vietnamese</th>
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<tbody>
<tr>
<td>Half Moon Shoal</td>
<td>Banyue Jiao (Ban-yueh Chiao)</td>
<td>bai Trang Khuyet</td>
</tr>
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</table>
3. Chronology of Hydrographic Surveys in the Spratly Islands
1815 to 1992

This chronology restricts itself to the principal survey work done by cartographers trained in what might be termed European surveying methods from the beginning of the 19th century.\(^2\) It is known of course that maps were produced as a result of the voyages of Cheng Ho, but these interesting depictions were not really useful to the early European seaman bent on a safe passage to China.

Similarly many 17th and 18th century maps and charts delineated with comparative accuracy the coasts of Malaya, Cochin China, Hainan and China to the west and the Philippines east of the South China Sea. However these maps and charts tended to falter as they progressed into the central regions of the South China Sea.

For example, Herbert’s “Correct Chart of the China Sea - etc” (Herbert, c.1758) published in about 1758 shows the Paracel Islands as a long group of islands and reefs extending from 13 to 17 degrees North. On the same chart Macclesfield Bank is somewhat incorrectly positioned, but clearly named as Macclesfield Bank. The present day Spratly Islands, or ‘Dangerous Ground’ appears as ‘white space’ an immediate warning to later generations of seaman that perhaps no surveys had been made in that area. On Herbert’s chart two areas on the western edge of the Dangerous Ground are marked as shoals and one, with the notation “Low Island and Reefs”, appears to be on the same latitude as Thitu Island and Reefs.

In general terms the 18th century European navigator was not particularly well served for charts and accurate navigational information in most parts of the world. This problem applied more or less equally to naval or mercantile seamen. As a result several nations took positive action to form an official naval hydrographic establishment, beginning with France in 1720. The Lords Commissioners of the Admiralty in London decided in 1795 to appoint an official to be known as the ‘Hydrographer of the Navy’ who would take charge of most aspects of compiling and supplying charts and other hydrographic information to the Royal Navy.

The first Hydrographer of the Navy was Alexander Dalrymple FRS who occupied the Hydrographer’s post between August 1795 and May 1808. Dalrymple had begun his career as a writer in the East India Company (EIC), and had subsequently become interested in finding safer, quicker routes to and from India to China. In 1759 Dalrymple made his first exploratory voyage into the South China Sea aboard Cuddalore which was intended, in part, to prove that ships bound for Canton could avoid the worst dangers of the South China Sea by proceeding through the Sulu and Celebes Seas. In some respects Dalrymple’s first surveying voyage was less than a resounding success when the Griffin (one of several ships being guided into the Sulu Sea by Cuddalore) struck a reef and sank off Jolo on 20 January 1761.

Undeterred by this set-back Dalrymple made a survey of Palawan’s west coast before returning to Madras in January 1762. Dalrymple’s cartographic interests were recognised in 1779 with his appointment as the first official Hydrographer of EIC, an appointment he held until 1795 when, as mentioned above, he became Hydrographer of the Navy. During Alexander Dalrymple’s period as Admiralty Hydrographer, few if any charts of the South China Sea were

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\(^2\) A summary of significant dates in the hydrography of the Spratly Islands is provided in Appendix I.
published by the Admiralty although Dalrymple’s own charts of the area, compiled before 1795, were available to navigators of all nationalities.

Captain James Horsburgh succeeded Dalrymple as Hydrographer of EIC in 1795. Like Dalrymple, Horsburgh was deeply interested in publishing charts, sailing directions and making efforts to ensure that commanders of EIC ships were aware of all possible dangers that might be encountered during their voyages. The expansion and increasing importance of the China trade, combined with the losses of ships on EIC voyages prompted Horsburgh to assign Captain Daniel Ross, assisted by Lieutenant P. Maugham to survey duty in the South China Sea on the coast of China (1807) the Paracel Islands (1808) Cochin China (1809) and the produced coast of Palawan (1810). Although there were many charts published as a result of February Ross’s surveys one, which concerns the present subject, was entitled, “(South) China Sea - Sheet 1 and 2” (Horsburgh, 1821), published by Horsburgh in 1821 and 1823. Sheet 1 of this chart (1821) was the first reasonably accurate delineation of the area already known to seamen as The Dangerous Ground. On the 1859 edition of this chart Spratly Island was referred to as Storm Island, although whether this name is one ascribed by Ross himself or by Horsburgh is not known.

When the October 1821 “South China Sea” chart was published, Captain Horsburgh had already produced in 1811 his two volumes of sailing directions entitled “The India Directory or Directions for Sailing to and from the East Indies, China Australia and the Interadjacent ports of Africa and South America.” This book, which rapidly became known as “Horsburgh’s Directory” or “The India Directory”, was produced in a total of eight editions between 1811 and 1864 before being effectively superseded by Findlay’s “Directory for the Navigation of the Indian Archipelago and the coast of China from the Straits of Malacca and Sunda, and the passages east of Java, to Canton, Shanghai, the Yellow Sea and Korea.”

The foundation of a hydrographic establishment at the Admiralty did not reduce the EIC’s surveying operations which were, if anything, increased by Horsburgh, who as EIC Hydrographer despatched both cruisers and survey vessels of the EIC’s Bombay Marine on surveys into various parts of Asia, including the South China Sea as related above. Charts derived from these surveys were published “according to Act of Parliament by J. Horsburgh.” However that Act of Parliament did not appear to provide any form of copyright protection to the EIC whose surveys were reproduced by a number of European cartographic publishers.

Amongst these chart publishers a number of English firms predominate, changing their name and style as individual and/or family interests were sold or merged together. In addition to William Herbert mentioned above, the lineal progression of these private London chart publishers was:

- Thomas Jeffery
- Robert Sayer and Bennett c. 1770
- David Steele
- Robert Laurie c. 1790
- Laurie and Whittle c. 1797-98

Steele, for example, was quick to produce “Steele’s new Chart of the coast of China from St. John’s Island to Pedra Branca, showing the entrances and course of the River Tigris (sic) to Canton” on 1 October 1810, a chart based in part on work ordered by Horsburgh. Similarly
by 1815 the “New Seaman’s Calendar” was advertising five charts of the (South) China Sea, including a version of the Horsburgh/Ross two sheet chart (South) China Sea, that was sold under the title “Chinese Seas after Horsburgh.” As there was some degree of embellishment or improvement in many of these privately produced charts their accuracy was questionable.

By the time Horsburgh’s chart China Sea was produced in 1821-23 the Royal Navy’s second Hydrographer, Captain Thomas Hurd, had completed a review of his establishment, and its progress in improving navigational information. Writing in his official Hydrographer’s Report of 7 May 1814, he stated:

“The return of Peace to this Country makes me consider it as an official duty to represent to the Lords Commissioners of the Admiralty the great deficiency of our Nautical knowledge in almost every part of the World...Nearly the whole of China and Eastern Seas included between Kamchatka and Van Diemen’s Lands, together with the Philippines and Islands on the western coast of Sumatra are unknown to us...”


Dalrymple’s period as Hydrographer had been characterised by great industry, with a minuscule staff, in obtaining vast amounts of information. However distribution of that information in the form of charts was not a hallmark of Dalrymple’s Admiralty hydrographic stewardship, hampered as he was by lengthy periods of warfare, and his own management of the Hydrographic Office. In addition to the miserly spending authorised by the Lords Commissioner of the Admiralty, Dalrymple was to some extent competing with the private chart publishers, work produced by French hydrographers and charts being privately published for Royal Navy officers.

Captain Hurd’s comments that the “whole of China and the Eastern Seas...are unknown to us” should be interpreted within the context of his position as Hydrographer of the Navy. With the exception of work being undertaken at the direction of EIC there were few charts of the South China Sea that even remotely complied to standards that the Royal Navy’s own small corps of surveying officers had shown they were capable of producing. An Admiralty publication “Sea Surveys” stated:

“During Dalrymple’s tenure of office there was no organised surveying as it is now understood, and it will perhaps have been noted that the Board Minute of August 12, 1795, contained no instructions regarding the prosecution of surveys, whether at home or abroad. But Captain Cook had already shown the way, and by his accuracy and attention to detail had for all time set an ideal which it has been the ambition of later generations to live up to. Cook was a remarkable man in every way, and his example inspired others, among them Captain Matthew Flinders, in the Reliance, who may be said to have been the first naval surveyor employed abroad under the auspices of the Hydrographic Office. This does not imply that there was no hydrographic surveying done at all during this time; on the contrary, a great deal of work was being carried out by navigators the world over, La Pérouse, Malaspina, D’Entrecasteaux, Beaufort, Broughton and Lisiansky being perhaps the best known and most able. The importance of the surveys in the Far East executed by Captain James Horsburgh in 1796-1812 cannot be exaggerated, nor should the work of Commander W.R. Broughton on the coasts of China and Japan be overlooked”

(Edgell, 1965: 4-5).
Planning for surveys allocating ships and commencing examinations of the South China Sea’s central regions was instigated towards the end of Captain (later Rear Admiral Sir) Francis Beaufort’s tenure as Hydrographer of the Navy, which spanned 1829 to 1855. From 1843 HMS Samarang under command of Captain (later Admiral Sir) Edward Belcher made numerous surveys on the Borneo and Philippine coasts, delineating much of the southern and eastern area of the Dangerous Ground until Samarang returned to England in 1847. Belcher was followed by Commander Bate in HMS Royalist, which worked principally in the Palawan Passage area between 1848 and 1853. Bate’s chart of Palawan published on 3 November 1856 was one of the oldest charts still being produced by the Admiralty in 1975.

When the post of Hydrographer was held by Captain (later Rear Admiral) John Washington between 1855 and 1863 surveys in the South China Sea and the Dangerous Ground continued, with the ships Royalist and Saracen. After surveying Pratas Reef, with the intention of locating a suitable position for building a lighthouse, Saracen was sent south to Bangka Strait. In 1862, Staff Commander Reed, HMS Rifleman, commenced a detailed survey of the Dangerous Ground, an operation that the Royal Navy’s first hydrographic historian described as “...clearing the highways to the north from Singapore of the China Sea” (Dawson, 1885: 140). During 1863 Commander J. Ward succeeded Reed in command of Rifleman, surveyed Vanguard, Prince of Wales, Alexander and Granger Banks, and disproved the existence of several previously reported dangers. Commander Reed returned to Rifleman in 1866, to continue examinations of the north-western regions of Palawan Passage.

Commander Reed’s 1867-68 survey took him into the Spanish waters off Palawan, where he cooperated with Captain Claudio Montero of the Spanish Navy who was engaged in similar survey work. Captain Montero made a practice of exchanging copies of his surveys with Reed, and in due course Montero’s work found its way into additions and corrections to British Admiralty charts. In 1869, after completing a large survey of Balabac Strait the Rifleman was condemned as unfit for further service and sold. The name of this ship is perpetuated in the naming of Rifleman Bank, and that of her commander in Reed Bank. Reed’s second-in-command of Rifleman, Lieutenant Thomas Tizard (who also commanded HMS Saracen between 1864 and 1867) is recognised in the naming of Tizard Bank. Commander Reed also compiled the first volume of the Admiralty Sailing Directions for the passage from Singapore to Hong Kong.

Commenting in 1869 upon the of charting of the South China Sea a geographer (Findlay, 1869: v) wrote:

“Palawan, and some of the islands North of Borneo, were elaborately surveyed and profusely described by Captain Bate. The western coasts of the Philippine Islands have been generally laid down from the surveys of various Spanish officers.

The China Sea is perhaps the locality where hydrography has made the greatest changes of late years. Up to 1862 the charts of this great highway exhibited a labyrinth of detached shoals, scattered about without order or connection, laid down from the isolated observations of zealous officers of the East India service, many of which are now difficult of recognition, from the vague manner of their announcement. The increasing importance of the China commerce, and the advance in the sailing powers of the ships employed in it, caused this great sea to be much more frequented
than in former years. Since the year above named, Commander Reed, with a moderate staff, in HMS Rifleman, examined the outer line of dangerous shoals limiting the two great channels, which are separated by a vast range of dangerous coral reefs and shoals, the ‘Archipelago of Reefs’, leaving the clear Main Channel to the NW, and the Palawan Channel to the SE of them, perfectly free from danger for vessels beating up or down the China Sea by either passage in the opposite monsoons”.

Findlay himself, as geographer to Richard Holmes Laurie, had compiled a series of twelve charts under the general title “The Indian and Pacific Oceans” covering the area from Cape of Good Hope to Cape Horn, several sheets including all or portions of the South China Sea. That private cartographers were apparently able to compete with the Admiralty Hydrographer’s products indicates that the Admiralty had not pursued its commercial sales particularly vigorously and that many merchant seamen still preferred the commercial charts. The 1869 Admiralty Catalogue of Charts Plans, Views and Sailing Directions in Section XIII (Indian Archipelago, China Sea and Japan) lists over thirty six coastal charts around the circumference of South China Sea. The four sheet series China Sea that are still in use today had only recently been published as:

2660 a   China Sea, Southern Portion, Singapore to Calamian
2660 b   1868, and;
2661 a   China Sea, Northern Portion, Cam-ranh Bay to Formosa Strait
2661 b   1867.

Admiralty surveys in the South China Sea moved away from the Dangerous Ground for several years after 1868 concentrating more on the coasts of China. Between 1881 and 1883 HMS Magpie, under the command of Foley Vereker was engaged in surveying southern areas in the course of a general re-examination of Borneo’s offshore northern coasts.

It was not until October 1888 that the Admiralty published the first detailed chart of some principal reefs in the Dangerous Ground. That chart’s title was:

BA 1201 - “Reefs in the China Sea”

and it contained plans of:

- Loai Tu Island and Reefs
- North Danger
- Thi Tu Island and Reefs and Subi Reef
- Tizard Bank and Reefs.

BA 1201 was derived from the 1867-68 surveys by Reed, Tizard, Lys and others in HMS Rifleman referred to earlier in this chronology. “Reefs in the China Sea” was to remain substantially unaltered for many years and today, 1995, it is still a current chart in the Admiralty catalogue with a plan of Spratly Island added as a result of surveys in 1951. Basically BA chart 1201 represents the “beginning and the end” of the Admiralty’s publicly available detail charts of features in the Dangerous Ground. As will be explained survey ships of the Royal Navy worked in the Dangerous Ground after 1867-68, but most of their more detailed surveys were not made available to the general public.
Although not specifically relevant to the Dangerous Ground as such the German naval ships SMS Freya and Iltis made a survey of the Paracel Islands between 1881 and 1883, from which the Admiralitat in Berlin produced a two sheet chart entitled “Die Paracel Inseln”. This chart was much more detailed than the 1808 surveys made by Captain Ross of the Bombay Marine, and was quickly reproduced by the British Admiralty in June 1885 as chart BA 94 “Paracel Islands”.

The French hydrographic authorities were equally quick to use this survey, reproducing the German work as their chart 4101 “Les Paracels”. This exchange and reproduction of surveys and charts originated by one country has characterised some aspects of charting and hydrography in the South China Sea. It may also be a possible reason why some inconsistencies appear to perpetuate themselves from chart to chart produced by different countries.

The British surveying ships Rambler and Flying Fish operated on the fringes of the Dangerous Ground from 1885 to 1890 with Rambler making a detailed resurvey of Pratas Reef in 1889.

The first decade of the 20th century did not see any particularly special British Admiralty efforts to make new surveys in the Dangerous Ground, although survey work continued on the Borneo and China coasts. One survey ship, HMS Merlin under the command of Commander Walter, was engaged on Gordon Patch off Labuan and recovered hydrocarbon gas samples from a depth of 62 fathoms. This discovery prompted further surveys and laid the foundation for the subsequent large scale petroleum-related hydrographic and seismic work off Brunei, Sabah and Sarawak. Between 1909 and 1914 the Merlin was employed surveying the offshore banks and shoals that lie north of Borneo, approaching the southern boundary of the Dangerous Ground. Many of the areas examined have subsequently become major oil and gas producing areas of considerable economic and political importance. Large scale surveys of the South China Sea were effectively terminated by the outbreak of the First World War, and in 1914 HMS Merlin proceeded to Hong Kong to be paid-off, releasing her surveying staff for more urgent hydrographic work in the North Sea.

This thumbnail sketch of the first century of modern hydrographic surveys in the Dangerous Ground since February Hurd’s 1814 report may give the impression that survey work in the South China Sea was largely performed by the British Admiralty. In fact there were other nations involved in various survey activities, particularly by the French Marine’s Service Hydrographique et Oceanographique de la Marine (SHOM) on the coast of Indo-China and by Spanish and US hydrographers on the western coast of the Philippines. However these countries did not actively venture into the area now referred to as the Spratly Islands. Thus it happened that the Royal Navy’s hydrographic surveyors, with somewhat wider ranging instructions than many of their contemporaries made the first detailed examinations of The Dangerous Ground.

After the First World War Admiralty survey ships returned to the South China Sea in 1921 for both general and special surveying duties, some of the latter being concerned with the Dangerous Ground. In the 1923 survey season HMS Iroquois began work off Miri, Sarawak, as part of oil export activity developing in that area. Iroquois was to remain in the South China Sea some years, and during 1925, under Commander A.L. Jackson, the vessel was engaged in secret surveys of North Danger Reef, where Commanders Fryer and Day were making an examination of the atoll for fleet anchorage purposes. (Day, 1972: 62 and 68). During 1927
when HMS Herald was engaged in surveys of South Luzonia Shoal the Iroquois made further surveys around the Dangerous Ground, and in 1928 she was working in the Paracel Islands.

In 1931 Herald and Iroquois, assisted by HMS Bridgewater and the Royal Air Force, made an extensive survey of the north-eastern area of the Dangerous Ground, under secret orders including the only modern survey of Union Bank and Reefs. These surveys were made to investigate probable areas for seaplane operations in time of war. The 1931 program was continued in 1932 by Herald which made surveys at Scarborough Reef, Royal Captain Shoal and Half Moon Reef. Clandestine surveys continued in 1933 when Jackson Reef, Mischief Reef and areas on the north-western side of Palawan Passage were surveyed. Despite the survey activity described above the Admiralty did not release any new charts of the area, and it was the US Hydrographic Office which published the Herald’s surveys of Jackson Atoll and Mischief Reef in HO 5658 in October 1950, as a Confidential or Green chart. USHO chart 5658 was republished in a 2nd Edition on 16 March 1980 under the same title, as DMA chart 93042 without any restriction on its availability. In February and March 1935 the US Navy ships Pigeon, Heron and Bittern surveyed Pigeon Passage.

During 1936 and 1937 there was a considerable increase in hydrographic investigations in the Dangerous Ground, as an Admiralty survey ship, a US Navy salvage vessel, USS Pigeon, and Imperial Japanese Navy (IJN) survey teams carried out a variety of investigations in the region. The Japanese Navy’s Hydrographer had published a number of general charts that included the Dangerous Ground, but Japan’s 1936-37 operations were intended to survey North Danger Reef (1936) and Tizard Bank (1936-37) for fleet anchorage and military purposes. In 1936 the IJN’s Hydrographer issued substantially revised versions of IJN-HO 810 “South China Sea” and IJN-HO 1675 “Northern Approaches to Philippine Islands”, following these general charts with four completely new charts:

- IJN-HO 521-3 Hakuken Syo (North Danger) on a scale of 1:30,000
- IJN-HO 522 Nakashima Fukin (Itu Aba) on a scale of 1:30,000
- IJN-HO 523-2 Tizato Tai (Tizard Bank) on a scale of 1:75,000
- IJN-HO 524 Shinnan Gunto on a scale of 1:750,000.

These Japanese charts were published in 1938, but did not become available to non-Japanese military users until after the Second World War. The US Navy’s Hydrographic Office republished IJN HO 521 and 523 in October 1950 under HO numbers 5658 North Danger and 5657 Tizard Bank. The ROC-Taiwan Naval Hydrographer also republished IJN-HO 523-2 under ROC No. 478 “T’ai-Ping Tao and Cheng-Ho Chun-Chiao” in 1953.

Japanese hydrographers made ‘sketch’ surveys during 1936 - 1937 of various reefs in Shinnan Gunto, published as IJN-HO 525, that included:

- Irving Reef
- Jackson Atoll
- Loai Ta and Menzies Reef
- Mischief Reef
- Nanshan Island
- Investigator Shoal
- Southampton Reefs
Like the charts of North Danger and Tizard Bank these sketch surveys were not readily available until July 1951 when the US Hydrographic Office published them as Chart HO 5657 “Plans in the Dangerous Ground - South China Sea”. These same plans, less the plan of Spratly Island were re-published in December 1956 by ROC-Taiwan in chart 477-A “Plans in Nan-Sha Chun-Tao”.

Also in 1937 the US Navy salvage ship Pigeon (ASR-6) conducted a further hydrographic survey in the Dangerous Ground. Pigeon verified a 10-mile wide channel clear of dangers, originally surveyed in 1935, and made both southeast to northwest and northwest to southeast transits of the Dangerous Ground direct from Fiery Cross Reef to Half Moon Shoal. Generally referred to as “Pigeon Passage” this track enabled a prudent navigator to make night passages through the Dangerous Ground with some degree of safety prior to the advent of satellite navigation systems. For salvage and naval purposes Pigeon Passage provided a convenient east to west short cut through the middle of the Dangerous Ground. For reasons that are not entirely clear Tennent Reef is generally referred to as Pigeon Reef in US Sailing Directions. Presumably, based on navigational experience in Pigeon Passage, USS Pigeon used Tennent Reef as a navigational check on the southern boundary of Pigeon Passage.

HO Publication 93 “Sailing Directions for the Western Shores of the South China Sea” included directions for Pigeon Passage in its 4th, 5th and 6th Editions. The current American sailing directions eschews any mention of Pigeon Passage stating:

“Little advantage can be had in deviating from the recommended routes in the South China Sea to cross this [Dangerous Ground] area in view of the extensive dangers to be encountered. Due to conflicting data and accuracy of the various partial surveys of Dangerous Ground, certain shoals and reefs may appear on one chart but not on another regardless of the scales involved. Charted depths and their locations may present considerable error in the lesser known regions of this area. Avoidance of Dangerous Ground is the mariner’s only guarantee of safety.”


On balance this is probably sound advice for those who have no pressing commercial or military reason for making transits through the Dangerous Ground.

Whilst IJN hydrographers made their surveys on the major and lesser reefs in 1936-1937, and USS Pigeon went her way through the Dangerous Ground, making a number of sketch surveys, HMS Herald resumed her 1934 survey program. British surveyors connected their work with US Coast and Geodetic surveyors of Palawan and frameworks for several new small scale charts of the area were established. Herald returned to survey work at Mischief Reef again in 1938, and continued with examinations and recharting reefs off the Borneo coast close to the Dangerous Ground.

Royal Navy survey work in the South China Sea ceased on the outbreak of war in Europe in 1939, with surveying officers attached to Herald and Bridgewater being dispersed or assigned to local operational duties. Apart from whatever the Japanese Navy may have done to improve
their own charts of the Dangerous Ground, no further British or US Navy hydrographic operations were conducted in the area until the Pacific War finished in 1945.

As no major military campaigns were conducted in the Dangerous Ground itself there was no requirement for new surveys, particularly as the Royal Navy had not been idle in the area in years preceding 1939. The Admiralty’s Hydrographer issued three confidential or ‘F-series’ charts which included some data obtained during various survey operations in the Dangerous Ground, in addition to information already published on BA chart 1201. It was, in part, information from BA chart F.6064 that was incorporated in USHO chart 5658 “Plans in the South China Sea” when that chart was published in October 1950, to include the Admiralty surveys of Jackson Atoll and Mischief Reef.

The first new general chart of an area of the South China Sea published after the Second World War was the French SHOM 5691 “Annam et Cochin”, released in September 1945. Produced on a 1:909,000 scale SHOM 5691 covered an area from Latitude 7-30 to 15-30 North, and extended slightly eastward of Longitude 112-15 East, thus incorporating Spratly Island, and its adjacent reefs and banks on a medium scale chart. Although providing only slightly more detail of reefs than was available on BA 2660A (Scale 1:1,550,000), the new SHOM chart gave navigators sailing from any port between Qui Nhon and Saigon a single sheet chart on which to plot a course to or from Spratly Island. It is not known whether this was a reason for the choice of scale and layout that governed production of SHOM 5691, but it is a noticeable feature of that chart.

By 1946 fair copies of IJN’s Dangerous Ground plans had passed into US and Chinese hands, although, as related above, it was not until October 1950 that the US Hydrographic Office finally published this Japanese material. The Admiralty published no Japanese material concerning the reefs and shoals in Dangerous Ground, leaving BA 1201 “Reefs in the China Sea” as its only publicly available chart of features in the region. The first Royal Navy survey vessel assigned to routine hydrographic duties in South China Sea, HMS Sharpshooter had arrived off Borneo in 1946, where that ship conducted hydrographic operations in the approaches to Brunei, related to general charting improvements in Northwest Borneo.

In 1948 a newly commissioned Admiralty survey ship, HMS Dampier, arrived in the South China Sea, to commence hydrographic work off Bintulu in Northwest Borneo. Dampier remained in the South China Sea for several years, improving or making new surveys off Borneo, and running extensive lines of soundings in the area. In 1951 Dampier, under Commander R.H. Connell, examined Spratly Island, which was surveyed by Lieutenants D.W.S. Collins and D.N. Price, to produce a small plan of the island. That plan, the first published Admiralty survey of Spratly Island, appeared on a 1:25,000 scale incorporated on a new version of chart BA 1201 “Reefs in the China Sea”. Thus, over 100 years after its discovery, Spratly Island actually appeared as a small plan on a publicly available chart. Despite the importance that now attaches to Spratly Island the Admiralty, in their wisdom, did not see fit to designate the modified BA 1201, published on 30 January 1953, as a new edition. Instead the addition of Spratly Island to this chart was merely accorded a notation “Large Corrections”. Spratly Island had been accurately surveyed in 1864 by Rifleman under Commander John Ward, but the 4 inch to 1 mile ‘fair chart’ was not published by the Hydrographer.
Similarly the US Navy in their postwar chart HO 5657, “Plans in the Dangerous Ground - South China Sea”, published in July 1951, included a plan of Spratly Island on a scale of 1:15,000. Many of the plans published in HO 5657 were derived directly from Japanese surveys of 1937. Subsequently most of these plans (excluding Spratly Island) were reproduced on ROC-Taiwan chart 477A, “Plans in Nan-Sha Ch’un-Tao”, published in December 1956. ROC-Taiwan chart 477A contains a total of nine plans, and the only readily apparent difference between USHO 5657 which has ten plans and ROC-T 477A is that the US chart has a plan of Spratly Island. Although US Hydrographic Office published a plan of Spratly Island on chart HO 5657 this chart was superseded in 1974 and at present the US Navy does not publish a detailed chart or plan of Spratly Island. The Royal Navy published no further detailed plans or charts of areas within the Dangerous Ground after revising BA 1201 in January 1953.

Following the re-establishment of ROC-Taiwan’s Navy Hydrographic Service at Kaohsiung, their Hydrographer produced the first publicly available medium scale, single sheet chart of the Dangerous Ground. That chart, ROC-T No. 476, entitled “Nan-Sha Ch’un-Tao” was published in October 1953 and used a number of Japanese and Taiwanese surveys as sources. The 1:750,000 scale of ROC-T No. 476 made it useful for navigation inside the Dangerous Ground, provided due care was taken not to place absolute reliance on the veracity of any positions of banks and reefs in the middle of Dangerous Ground. As this caveat applied to all BA, Japanese and US charts then available, this did not constitute a particular hardship when using the better scale ROC chart.

In April 1954 the ROC-Taiwan Navy Hydrographer printed chart ROC-T 477 entitled “Islets of the Nan-Sha Ch’un-Tao” which incorporated data drawn from various sources to 1938 to reproduce plans of:

- Chung-Yeh Ch’un-Chiao (Thitu Island)
- Shuang-Tzu Chiao (North Danger)
- Tao-Ming Ch’un Chiao (Loaita Island)

The arrangement of plans and appearance of the chart is very similar, if not identical to the 4th (1944) edition of USHO chart 2786 “Reefs in the South China Sea”. However scales used on ROC plans, being 1:111,600 are different to USHO scales of 1:117,840. Similarly ROC-Taiwan 477’s scale of 1:111,600 for North Danger differs from BA 1201’s Loaita and North Danger at 1:111,400 although the plan of Thitu Island is at exactly the same scale (1:111,600) as the plan appearing on BA 1201.

The ROC-Taiwan hydrographic authorities followed-up ROC-T 477 in 1956 with their chart No. 477A incorporating nine plans previously referred to and in addition to acknowledging that data is drawn “...from a Japanese survey in 1938...” contains the notice:

“CAUTION. Be prudent to use this abbreviated survey chart.”

Reference has been made to the 1944 edition of USHO chart 5658 (1 October 1950) that reproduced the British surveys of Jackson Atoll and Mischief Reef. However some difficulty arises when attempting to reconcile the US Navy’s post war charts of Tizard Bank. It appears that the US Navy had two charts of Tizard Bank in circulation for some time, one being the plan at a scale of 1:117,840 printed on USHO 2786, “Reefs in the China Sea”, and the other, USHO 5659 being solely a plan of “Tizard Bank and Reefs” at a scale of 1:75,000, published in its first edition in October 1950. The derivation information printed on HO 5659 states:
“From a Japanese survey of 1936 and 1937, Authority-Japanese chart S-523.”

Whilst it may be possible that the IJN fair chart obtained by US Navy in the aftermath of World War II was numbered S-523, JMSA’s Tokyo archive copy of that chart bears the number 523-2.

The USHO chart catalogue for 1967 shows that HO 5659 is a plan of Tizard Bank, but HO 2786 relates to various other reefs, excluding Tizard Bank. However an examination of chart HO 2786 obtained in 1968 shows the chart to be little altered in content from its original 1911 form, although the plans have been re-arranged in rectangular blocks as they indeed were on the 4th (August 1944) edition of the chart. USHO 5659 is not even indicated as being available in the US 1970 catalogue, when chart distribution authority moved from US Naval Oceanographic Office to the Defense Mapping Agency (DMA). However USHO 5659 re-appears in later mid-1970 DMA chart catalogues as DMA No. 93043, with a first edition date given as October 1950, exactly as that chart is printed today.

As part of the changes that occurred to US Navy’s chart distribution and numbering system in 1970, the previous USHO 4-digit series numbers were cancelled and replaced by a DMA 5-digit code. Thus US HO 2786 re-emerged from this exercise in a revised edition dated 21 September 1970 bearing number (DMA) 93061 “Reefs in the South China Sea”, with a catalogue notation of “4th Edn/Aug 1944”, still containing a plan of Tizard Bank and Reefs. The situation appears to be clarified in the 1994 edition of DMA’s (Public Sale) Nautical Charts and Publications catalog which lists the two charts as:

- 93043 Tizard Bank
- 93061 Reefs in the South China Sea
  Plans (B) Thitu Island and Reefs and Subi Reef
  (C) Loaita Island and Reefs.

However purchasers of DMA 93061 should be aware that the chart, as sold over the counter, also contains plans of North Danger and Tizard Bank and Reefs both slightly defaced with a “Cancelled” stamp.

In August 1953 the Philippines Coast and Geodetic Survey published their chart (Phil) 4716 “Palawan” on a scale of 1:402,000 which contains some useful data concerning banks and reefs of the Dangerous Ground that adjoin Palawan Passage. This Philippines chart is also reproduced by US as DMA chart 92033 which is presently in a 5th Edn, dated 16 August 1986.

The (Japanese) Maritime Safety Board (now Japanese Maritime Safety Agency JMSA) published its chart (JMSA) 1801 “South China Sea, Southern Portion, Eastern Sheet” on 24 October 1959. This chart on a scale of 1:1,200,000 provides a better representation of the entire Dangerous Ground on a more convenient scale than the 1:1,550,000 used on BA 2660B, its near equivalent British chart. The next large scale general chart published was the Philippines PC and GS 4200 “Philippines”, 19 December 1960, on a scale of 1:1,575,000 which only shows some of the eastern area of the Dangerous Ground. PC and GS 4200 both in its December 1960 and December 1968 editions does not show any Philippine claims into the Dangerous Ground, although this matter is rectified on both the latest (February 1984) edition of PC and GS 4200 and the PC and GS Chart Catalogue of 1991. The JMSA chart 752
"Palawan", published 5 August 1968 on a scale of 1:750,000 provides a better coverage of the Dangerous Ground’s eastern edges than its DMA counterpart, DMA 92033.

The US Hydrographic Office improved its general chart coverage of the Dangerous Ground with the publication of a second edition of HO 5501 “South China Sea - South Western Portion” in May 1966 on a scale of 1:971,600, and the first edition of a new chart HO 5498 “Mui Bai Bung to Mui Da Nang” on a scale of 1:1,071,000 in July 1967.

Both these charts are available as DMA 71027 and DMA 93030 respectively in 1994, somewhat defaced with Omega navigation graticules. As both charts are bathymetric they provide a very good representation of bottom contours in the Dangerous Ground.

ROC-Taiwan produced a new chart ROC-0474 “South China Sea -Southern Portion, Eastern Sheet” on 31 October 1974, based upon JMSA chart 1801, using the same scale of 1:1,200,000. This ascribes Chinese (Wade Giles) names to all features in the Dangerous Ground (Nan-Sha Chun-Tao) and is a very useful chart for this reason, apart from its navigational value.

The People’s Republic of China published its chart No. 9203 “Southern Portion of Nanhai” on 1 August 1976, adopting a scale of 1:2,000,000 which takes in the entire Nansha Qundao region as the chart covers the area between the equator and 14° North.

On 10 June 1980 the Russian Hydrographic Office, GONIO, published chart No. 66480 “Tizard Bank and Reefs” on a scale of 1:75,000. This chart is very similar in appearance to the IJN-HO chart 523-2, and represents another example of borrowing hydrographic information from earlier sources.

In June 1982 the US DMA published a series of four charts, on a scale of 1:250,000 covering almost the entire Dangerous Ground area under the following numbers and titles:

- 93044 Yongshu Jiao to Yongdeng Ansha
- 93045 Heng Jiao to Haima Tan (Routh Shoal)
- 93046 Mantangule Island to Eran Bay
- 93047 Yongshu Jiao to Po-Lang Chiao.

An adjoining chart, DMA 93048 “Duhu Ansha (North Viper Shoal) to Kimanis Bay”, published in November 1982, connects chart 93046 to the northern Borneo coastline.

One unusual feature of chart DMA 93047, the south-western sheet of the four, is that its western boundary is established at Longitude 111° 55’ East, thus excluding Spratly Island, Ladd Reef and Rifleman Bank from the coverage provided by these four charts.

The five DMA charts are derived from various acknowledged sources, including ROC-Taiwan charts 474, 476, 477, 477A, 478 Philippine charts 4716 and 4720 together with “Miscellaneous Data”, and each contains a notice unusual for US charts that states:

“This chart is based in whole or in part on information from other than official US Government sources as indicated. Copyright restrictions of the country of origin continue to exist.”
When BA 967 “Palawan” was re-issued on 15 November 1985 as a much-improved version of previous 25 August 1924 edition it contained a number of interesting remarks under the heading “Source Data” including:

“g. DANGEROUS GROUND.
Admiralty, United States and Japanese reconnaissance surveys prior to 1940. See Caution.”

The caution notice, printed in large magenta letters in the title block of BA 967 states:

“DANGEROUS GROUND
The large area north-westward of the recommended track [through Palawan Passage] is known to abound with dangers. No systematic surveys have been carried out and the existence of uncharted patches of coral and shoals is likely; the positions of the charted banks and shoals cannot be relied upon. Vessels are warned not to attempt to pass through this area; see Admiralty Sailing Directions.” (BA 967, November 1985).

ROC-Taiwan’s chart No. 0476 “Nan-Sha Ch’un-Tao” was re-issued as a revised, colour-tinted 2nd edition on 30 April 1988, retaining its previous 1:750,000 scale. This new, and current, edition of ROC-Taiwan No. 0476 is a considerable improvement on its predecessor, and lists a number of sources of hydrographic data including:

- 1st (1953) Edn of chart 0476.
- Various surveys prior to 1971.
- JMSA chart No. 1502 (South China Sea, Southern Portion -Western Sheet) 1975 edition.

Also, on 30 April 1988, the 2nd edition of ROC chart 0478 “T’ai-Ping Tao and Cheng-Ho Chun Chiao” was issued as a coloured chart. Originally published in October 1953 as an almost direct reproduction of IJN-HO chart No. 523-2 “Tizato Tai”, the new ROC-Taiwan 0478 maintained the original scale of 1:75,000 in exactly the same way as US DMA chart 93043 retains the original Japanese scale and metric soundings.

Malaysian chart MAL 781 “Terumbu Semarang Barat Kechil to Terumbu Peninjau” [Semarang Bank to Investigator Reef] was published 30 October 1988 on a scale of 1:300,000. This chart, includes:

- Ardasier Reef and Bank (Terumbu/Permatang Ubi)
- Barque Canada Reef (Terumbu Perahu)
- Dallas Reef (Terumbu Laya)
- Erica Reef (Terumbu Siput)
- Investigator Reef (Terumbu Peninjau)
- Louisa Reef (Terumbu Semarang Barat Kechil)
- Mariveles Reef (Terumbu Mantanani)
- Royal Charlotte Reef (Terumbu Semarang Barat Besar)
- Swallow Reef (Pulau Layang Layang)
Previously Swallow Reef was a ‘reef’, but the Malaysian chart adopts the term ‘Pulau’ (island) in describing Layang Layang. Chart MAL 781 is derived from a variety of survey data, including hydrographic work around Mariveles, Dallas and Swallow Reefs by the Royal Malaysian Navy’s large oceanographic and hydrographic survey ship KD Mutiara (A152) during 1987. Chart MAL 781 also includes a warning that reads:

“CAUTION
Certain areas within this chart as indicated by the scarcity of sounding have not been systematically surveyed especially around Permatang Ubi (Ardasier Bank) Terumbu Laya (Dallas Reef) Terumbu Perahu (Barque Canada Reef) and Terumbu Peninjau (Investigator Reef). Existence of uncharted rocks and corals very likely. Vessels are warned not to attempt to enter inside any lagoons.”

Malaysia published chart MAL-6 “Sabah-Sarawak” on 1 October 1991 to a scale 1:1,250,000. This chart has relatively good coverage of southern areas of Dangerous Ground (Kawasan Bahaya) extending from Vanguard Bank in the west to Commodore Reef (Terumbu Laksamana) in the east. The chart’s northern boundary of Latitude 8° 50’ North is sufficient to enable Spratly Island (Pulau Spratly) and Ladd Reef to be shown on the chart. Chart MAL-6 also contains a cautionary note about the dangers of navigating in the Dangerous Ground.

In concluding this brief chronology of hydrographic surveying in the Dangerous Ground it must be remembered that most, if not all of the original surveys were based on astronomical observations, made from comparatively small vessels or from atolls and cays themselves. For this reason it is not surprising that numerous marine casualties have occurred around the Dangerous Ground. Mariners, navigating from sextant observations obtained in leaden overcast northeast monsoon conditions, can easily make small mistakes in latitude and longitude that are sufficient to misplace their position up to 10 miles. Such errors, combined with probable small errors in the charted positions of many reefs in the area are sufficient to result in a marine casualty. Even use of modern satellite navigation/Global Positioning Systems aboard ships cannot make up for errors in positions of reefs that were originally laid down on charts without the benefit of satellite navigational devices.

Most charts of the Dangerous Ground which present day seamen and geographers refer to were laid down under conditions described below:

“In 1888 Commander W.U.Moore was instructed by Wharton [Admiralty Hydrographer] to take his ship Rambler to examine Tizard Bank.

Tizard Bank has a few sand cays above water around its perimeter, whilst the encircling rim of Macclesfield bank, 300 miles to the north, has no depths less than ten fathoms. Both have lagoons within the reefs and their outer walls fall steeply away to great depths.

The ship being anchored at various points on the shallow perimeter formed a base for the steam cutter, Using masthead angles, she ran sounding profiles from the deep water in over the ridge past the ship to the lagoon; meanwhile the second steam cutter made dredgings along this profile. The surgeon, P.W. Basset-Smith, who had an amateur interest in coral, was in the dredging boat collecting and preserving the
specimens caught in the dredge and found enmeshed in swabs hauled along the seabed. On Tizard Bank decreasing quantities of live coral was found down to thirty-two fathoms on the outside slopes, which were thereafter composed of coral debris. In the lagoon sand was mostly to be found with occasional outcrops of coral down to forty-five fathoms where, surprisingly, live reef-building coral was discovered.” (Ritchie, 1967 364 - 365).³

³ In October 1994, during a research visit to the Admiralty Hydrographic Agency’s archives at Taunton, David Hancox uncovered a wealth of survey material that has not reached the public domain including the 1860s and 1930s surveys, many of the latter marked “Secret” or “Most Secret”. This material also included surveys of some islands and reefs in the Spratlys made by Cmdr. Ward and Staff Cmdr. Reed in HMS Rifleman. This material will be described in some detail when further research by Hancox has been completed.
Appendix I: Significant Dates in the Hydrography of the Spratly Islands

1821- Horsburgh’s chart “South China Sea” published in two sheets. The southern sheet which covers the Dangerous Ground can also be found in later 1859 versions as “South China Sea - Southern Part”, and “China Sea Sheet I”.

1840 Admiralty published chart BA 1270 “The China Sea from Singapore to Canton to Manila”, 20 May 1840.

1851 Surveys of Palawan Passage by Bate in Royalist commenced, and continued until 1855.

1856 Admiralty published chart BA 967 “Palawan Island”, 3 November 1856.

1862 Staff Commander Reed in Rifleman commences examination of Dangerous Ground, a task that continued until 1869, and defined the extent of the area. Reed’s work on eastern boundary coordinated with Spanish Navy’s hydrographers.

1867 Admiralty published charts BA 2660a and b “China Sea - Southern portion, Singapore to Calamian”.

1881 Charts BA 2660a and b re-issued as “China Sea - Southern Portion” on 1 November 1881.

1887 Admiralty publishes general chart BA 1263 “South China Sea” on 30 May 1887.

1888 Admiralty publishes chart BA 1201 “Reefs in the China Sea” on 23 October 1888, with plans North Danger, Loai Ta Island, Tizard Bank and Thi Tu Island and Reefs and Subi Reef.

1900 Hydrographic Department, IJN, publishes chart IJN 451 “Reefs in the China Sea” as a direct reproduction of BA 1201, on 29 May 1900.

1911 Hydrographic Office, US Navy, publishes chart No. 2786 “Reefs in the China Sea” reproduction of BA 1201 on November 1911.

1925 HMS Iroquois surveys North Danger Reef area. Hydrographic Department, IJN, publishes chart (IJN) 529A “China Sea, Southern Portion, Eastern Sheet” as a direct reproduction of the May 1925 New Edition of BA 2660A. This Japanese chart was published on 21 December 1925.

1931 HMS Herald surveying in Dangerous Ground. This work continued in 1932 with examinations of Jackson Reef, Mischief Reef and Royal Captain Shoal.

1936 Japanese Navy survey parties commence work at North Danger and Tizard Banks. This work continued into 1937 with surveys of other areas in Dangerous Ground.

1937 USS *Pigeon* surveying Dangerous Ground to verify east-west transit passage. HMS *Herald* working at Mischief Reef and on western boundary of Dangerous Ground.

1938 Japanese Navy publishes confidential charts of North Danger, Tizard Bank and sketch plans of ten reefs/islets in the area.

1942 US Naval Hydrographic Office publishes chart HO 5501 “South China Sea - Southwestern Part” in April 1942.

1944 US Navy publishes revised version of chart HO 2786 “Reefs in the China Sea” during August 1944 with all plans reset on rectangular blocks. Admiralty chart F.6064 “Plans in the South China Sea” available for military use. (See USHO 5658 under 1950 entry).


1951 HMS *Dampier* surveys Spratly Island. US Navy publishes chart 5657 “Plans in the Dangerous Ground - South China Sea” that includes Spratly (Storm) Island, July 1951.

1953 Admiralty published revised chart BA 1201 “Reefs in the China Sea” including a plan of Spratly Island, on 30 January 1953. Philippine C and GS publishes first edition of chart PC and GS No. 4716 “Palawan” in August 1953, showing eastern edge of Dangerous Ground. ROC-Taiwan Navy publishes chart 476 “Nan-Sha Chun-Tao” in October 1953, based on ROC-Taiwan and Japanese surveys.

1954 ROC-Taiwan Navy publishes charts 477 “Islets of the Nan-Sha Ch’un Tao” on 20 April 1954.

1956 ROC-Taiwan Navy publishes chart 477A “Plans in Nan-Sha Chun-Tao” in December 1956.


1967 US Naval Oceanographic Office publishes 1st edition of HO/BC 5498 “Mui Bai Bung to Mui Da Nang” which includes a large portion of the Dangerous Ground on scale 1:1,071,000 with detailed bathymetric information.


1977 Japanese Maritime Safety Agency publishes chart JMSA 2006 “South China Sea” scale 1:3,500,000 on 14 February 1977, that becomes basis for International chart INT 508 “South China Sea”. Chart INT 508 is then published by numerous countries including Germany, Malaysia, South Korea, Soviet Union, United Kingdom (BA 4508 of 25 September 1985) and United States.

1982 US DMA publishes four charts, 93044, 93045, 93046 and 93047 on 1:250,000 scale in November 1982. Chart 93047 excludes Spratly Island, which remains on chart 93030 on a scale of 1:1,071,000.

1987 Royal Malaysian Navy survey ship KD Mutiara operating around Ardasier, Dallas, Mariveles and Swallow Reefs.


1991 Malaysia publishes new chart MAL 6 “Sabah-Sarawak” on 1 October 1991 on scale 1:1,250,000 that includes all southern areas of Dangerous Ground.
Appendix II: List of Navigational Charts and Plans of the Spratly Islands

Introductory Notes

This list is based on an original compilation by Du Plessis and Hancox during the period 1966 to 1981, with additions and amendments to August 1994.

In this Appendix countries and their respective hydrographic authorities are listed alphabetically, commencing with British Admiralty [Great Britain] and closing with Vietnam. Charts published by China are subdivided into two groups, namely charts produced by Republic of China - Taiwan, and Peoples’ Republic of China.

Charts are listed numerically, in accordance with normal marine chart storage practices. Many hydrographic authorities follow a system of grouping charts with the first numeral (group) designating a particular area of the world.

It should be noted that the British Admiralty chart numbering system did not generally group charts whereby the first numeral indicates a particular area of the world, although a geographical “folio” system is followed, dividing the world into distinct areas.

Where several editions or variations of a particular chart have been published by a hydrographic authority the earliest or “First Edition” of that chart is listed first in this Appendix.

Chart Descriptions:

- Chart names and/or titles given in this list are the titles or names printed on the “thumb label” or title block of the chart concerned.

- Dates given are date of publication printed on the chart, and in the cases of newer editions, the dates of subsequent “Large Corrections” or “New Editions” are listed chronologically.

- Where a national hydrographic authority utilises by agreement, or otherwise, the surveys carried out by another country this fact, if noted on the particular chart concerned, is mentioned in this list.

- Chart scales are those given on the chart concerned.
British Admiralty Charts

Between 1840 and 1909 British charts were listed in an (un-numbered) small format publication entitled:

“Admiralty Catalogue of Charts, Plans, Views and Sailing Directions”

From 1910 to 1956 the format of British chart catalogue changed to include Index Charts or drawings, and the publication was re-titled:

“Catalogue of Admiralty Charts, Plans and Sailing Directions”

That publication was given the numerical designator Hydrographic Department (HD) publication “HD 374” in 1920. The title was again amended post-Second World War to:

HD 374 “Catalogue of Admiralty Charts and other Hydrographic Publications”

The Admiralty chart catalogue was renumbered to a Nautical Publication (NP) number some twenty years ago under the title:

NP-131 “Catalogue of Admiralty Charts and Other Hydrographic Publications”

<table>
<thead>
<tr>
<th>British Adm. No.</th>
<th>Title</th>
<th>Publication Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>(No number)</td>
<td>South China Sea - Sheet 1 February Daniel Ross (Bombay Marine) Published by J. Horsburgh, London.</td>
<td></td>
</tr>
<tr>
<td>967</td>
<td>Palawan Island</td>
<td>1:725,000</td>
</tr>
<tr>
<td></td>
<td>From surveys by Commander W. Bate, assisted by Lieutenants C. Pasco and C. Bullock and Mr W. Calver.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>This chart went through eight new editions and one large correction before being superseded by a new BA 967 in 1985.</td>
<td></td>
</tr>
<tr>
<td>967</td>
<td>Palawan</td>
<td>Coloured - with views deleted</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3 November 1856</td>
</tr>
<tr>
<td></td>
<td></td>
<td>New Edn 15 November 1985</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Current Edn</td>
</tr>
</tbody>
</table>

4 The current version of NP-131 is the 1994 edition.

5 This chart was originally published by J. Horsburgh, Hydrographer of the East India Company. It is only included because it represents the result of an early 19th century survey to delineate the extent of the Dangerous Ground. This chart was not taken into the Admiralty series when the Hydrographical Office took over publishing East India Company charts in the early 1860s.
### A Geographical Description of the Spratly Islands

**British Adm. No.** | **Title** | **Publication Data**
--- | --- | ---
1201 | **Reefs in the South China Sea**<sup>6</sup>  
- Loaita Island and Reefs  
- Thi Tu Island and Reefs, and Subi  
- North Danger  
- Tizard Bank and Reefs | 23 October 1888

1201 | **Reefs in the China Sea**<sup>7</sup>  
- Loaita Island and Reefs  
- North Danger Reef  
- Spratly Island<sup>8</sup> 1951 survey  
- Thi Tu Island and Reef, and Subi Reef  
- Tizard Bank and Reefs | New Edn 30 January 1953

1263 | **South China Sea**  
Various New Editions.  
- 2 October 1912  
- 12 January 1917  
- 20 September 1918  
- 11 September 1922  
- South China Sea 1:4,840,000 | 30 May 1887  
New Edn June 1897

1263 | **Ambong Bay to Sampanmangio Point**<sup>10</sup>  
**Kota Kinabalu to Pu. Mantanani**  
1:145,000  
1:150,000 | 29 January 1913  
New Edn 13 June 1958

2660 A<sup>11</sup> | **China Sea** - Southern Portion  
- Western Sheet | 18 November 1881  
New Edn 30 June 1972

2660 B | **China Sea** - Southern Portion  
- Eastern Sheet | 1 November 1881  
New Edn 27 August 1971

---


<sup>7</sup> “With additions and corrections from Japanese and US Navy charts to 1944”.

<sup>8</sup> Spratly Island appeared for the first time as a detailed plan on a BA chart following surveys by Lieutenants D. Collins and D. Prince, of HMS *Dampier* 1951. Superseded by new International version of “South China Sea” chart known as Int 508 or BA 4508. See Japan.

<sup>9</sup> Emerald and Big Bonanza Shoals, general details of southern shoals - from surveys by HMS *Merlin* 1909-1919 (Captain F.C. Learmonth) with additions from HMS *Herald* (Commander Jenks) 1938 and HMS *Dampier* (Commander N.D. Royds) 1956. Superseded in November 1990 by new chart.

<sup>10</sup> BA chart 2660A (see below) first published in 1881 has always used, and continues to use, the conventional spelling of (Captain) Spratly’s name as *Spratly*. Early, privately printed charts also use words “Storm Island” and some US charts use “Storm Island” in parentheses.
## Notes

1. Symbols and abbreviations used on BA charts have been changed considerably over the period covered by this list.

   (i) Between 1910 and 1970 all BA chart symbols and abbreviations were found on a single sheet chart No.5011 entitled:

   "Explanation of Signs and Abbreviations as shown on the charts issued by the Hydrographic Department, Admiralty."

   (ii) From 1972 these symbols etc are found in a new book edition of BA 5011:

   "Symbols and Abbreviations used on Admiralty Charts"

   Book Edition 1 - June 1972

   (iii) Since 1972 this booklet has been through five editions, up to 1987, when it was superseded by a revised and reset Chart 5011:

   "Symbols and Abbreviations used on Admiralty Charts"

   Edition 1 - 1991 - Sub-titled “INT-1”

---

12 Charts BA 2660A, 2660B, 2661A and 2661B have been through numerous “New Editions” and “Large Corrections”. As an example the printing history of BA 2660A, China Sea-Southern Portion-Western Sheet is listed below:

- Published: 18 November 1881
- New Edn: May 1886
- " : November 1894
- " : August 1896
- " : July 1909
- " : 16 July 1912
- " : 23 May 1923
- Large Corr’ns: 10 September 1954
- " : 10 September 1954
- " : 11 January 1969
- " : 30 June 1972

13 Int. 508 - modified repro - of Japanese (JMSA) chart No.2006
This version of BA 5011 is based on the IHO publication:

“Chart Specifications of International Hydrographic Office”

adopted in 1982, with colour presentations.

The use of modern book versions of BA 5011 to interpret pre-1972 Admiralty charts is not advisable without specialist knowledge.

2. The Admiralty has published various editions of its sailing directions “China Sea Directory” (pre-1912) and China Sea Pilot since 1868. The current relevant editions of this publication are:

(i) “China Sea Pilot” - Volume I [NP. 30]

(ii) “China Sea Pilot” - Volume II [NP. 31]
4th Edition, 1975; revised and re-issued 1982

NP. 30 covers the west side of the China Sea from Tg. Lompat in peninsular Malaysia to Zhelang Yan, PRC and includes Kep Anambas, Hainan and the (western) islands and banks bordering the main route from Singapore Strait to Hong Kong, including Paracel Islands and Macclesfield Bank.

NP. 31 covers the western and north-western coasts of Borneo, the Philippines (from Balabac to Cape Bojeador) and the outlying islands and dangers in the southern and eastern parts of the China Sea. The Dangerous Ground is described in Chapter 8, with a brief description of Scarborough Reef, Truro Shoal and Stewart Bank at the end of Chapter II.

3. Other publications by the (Admiralty) Hydrographer of the Navy relevant to the Dangerous Ground include:

(i) “Co-Tidal Atlas, South East Asia” - NP. 215

(ii) “Underwater Handbook for South China and Java Seas” - NP. 623
Hydrographer of the Navy, London, 1967

NP. 215 is valuable, in conjunction with charted tidal data, for calculating approximate tidal ranges and checking predictions made with HD 289 data. It is also useful for general tidal movements in the region, if used with a comparable US-DMA Co-Tidal Range Line drawing.

NP. 623 is a comprehensive bathymetric and oceanographic handbook that was no longer on sale in 1972.
4. Considerable information can still be obtained from:

“Indian Archipelago and China Directory”
by A.G. Findlay, R.H. Laurie, London.
3rd Edn. 1889

Earlier or later editions are equally useful.

5. Although not specifically affiliated with the Admiralty, the International Hydrographic Bureau (of Monaco) published the useful document:

“General List Arranged by Oceans of Original Reports of Shoals of Doubtful Existence, and of Shoals the Positions of which are doubtful or approximate.
Part D - NORTH PACIFIC OCEAN”
(Special Publication No 20, 2nd Edn. January. 1932, I.H.B., Monaco.)

This publication has been used to cross-check some ED/PD and other reefs that certain parties claim to occupy and some of which are still shown on certain charts.

The IHB, now known as International Hydrographic Organization IHO, also publishes:

“Chart Specifications of the IHO, and Regulations of the IHO for International (INT) Charts”
MP-004

Originally published 1972; republished as a modified document in 1989-1990. Printed in six parts, and gives IHO’s specifications for compiling nautical charts, together with agreed symbols and abbreviations adopted for general use by IHO member states. Another IHO publication further codifies chart production:

“Chart INT 1 Symbols, Abbreviations, Terms used on Charts”
Republic of China - Taiwan
Chinese Navy Charts

Published by the Chinese Naval Hydrographic and Oceanographic Office, Kaohsiung, Taiwan.

<table>
<thead>
<tr>
<th>No.</th>
<th>Title</th>
<th>Publication Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>0471</td>
<td><strong>South China Sea</strong> - Northern portion 1:1,200,000</td>
<td>31 December 1980</td>
</tr>
<tr>
<td></td>
<td>- Eastern Sheet</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Based on Japanese chart JMSA No.1500 of 1967</td>
<td></td>
</tr>
<tr>
<td>0474</td>
<td><strong>South China Sea</strong> - Southern Portion 1:1,200,000</td>
<td>31 October 1974</td>
</tr>
<tr>
<td></td>
<td>- Eastern Sheet</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(General coverage of Nan-Sha Chun’Tao).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Based on Japanese chart JMSA No.1801 of 1959</td>
<td></td>
</tr>
<tr>
<td>0476</td>
<td><strong>Nan-Sha Ch’un Tao</strong> 1:750,000</td>
<td>30 April 1988</td>
</tr>
<tr>
<td></td>
<td>(From various surveys to 1974, with additions to 1986;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>originally published in 1st Edn, Oct 1953 as No. 476).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The best single sheet chart on this scale covering main</td>
<td></td>
</tr>
<tr>
<td></td>
<td>areas of The Dangerous Ground.</td>
<td></td>
</tr>
<tr>
<td>0477</td>
<td><strong>Islets of the Nan-Sha Ch’un Tao</strong></td>
<td>20 April 1954</td>
</tr>
<tr>
<td></td>
<td>- Chung-Yeh Ch’un Chiao 1:111,660</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Loia Ta Island and Reefs).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Shuang-Tzu Chiao 1:111,660</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(North Danger Island and Reefs; part IJN-chart 521-2 q.v).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Tao-Ming Ch’un-Chial 1:111,660</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Lam Kiam Cay and reefs).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Compiled from various sources to 1938 and minor corrections to</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1962.</td>
<td></td>
</tr>
<tr>
<td>0477A</td>
<td><strong>Plans in Nan-Sha Ch’un Tao</strong></td>
<td>25 December 1956</td>
</tr>
<tr>
<td></td>
<td>Total of 9 plans - as listed below:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(English names in brackets)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Chiang-Lai Chiao 1:100,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Loai-Ta - N.E. area, inc. Menzies Reef)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Chin-Lun T’an 1:100,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Union Bank area inc. Sin Cowe Island)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Apps to Fie-Hsin Tao and Ma-Huan Tao 1:60,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Nanshan Island)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Hai-K’ou An-Sha 1:100,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(N.E. Investigator Shoal)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Heng Chiao 1:100,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Southampton Reefs, Livock Is.)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Hsing-sheng Chiao 1:100,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Irving Reef)</td>
<td></td>
</tr>
</tbody>
</table>

14 Charts which follow, viz ROC Taiwan numbers 0476, 0477, 0477A and 0478 are published under the sub heading: “China - Fourth Coast Area - Kwang Tung Province”
## Notes

1. The Republic of China established the: “Bureau of Navigation Charts” as a special division of the (Chinese) Department of the Navy in 1922. See also Note 2, China-PRC charts.

2. In general terms the most detailed charts of larger islets and atolls in the Dangerous Ground are those published by ROC-Taiwan, namely:

   - BA Number 0474; General chart
   - BA Numbers 0476, 0477, 0477A and 0478; plans

3. Generally the symbols and abbreviations used on ROC-Taiwan charts follow present international custom, but in case of doubt ROC-Taiwan (Hydrographic) Publication No.1:

   “Symbols and Abbreviations used on Chinese Charts”
   Edn No.4, 1987
   Edn No.5, June 1992

   should be consulted.
People’s Republic of China - PRC
China Navigation Press

<table>
<thead>
<tr>
<th>PRC No.</th>
<th>Title</th>
<th>Publication Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>9203</td>
<td>Southern Portion of Nan Hai</td>
<td>1:2,000,000 August 1976</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(1st Edn)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>June 1984</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(2nd Edn)</td>
</tr>
</tbody>
</table>

Notes

1. PRC 5-digit series are not readily available, but from observations of these charts on salvage operations it appears that PRC 5-digit detail charts of Dangerous Ground are a mixture of Japanese, ROC-Taiwan, PRC-China Navigation Press and US charting.

2. The China Navigation Press is a lineal successor to the (Kuomintang) Republic of China, Department of the Navy’s special Bureau for Navigation Charts, originally established in 1922 at Canton. ROC-Taiwan and PRC-China both use (archival) material originally surveyed and/or collected by the Bureau for Navigation Charts.
French Charts
Service Hydrographique de la Marine (SHOM)

<table>
<thead>
<tr>
<th>SHOM No.</th>
<th>Title</th>
<th>Publication Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>Île de Palawan</td>
<td>1:1,000,000 February 1901</td>
</tr>
<tr>
<td></td>
<td>From British chart BA 0967</td>
<td>Superseded in 1986 and replaced by BA 0967</td>
</tr>
<tr>
<td>3106</td>
<td>Detroit de Balabac et cheneaux entre Borneo et Palawan</td>
<td>February 1892</td>
</tr>
<tr>
<td></td>
<td>From British surveys of 1868-69</td>
<td>Superseded</td>
</tr>
<tr>
<td>5691</td>
<td>Annam et Cochin</td>
<td>1:909,000 1945</td>
</tr>
<tr>
<td></td>
<td>(Current chart)</td>
<td></td>
</tr>
<tr>
<td>6837</td>
<td>Mer de Chine meridionale</td>
<td>1:3,500,000 1981 NE 1990</td>
</tr>
<tr>
<td></td>
<td>(Int. No.0508)</td>
<td>Derived from Japanese chart JMSA No.2006</td>
</tr>
</tbody>
</table>

Notes

SHOM does not appear to have taken any great interest in Storm (Spratly) Island until 1927 when Taiwan based Japanese interests began large-scale guano exploitation on Spratly Island. In 1927 a French Marine vessel carried out some hydrographic survey work around Spratly Island. However enquiries to SHOM indicate that no publicly available chart or plan of Spratly Island was published.

France declared formal possession of Spratly Island in April 1930; and the island was occupied by Japanese troops during March 1939.

In general terms French SHOM chart coverage of the South China Sea coastal areas has declined from a high point of 12 pages as shown in SHOM Publication No.824, dated January 1901:

“Catalogue par ordre Geographique des Cartes, Plans, Vues de Cotes, Instructions Nautiques, Memoires, etc. qui comosent L’Hydrographie Francais.”

to a two page entry in the 1994 SHOM Publication No.0004-ZKA:

“Catalogue des Cartes Marines et des Ouvrages Nautiques.”

This is of course a reflection of the generally shrinking chart coverage offered by SHOM, whose (commercial) catalogues have reduced from a four volume (fascicule) publication, numbers 4-A, 4-B, 4-C and 4-O in 1971 to the 1994 single large volume SHOM Publication No.0004-ZKA.
The cartography and layout of more recent SHOM charts follows internationally agreed conventions in this matter, but earlier charts contain a variety of symbols. For older charts it will be necessary to consult:

“Symboles et Abreviations figurant sur les cartes Marines Francais”
(SHOM Publication No. 1-D - for example - 31 January 1978).

France has published numerous editions of Sailing Directions relating to Asia under the general heading of “Mers de Chine et du Japon et Grand Archipel d’Asie”. In the year 1900 the following volumes were relevant to the South China Sea:

<table>
<thead>
<tr>
<th>SHOM No.</th>
<th>Title</th>
<th>Publication Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>661</td>
<td>“Instructions nautiques sur les Mers de Chine” (Introduction - Navigation generale).</td>
<td>8th Imprint 1883</td>
</tr>
<tr>
<td>807</td>
<td>“Mers de Chine, tome I er” (Entrees occidentales de la mer de Chine - Sumatra et canaux avoisinants).</td>
<td>8th Imprint 1900</td>
</tr>
<tr>
<td>747</td>
<td>“Mers de Chine, tome II” (Du detroit de Singapore aux approches Sud de Canton et de Hong-Kong).</td>
<td>8th Imprint 1894</td>
</tr>
</tbody>
</table>

In 1990 the SHOM Sailing Directions applicable to the South China Sea’s Dangerous Ground are:

<table>
<thead>
<tr>
<th>SHOM No.</th>
<th>Title</th>
<th>Publication Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serie K</td>
<td>“Asie du Sud-Est”</td>
<td></td>
</tr>
<tr>
<td>Vol. 4</td>
<td>“Detroits de Malacca et de Singapour, Cote est de Malaisie, Golfe de Thailande, Cotes est de la Peninsule Indochinoise”</td>
<td>1982</td>
</tr>
<tr>
<td>Vol. 7</td>
<td>“Grand Archipel D’Asie” (Cotes ouest et Nord-Est de Borneo Iles Philippines).</td>
<td>1978</td>
</tr>
</tbody>
</table>
German Charts

<table>
<thead>
<tr>
<th>Number</th>
<th>Title</th>
<th>Publication Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>298</td>
<td>“Sub Chinesisches meer”</td>
<td>August 1978</td>
</tr>
<tr>
<td></td>
<td>(Int. 508 - Deutsches Hydrographisches Institut, Hamburg - reproduced from Japanese chart JMSA No.2006).</td>
<td></td>
</tr>
</tbody>
</table>

The Deutsches Hydrographisches Institut and its successor Bundesamt für Seeschifffahrt und Hydrographie do not issue any detailed charts of the Dangerous Ground area.

Indonesian Charts

Jawatan Hidro-Oceanografi

<table>
<thead>
<tr>
<th>Number</th>
<th>Title</th>
<th>Publication data</th>
</tr>
</thead>
<tbody>
<tr>
<td>02</td>
<td>Kepulaun Indonesia dan Sekitarnya</td>
<td>November 1961</td>
</tr>
<tr>
<td></td>
<td>(inc. ‘Daerah Berbahaja’ or Dangerous Ground)</td>
<td>New Edn September 1988</td>
</tr>
<tr>
<td>38</td>
<td>Laut China Selatan - Bagian Selatan</td>
<td>November 1926</td>
</tr>
<tr>
<td></td>
<td></td>
<td>New Edn October 1978</td>
</tr>
<tr>
<td>147</td>
<td>Laut China Selatan - Pu Pu Anambas dan Pu Pu Natuna</td>
<td>January 1909</td>
</tr>
<tr>
<td></td>
<td></td>
<td>New Edn April 1982</td>
</tr>
<tr>
<td>501</td>
<td>Laut China Selatan dan Laut Natuna</td>
<td>August 1986</td>
</tr>
<tr>
<td></td>
<td>Ningga Laut Sulu dan Laut Sulawesi</td>
<td></td>
</tr>
</tbody>
</table>

Notes

1. Charts 38 and 147 were originally published by Royal Netherlands Navy(Hydrografic Dept), and have been improved by Indonesian Navy.

2. Indonesian charts and navigational publications are indexed in:

   “Katalog Peta laut dan Buku Nautika - Indonesia”

3. No Dutch charts have been listed in this Appendix as very few were relevant to area considered or during the dates covered by this Appendix.
Japanese Charts

1. Japanese Hydrographic Office (JHO) of Imperial Japanese Navy (IJN)

<table>
<thead>
<tr>
<th>JHO-IJN No.</th>
<th>Title</th>
<th>Scale</th>
<th>Publication Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>451</td>
<td>Reefs in the China Sea</td>
<td>1:111,400</td>
<td>29 May 1900</td>
</tr>
<tr>
<td></td>
<td>Direct reproduction of BA chart 1201, with identical plans. Remained in the general chart catalogue until 1945/46 but was superseded for military purposes by IJN confidential charts 521, 522 and 523 below.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>521-2</td>
<td>Hokuk Bn (North Danger Reef)</td>
<td>1:30,000</td>
<td>14 March 1938</td>
</tr>
<tr>
<td></td>
<td>Military confidential chart, on considerably larger scale than previously available on BA 1201 of 1888 which included a plan of North Danger Reef on a scale of 1:112,000.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>522</td>
<td>Nagashim Fukin (Iru Aba)</td>
<td>1:30,000</td>
<td></td>
</tr>
<tr>
<td>523-2</td>
<td>Tizato Tai (Tizard Bank)</td>
<td>1:75,000</td>
<td>29 November 1938</td>
</tr>
<tr>
<td></td>
<td>Military confidential chart. On larger scale than previously available BA 1201 of 1888 where Tizard Bank is depicted on scale 1:136,500. This chart (523-2) reflects considerable sounding work and accurate definition within lagoon, compared to BA 1201.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>524</td>
<td>Shinnn Gunto</td>
<td>1:750,000</td>
<td></td>
</tr>
<tr>
<td>525</td>
<td>Islets and Reefs in Shinnn Gunto</td>
<td></td>
<td>1938</td>
</tr>
<tr>
<td></td>
<td>A series of ten sketch plans of reefs and ilsets in the Dangerous Ground, from surveys in 1936-37. These sketch plans were subsequently reproduced on US HO 5657, dated July 1951 and ROC-Taiwan 477A of 25 December 1956 with acknowledgement to Japanese surveys. Plans on various scales.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>529A and 529B</td>
<td>China Sea - Southern Porportion, Eastern Sheet</td>
<td>1:1,550,000</td>
<td>21 December 1925</td>
</tr>
<tr>
<td></td>
<td>Direct reproduction of BA chart 2660A. Superseded by JMSA 1801 in October 1959.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
2. Japanese Maritime Safety Agency (JMSA)

<table>
<thead>
<tr>
<th>JMSA No.</th>
<th>Title</th>
<th>Publication Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>752</td>
<td>Palawan</td>
<td>1:750,000 August 1968</td>
</tr>
<tr>
<td>810</td>
<td>South China Sea</td>
<td>1:4,000,000 November 1937</td>
</tr>
<tr>
<td>1502</td>
<td>South China Sea - Southern Portion</td>
<td>1:1,200,000 December 1975</td>
</tr>
<tr>
<td></td>
<td>Superseded by JMSA 2006</td>
<td></td>
</tr>
<tr>
<td>1801</td>
<td>South China Sea - Southern portion</td>
<td>1:1,200,000 24 October 1959</td>
</tr>
<tr>
<td></td>
<td>- Eastern Sheet</td>
<td></td>
</tr>
<tr>
<td></td>
<td>From British, US, Indonesian and Japanese</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Surveys; includes eastern part of Dangerous</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ground and south to Kuching (Long. 105E to</td>
<td></td>
</tr>
<tr>
<td>2006</td>
<td>South China Sea</td>
<td>1:3,500,000 14 February 1977</td>
</tr>
<tr>
<td></td>
<td>Current Edn.</td>
<td>New Edn 15 October 1985</td>
</tr>
<tr>
<td></td>
<td>This chart is used as basis for International 1:3,500,000 series chart Int 508.</td>
<td></td>
</tr>
</tbody>
</table>

Notes


2. A complete list of Japanese charts is found in:

   “Catalogue of Charts and Publications”
   Maritime Safety Agency - Japan
   Publication No.900

   which is generally issued at two year intervals.

3. Although both IJN and JMSA charts follow British Admiralty charts in topographic style, it is advisable to consult JMSA Publication No.6011:

   “Chart Symbols and Abbreviations”

   to avoid mistaken interpretation of charted information.

4. The relevant JMSA Sailing Directions for the Dangerous Ground are:

   JMSA “South China Sea Sailing Directions” Publication 204

Prior to this date the JMSA sailing directions split the South China Sea more or less equally into two areas such that:

Publication 211 “South China Sea - Western Area”

covered area from Singapore Strait to Hong Kong, including Gulf of Thailand, Vietnam to Haiphong and the Paracel Islands, and

Publication 213 “South China Sea - Eastern Area”

covered area from Singapore Strait to Pratas Reef, including the northern coast of Borneo and the main Dangerous Ground areas.

(Publications 211 and 213 were superseded in 1988 by Publication 204).

5. JMSA also publishes a series of charts for the northern coast of Borneo which are not included in this Appendix.
South Korea
Republic of Korea Hydrographic Office

<table>
<thead>
<tr>
<th>No.</th>
<th>Title</th>
<th>Publication Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>2508</td>
<td>South China Sea</td>
<td>1:3,500,000, August 1984</td>
</tr>
</tbody>
</table>

Malaysia
Directorate of Hydrography, Department of Navy

<table>
<thead>
<tr>
<th>MAL No.</th>
<th>Title</th>
<th>Publication Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Sabah - Sarawak</td>
<td>1:1,250,000, 1 October 1991</td>
</tr>
<tr>
<td>781</td>
<td>Terumbu Semarang Barat Kechil (to) Terumbu Peninjau</td>
<td>1:300,000, 30 October 1988</td>
</tr>
<tr>
<td>4508</td>
<td>Laut China Selatan</td>
<td>1:3,500,000, 31 December 1991</td>
</tr>
</tbody>
</table>

Notes

The Malaysian Chart Catalogue (Katalog Carta Malaysia) 1994 Edition indicates that Malaysia plans to publish the following charts that include substantial coverage of the southern areas of the Dangerous Ground:

MAL 78 “Sarawak - Laut China Selatan”
Scale 1:750,000
This chart will also carry the International chart series designator INT 5060.

MAL 89 “Sabah - Laut China Selatan”
Scale 1:750,000
This chart will carry International chart series designator INT 5061

Malaysian charts are published to conform with IHO specifications, and the Malaysian publication “Malaysian Symbols and Abbreviations, MAL-1”.

An examination of details around Ardasier bank and Reef on chart MAL 781 shows colouring/shading used to indicate depths should be interpreted from the colour shades used in “MAL 1”, not BA 5011.
### Philippines

Coast and Geodetic Survey Department of
National Mapping & Resource Information Authority (NAMRIA)

<table>
<thead>
<tr>
<th>NAMRIA No.</th>
<th>Title</th>
<th>Scale</th>
<th>Publication Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>4200</td>
<td>Philippines</td>
<td>1:1,575,000</td>
<td>19 December 1960 (1st Edn)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2 December 1968 (2nd Edn)</td>
</tr>
<tr>
<td>4200</td>
<td><strong>Philippines</strong></td>
<td>1:1,575,000</td>
<td>New Edn.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>13 February 1984</td>
</tr>
<tr>
<td>4203</td>
<td><strong>Philippines</strong> - Western Part</td>
<td>1:1,575,000</td>
<td>1 January 1989</td>
</tr>
<tr>
<td>4707</td>
<td><strong>Philippines</strong> - South Western Part</td>
<td>1:808,000</td>
<td>5 November 1984</td>
</tr>
<tr>
<td>4716</td>
<td><strong>Palawan</strong></td>
<td>1:402,000</td>
<td>10 November 1975</td>
</tr>
<tr>
<td>4720</td>
<td><strong>Balabac Strait and approaches</strong></td>
<td>1:405,200</td>
<td>16 July 1979</td>
</tr>
</tbody>
</table>

### Notes

The NAMRIA C & GS Chart Index ascribes both English and Tagalog (Philippine) names to various reefs/islands in Dangerous Ground/Kalayaan Islands, as far west as London (Quezon) Reef, approx Long. 112-15 East.

The Philippines Chart Catalogue does not list any published detail or island/reef charts for the Philippines-claimed area of the Dangerous Ground.

Philippines publishes two volumes of Sailing directions, viz:
- Philippine Coast Pilot - Part I
- Philippine Coast Pilot - Part II

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15 This chart, as published in its 1st Edn. and its 2nd Edn. only shows (Philippine) International Treaty Limits and makes no boundary claims into the Dangerous Ground.
Russian - USSR Charts
Glavnoe Oupravlenie Navigatsii I Okeanografi

<table>
<thead>
<tr>
<th>GONIO NR.</th>
<th>Title</th>
<th>Scale</th>
<th>Publication Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>66480</td>
<td>Tizard Bank and Reefs</td>
<td>1:75,000</td>
<td>10 June 1980</td>
</tr>
</tbody>
</table>

Although not stated on chart this publication is very similar to ROC-Taiwan chart 0478, or earlier IJN chart 523-2. Current Edn

Notes

1. All civilian-use charts produced by Russia/CIS are listed in:

   “Catalogue of Charts and Publications of Glavnoe Oupravlenie Navigatsii I Okeanografi”.
   Publication Nr. 7007.2, issued/dated 1992
   GONIO, St Petersburg

   All (civilian-use) charts relevant to South China sea are listed in Region 8 Index of Publication 7007.2, which includes charts for Macclesfield Bank and the Paracel Islands.

   (Russia’s GONIO also produces a restricted (military) chart catalogue, Publication No. 7022, latest Edn. 1992, which contains some restricted charts of Vietnam ports and port approaches)

2. In many respects Russian chart symbols and abbreviations are similar to German charts, but use of Cyrillic symbols can cause confusion. If the official Russian Publication No. 7008.1 is not available the US (DMA) publication:

   “USSR Chart Symbols and Abbreviations”
   WOBZ-C4 Edn No.3 of November 1962

   is an acceptable substitute. Alternatively the Deutsches Hydrographisches Institut Publication INT 1 can be used, provided due care is taken.
Spanish Charts

Notes

1. No Spanish Charts of area have been listed in this section, since most surveys pre-date 1880, and are generally on the Palawn Passage edge of the Dangerous Ground.

2. Spanish charts of the Philippines coastal area adjacent to the Dangerous Ground circa 1900 are listed in:

   “Catalogo de las Cartas, Planos Y Libros de Venta en la Direcccion de Hidrografía”
   (1902 Edition)

published by Direcccion of Hydrografía, Madrid, and first produced in 1857. The Catalogo is arranged geographically and printed on an A-4 type format. South China Sea charts are listed at Section 6.
Introductory Notes

1. Prior to the Second World War there were three principal navigational chart producing organisations in the United States. These agencies and their areas of charting responsibility were:

   - US Army Corps of Engineers (ACoE)
     US mainland intra-coastal waterways, upper reaches of main navigational rivers and some port area charts and plans.

   - US Coast & Geodetic Survey (C & GS)
     Coastal and river charts, harbour approach, port plans and coastal sailing directions of US mainland and US overseas possessions and/or areas where the US government had interests, such as the Philippines.

   - US Navy Hydrographic Office (USN-HO or USHO)
     Ocean and coastal navigational charts, plans and sailing directions of ocean areas which included approaches to the continental US and Alaska.

The agencies producing charts covering the South China Sea area prior to the Second World War were C & GS for Philippines coastal waters and USHO for the ocean and non-Philippine coastal waters. Only USHO charts are listed in Section 1 of US chart list.

USHO was also responsible for production of navigational publications and sailing directions. The USHO publications concerning South China Sea immediately post-Second World War were:

- HO Pub 124 “Coast of China - Yalu River to Hong Kong/Canton”
  (Including Yangtze River, the coasts of Taiwan and Pescadores Islands.)

- HO Pub 125 “Western Shores of the China Sea”
  (Singapore to Hong Kong)

- HO Pub 126 “Soenda Strait and Western Coast of Borneo and Off-Lying Islands”

These publications were subsequently re-numbered after 1951 such that the following numbers were allocated to Sailing Directions:

- HO Pub 71 “Soenda Strait and West Coast of Borneo and Off-Lying Islands”

- HO Pub 92 “Philippines”
Chapter 2 of HO Pub 93 entitled “Outlying Islands, Banks and Dangers of the South China Sea” contained the best modern descriptions and sketches then (1957) available of the Dangerous Ground.

2. Following a reorganisation of US charting responsibilities in 1970, there were three navigational chart producers, as listed below:

- US Army Corps of Engineers (ACoE)  
  Retaining its US mainland charting responsibilities as described above.

- US Defense Mapping Agency (DMA)  
  Subsumed the responsibilities of all charting areas and sailing directions previously serviced by either USHO or its successor in functions US Naval Oceanographic Office (NOO) with some additional charting regions added. The DMA is more correctly described by its parent, US Department of Defense, as:

  ‘Defence Mapping Agency Hydrographic/Topographic Centre’

Until late 1992 US charts and sailing directions of the South China Sea were produced by DMA, as listed in Section 4 of US charts in the following list.

Under the DMA’s world-wide ‘regional’ geographical system, charts of the South China Sea are listed under Region 9.

- National Oceanic and Atmospheric Administration (NOAA)  
  In effect the US Department of Commerce, which previously controlled the US Coast and Geodetic Survey, transferred all C & GS charting responsibilities to NOAA. Apart from some general oceanographic charts NOAA did not produce any charts or plans relevant to South China Sea.

3. The public sale distribution of Defense Mapping Agency (DMA) nautical charts and publications was transferred to National Oceanographic and Atmospheric Administration (NOAA) with effect from autumn 1992. As a result NOAA re-vamped previous DMA catalogues starting with DMA Catalog Part 2, Vol. I - Nautical Charts and Publications (DMA-NC). The new DMA-NC is still subdivided into nine sections, and East Asia (inc. South China Sea) is contained in

  “DMA-NC 9 Region 9 - East Asia”
  Nautical Charts and Publications
  NOAA’s National Ocean Service
  1st Edn 1992-93

4. The South China Sea area is described in two DMA principal publications:

  Pub 160 “Sailing Directions (planning Guide) for South East Asia”
Pub 161 "Sailing Directions (en-Route) for the South China Sea and Gulf of Thailand"

Pub 160 is currently (1994) in its 3rd Edn (1991) and the present edition of Pub 161 is the 6th Edn of 1994. Pub 161 contains a useful Index-Gazeteer in which navigational features and place-names are listed alphabetically, together with an approximate position. Geographical names in DMA charts and publications are generally those used by the nation having sovereignty. Alternate names, given in parentheses, appear on some charts and publications.

The Dangerous Ground is described in Chapter 1 of Pub 161, but some of the sketch plans of atolls and reefs should be used with caution.

Pub 161 also contains a comprehensive Chinese Hydrographic Names directory, arranged in ‘Wade-Giles to Pinyin’ and ‘Pinyin to Wade-Giles’ format between pages 221 to 240.

The best medium scale general chart coverage of the Dangerous Ground available from any charting agency are the DMA’s (NOAA) 1:250,000 series charts listed below:

<table>
<thead>
<tr>
<th>Chart No</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>93044</td>
<td>Yongshu Jiao to Yongdeng Ansha</td>
</tr>
<tr>
<td>93045</td>
<td>Heng Jiao to Haima Tan (Routh Shoal)</td>
</tr>
<tr>
<td>93046</td>
<td>Mantangule Island to Eran Bay</td>
</tr>
<tr>
<td>93047</td>
<td>Yongshu Jiao to P’o-Lang Chiao</td>
</tr>
<tr>
<td>93048</td>
<td>Duhu Ansha (North Viper Shoal) to Kimanis Shoal</td>
</tr>
</tbody>
</table>

Unfortunately the south western sector chart, 93047, does not extend far enough westwards to include Spratly Island, Ladd Reef, or Rifleman Bank.
### United States of America

#### 1. US Hydrographic Office

**Post 1900**

<table>
<thead>
<tr>
<th>Number</th>
<th>Title</th>
<th>Publication Data</th>
</tr>
</thead>
</table>
| 2786   | **Reefs in the China Sea**  
- Loai Ta Island and Reef  
- North Danger  
- Thi Tu Island and Reefs and Subi Reef  
- Tizard Bank and Reef  
From British surveys of 1867 and 1868; basically a copy of BA 1201.  
Superseded by HO 2786 of 1944. | November 1911  
(1st Edn) |
| 2786   | **Reefs in South China Sea**  
- Thitu Island and Subi Reefs  
- Loaita Bank and Reefs  
Both from Japanese and British surveys between 1867 and 1938.  
Superseded by DMA chart No.93061, on 21 September 1970 which also included plans of ‘Tizard bank and Reefs’ and ‘Loaita Island and Reefs’, based on corrected Japanese surveys. | 8 August 1944  
(4th Edn) |
| 5498   | **Mui Bai Bung to Mui Da Nang**  
Includes all Dangerous Ground north of Rifleman Bank, and extends north to Macclesfield Bank and Triton Shoal in Paracels.  
Superseded chart; replaced by DMA No.93030. | 8 July 1967  
(1st Edn) |
| 5501   | **South China Sea - South Western Part**  
Includes southern area of Dangerous Ground, inc Rifleman Bank, Ardasier Reef, Spratly Island.  
Superseded chart; replaced by DMA No.71027. | 10 May 1966  
(2nd Edn) |
| 5649   | **Dangerous Ground, Palawan Passage to London Reefs**  
US Naval reconnaissance survey in 1935  
Both 1935 and 1937 editions of this chart were classified as “Confidential”. | December 1935  
(1st Edn)  
and,  
1937  
(2nd Edn) |
<table>
<thead>
<tr>
<th>Number</th>
<th>Title</th>
<th>Publication Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>5657</td>
<td>South China Sea - Plans in the Dangerous Ground</td>
<td>8 July 1951 (1st Edn)</td>
</tr>
<tr>
<td></td>
<td>- Amboyna Cay</td>
<td>1:7,500</td>
</tr>
<tr>
<td></td>
<td>- Irving Reef</td>
<td>1:100,000</td>
</tr>
<tr>
<td></td>
<td>- Itu Aba and Tizard Bank</td>
<td>1:15,000</td>
</tr>
<tr>
<td></td>
<td>- Nanshan Island and Flat Island</td>
<td>1:60,000</td>
</tr>
<tr>
<td></td>
<td>- North East Investigator Shoal</td>
<td>1:100,000</td>
</tr>
<tr>
<td></td>
<td>- Southampton Reefs *</td>
<td>1:100,000</td>
</tr>
<tr>
<td></td>
<td>- Spratly Island *</td>
<td>1:15,000</td>
</tr>
<tr>
<td></td>
<td>- Trident Shoal *</td>
<td>1:100,000</td>
</tr>
<tr>
<td></td>
<td>- Union Bank and Reefs</td>
<td>1:150,000</td>
</tr>
<tr>
<td></td>
<td>- Menzies Reef</td>
<td>1:100,000</td>
</tr>
</tbody>
</table>

Derived from Japanese surveys between 1936 and 1937 on Japanese HO 525, with Itu Aba from BA 1201 and Japanese HO 523.
Superseded chart; plans marked * were not reissued on DMA 93061.

| 5658   | Plans in South China Sea | October 1950 (1st Edn) |
|        | - Jackson Atoll | 1:75,000 |
|        | - Mischief Reef | 1:50,000 |
|        | - North Danger Reef | 1:30,000 |
|        | - South Entrance to Mischief Reef | 1:12,500 |

Jackson Atoll and Mischief Reef from surveys by HMS Herald - 1933
North Danger Reef from Japanese survey in 1936
Originally issued as a “Confidential” chart, derived from BA Secret Chart F.6064 and Japanese chart S-521 (IJN chart No.521-2).
Superseded chart; replaced by DMA 93042 of same title (new edition) 16 March 1985.

| 5659   | Tizard Bank and Reefs | October 1950 (1st Edn) |
|        | 1:75,000 |

From Japanese surveys in 1936 and 1937, resulting in IJN S-523
Superseded chart; renumbered and published 1974 as DMA 93043.

| 14705  | South China Sea | 1:1,031,800 |

Northern Portion, including Luzon and Taiwan.
Also listed as BC 14705 in 1965. Superseded by DMA 91010.

If using older USHO or US Naval Oceanographic Office charts it is advisable to check all symbols/abbreviations used on those charts with:

USNOO/US C & GS Chart No 1
“Nautical Chart Symbols and Abbreviations”
(Edn of September 1963 is most suitable)
## United States of America

2. Defense Mapping Agency (DMA)

<table>
<thead>
<tr>
<th>DMA No.</th>
<th>Title</th>
<th>Publication Data</th>
</tr>
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<tbody>
<tr>
<td>WOPGN 508</td>
<td><strong>South China Sea</strong></td>
<td>1:3,500,000, July 1983</td>
</tr>
<tr>
<td></td>
<td>US version of Int 508</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Current Edn</td>
<td>(1st Edn)</td>
</tr>
<tr>
<td>WOPGN 550</td>
<td><strong>Gulf of Thailand to Taiwan,</strong></td>
<td>1:2,802,000, 1 May 1982</td>
</tr>
<tr>
<td></td>
<td>inc the Philippines</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Current Edn</td>
<td>(6th Edn)</td>
</tr>
<tr>
<td>WOPGN 632</td>
<td><strong>Strait of Malacca to Banda Sea,</strong></td>
<td>1:2,802,000, August 1981</td>
</tr>
<tr>
<td></td>
<td>inc South China Sea, Java Sea and Celebes Sea</td>
<td></td>
</tr>
<tr>
<td>71027</td>
<td><strong>Paulu Bintan to Mui Ca Mau,</strong></td>
<td>1:1,091,700, 21 May 1983</td>
</tr>
<tr>
<td></td>
<td>inc North Coast of Borneo and adjacent islands.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>From various sources to 1969</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Omega overprinted)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lat 01° N to Lat 09° N / Long 103°-30’ to 115°-30’ E</td>
<td></td>
</tr>
<tr>
<td>92006</td>
<td><strong>Philippines - Southern Part</strong></td>
<td>1:1,089,900, 12 July 1975</td>
</tr>
<tr>
<td></td>
<td>(Loran C overprint)</td>
<td></td>
</tr>
<tr>
<td>93030</td>
<td><strong>Mui Bai Bung to Mui Da Nang</strong></td>
<td>1:1,071,000, 15 March 1980</td>
</tr>
<tr>
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<tr>
<td></td>
<td>From various sources to 1970</td>
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<tr>
<td>93042</td>
<td><strong>Plans in South China Sea</strong></td>
<td>1:30,000, 16 March 1985</td>
</tr>
<tr>
<td></td>
<td>- North Danger Reef</td>
<td></td>
</tr>
<tr>
<td></td>
<td>From Japanese survey of 1936; see IJN 521-2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Jackson Atoll and Mischief Reef surveys by HMS</td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>Herald</em> 1936</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Re-issued version of (US) HO No 5658, first published</td>
<td></td>
</tr>
<tr>
<td></td>
<td>October 1950</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Jackson Atoll</td>
<td>1:75,000</td>
</tr>
<tr>
<td></td>
<td>- Mischief Reef</td>
<td>1:50,000</td>
</tr>
<tr>
<td></td>
<td>- South Entrance to Mischief Reef</td>
<td>1:12,500</td>
</tr>
<tr>
<td>93043</td>
<td><strong>Tizard Bank</strong></td>
<td>1:75,000, October 1950</td>
</tr>
<tr>
<td></td>
<td>From Japanese survey HO chart 1936/1937 S.523, based</td>
<td></td>
</tr>
<tr>
<td></td>
<td>on IJN surveys 1936-1937.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Re-issued/renumbered version of HO 5659.</td>
<td></td>
</tr>
<tr>
<td>93044</td>
<td><strong>Yongshu Jiao to Yongdeng Ansha</strong></td>
<td>1:250,000, January 1982</td>
</tr>
<tr>
<td></td>
<td>inc details Chin-lun Tan (Union Tablemount)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>From ROC-Taiwan charts numbers:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0474, 0476, 0477, 0477A and 0478 and miscellaneous</td>
<td></td>
</tr>
<tr>
<td></td>
<td>data.</td>
<td></td>
</tr>
<tr>
<td>DMA No.</td>
<td>Title</td>
<td>Publication Data</td>
</tr>
<tr>
<td>---------</td>
<td>-------</td>
<td>------------------</td>
</tr>
<tr>
<td>93045</td>
<td><strong>Heng Jiao to Haima Tan (South Shoal)</strong> (Southern Banks area, Nansha Qundao) From Philippine chart C &amp; GS No 4716 of 1959 and ROC-Taiwan No 0476, 1953 Edn, and miscellaneous data.</td>
<td>8 June 1982 (1st Edn) 9 June 1984 (2nd Edn)</td>
</tr>
<tr>
<td>93046</td>
<td><strong>Mantangule Island to Eran Bay</strong> (Principal reefs Ardasier west to Hsi Chiao) From ROC-Taiwan chart number 0476 of 1953 and Philippine C &amp; GS chart numbers 4324 (1958), 4325 (1958), 4326 (1960), 4716 (1953) and 4720 (1960).</td>
<td>5 June 1982 (1st Edn)</td>
</tr>
<tr>
<td>93047</td>
<td><strong>Yongshu Jiao to P'o-Lang Chiao</strong> (Principal reefs in vicinity of Ardasier and north-westwards) From ROC-Taiwan Nos 0474 (1974) and 0476 (1953) and miscellaneous data Contains a ‘Glossary of Secondary Names’ giving Pinyin as ‘primary’ and English name as ‘secondary’ title.</td>
<td>June 1982 (1st Edn) 14 April 1984 (2nd Edn)</td>
</tr>
<tr>
<td>93048</td>
<td><strong>Duhu Ansha (North Viper Shoal) to Kimanis Bay</strong> From US and British charts to 1975.16</td>
<td>10 November 1982 (1st Edn)</td>
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<td><strong>Reefs in the South China Sea</strong> - Loaita Island and Reefs (Fathom Chart) - North Danger Reef - Thitu Island and Reefs and Subi Reefs - Tizard Bank and Reefs From British and Japanese Surveys between 1867 and 1938. By October 1976 plans of ‘North Danger Reef’ and ‘Tizard Bank and Reefs’ were stamped ‘Cancelled’ as ‘North Danger Reef’ was on DMA 93042 and ‘Tizard Bank’ was on DMA 93043.</td>
<td>August 1944 (4th Edn) (Revised 21 September 1970)</td>
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</table>

**Notes**

1. The majority of US-DMA chart coverage of South China Sea is contained in Portfolio No.93, “South China Coast to East Coast of Malay Peninsula”, although it may be necessary to draw some charts from Portfolio No.91 “Philippines (Northern Part)” and Portfolio No.92 “Philippines (Southern Part)” to complete coverage.

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16 Chart 93048 “Duhu Ansha (North Viper Shoal) to Kimanis Bay” is unusual in that it uses in its title (North Viper Shoal) a feature that is classified as ‘Existence Doubtful’ (ED) and also shows Glasgow Reef. Chart MAL 6 shows North Viper Shoal with the notation ‘ED’, and Glasgow Reef as an un-named feature. Glasgow Reef is also clearly shown, and named as such on chart 93046 “Mantangule Island to Eran Bay”.

2. US-DMA charts and publications for South China Sea area were previously listed in:

“Defense Mapping Agency Catalogue of Maps, Charts and Related Products, Volume IX, East Asia”
(Generally referred to as “Region 9 Catalogue”)

but are now found in DMANC-9 (See Note 3 in Introductory Notes to US chart listing).

3. Certain charts, indicated by green margins and lettering in older/superseded DMA catalogues were only issued to authorised Dept of Defense users, or to others on the basis of validated need. There were no ‘green charts’ listed in CATP 2, Vol 9 relevant to the Dangerous Ground, from 1970 onwards. However some USHO and/or US naval Oceanographic Office charts, including HO 5658 “Plans in South China Sea” (Jackson Atoll, Mischief Reef, North Danger Reef etc) were “Confidential” charts unavailable to non-Dept of Defense users.

4. Another small scale, useful outline chart is WOXZP-6137 - “Display Plotting Chart, for South China Sea” - on a scale of 1:4,383,000 = 1 inch per degree of longitude; it is a useful general reference for some purposes.

See DMA CAT-PB 1NA (Pub 1-N-A).
Vietnam

No Vietnamese charts have been consulted as observations at and discussions with Director (General) Le Ming Cong of VISAL indicate Vietnam uses a mixture of US-DMA and French charts, with some copies of British charts also in use.

It is highly probable that Vietnam has some surveys and restricted circulation hydrographic data for some of the areas it claims or occupies in the Dangerous Ground. It is also possible that the original reason for obtaining the Russian vessel Nevel'skoy was for its designed oceanographic and hydrographic purpose. Nevel’skoy was the only naval oceanographic research ship (other than Vladimir Kavrayskiy) ever built in the Soviet Union, and appears to have been a prototype for the Nicholay Zubov class.

VISAL-6, ex-Nevel’skoy, has been laid-up for some time, and Le Ming Cong did not appear to place ocean or coastal hydrography very high on his priority list.
Sketch Surveys in Dangerous Ground

Notes

1. These sketch surveys are held by David Hancox and can be obtained by contacting him.

2. The majority of sketch surveys are done on a 1:50,000 scale, although some variations to scales occur on surveys, depending on locality.

3. Surveys and examinations were generally controlled using Barr & Stroud range finder, radar and combinations of vertical and horizontal sextant angles.

4. Owing to lack of ship-borne helicopters in later 1960s, and more latterly ‘suspicious’ residents there has not been much opportunity to take aerial photographs of reefs and atolls in the Dangerous Ground.

5. All names used are the accepted English charted titles of the island, atoll or shoal concerned.

6. Names in inverted commas under a particular atoll, cay or reef are the names of a ship or marine casualty on that feature from which sketch surveys are derived.

Name of Atoll, Cay or Reef:

Alicia Annie
- See also sketch in Pub-161, page 17.

Alison Reef
- General sketch and leads to cay.

Amboyna Cay
- Sketch survey

Amy Douglas Reef
- (Iroquois Reef area).

Ardasier Bank
- General survey ‘Sea Spray’ files.
- Surveys for moorings.
- Survey sketches confined to south-western area.

Ardasier Reef
- Sketch survey of anchorage and entrance.
Barque Canada Reef
- See also USHO sketch survey in HO Pub 93.

Bittern Reef
Also known as “Maralie Reef”.
- Sketch survey of reef limits.
- Sketch survey, north east area.
- See also DMA Pub 161, page 21.

Bombay Castle - as part of Rifleman Bank
- ‘Geronimo’ casualty file.

Bombay Shoal
- ‘Salvonia’ file sketches, and photographs.
- Sketch surveys around ‘Pompadour’.

Central Reef
- Sketch surveys 1968, revised 1976.

Collins Reef, (in Union Banks)
- See Johnson Reef.

Commodore Shoals
- Two sets of sketch plans.
- Anchorage diagram for ‘FPSO-I’

Cuarteron Reef
- Surveys ‘Rendsburg’ casualty, and tidal observations.

Dallas Reef
- See also Ardasier sketches.
- Sketches/photos ‘Cherry Vinter’ casualty.

Discovery - Great Reef
- See AX-47 surveys, reproduced Pub-161, page 15.

Eldad Reef - Eastern edge Tizard Bank
- Sketch surveys - passage entrance.

Erica Reef
- Sketches only.

Fiery Cross Reef
Also known as North West Investigator Reef.
- ‘Thames Breeze’ surveys.
- Sketches from ‘Golden Cape’ Bridge Book.
- Data from tidal observations ‘Huntingdon’.
First Thomas Shoal

Flat Island
- Sketches in *Nanshan Group* folio.

Flora Temple Reef
- See *Western Reef*

Gaven Reefs
- See *Tizard Bank* sketches.
- 

Grainger Bank
- See ‘*Vesthval*’ survey sketches.
- Also ‘*Alexandra*’ Anchorage.

Half Moon Shoal
- Sketch survey, also reproduced in Pub-161, page 16.

Hardy Reef
- Rough sketches only.

Herald Reef
- See *South Luconia* surveys for SSP/BSP.
- ‘*Djatibrono*’ bank examinations.
- ‘*Jiun Ting*’ surveys.
- Pipelay route diagrams, surveys, calculations on pipe laying radius bends etc.

Holiday Reef
- See *Union Bank* surveys.

Hopkins Reef
- See *Amy Douglas* sketch surveys.

Hopps Reef
- See *Southampton Reefs* sketches.

Investigator North East Shoal

Investigator Shoal
- Based on US sketches.
- ‘*Anemasse*’ survey sketches.

Iroquois Reef
- See *Amy Douglas Bank* sketches.
Izu Aba Island
- See both Japanese chart and BA 1201, plus ROC-Taiwan surveys. Anchorage sketches and approaches.
- Also revised sketch Pub-161, page 14.

Johnson Reef
- See Union Banks survey.
- See also page 86c-’HO 93’ and sketch in Pub-161, page 19.

Ladd Reef
- ‘Chiei Maru’ sketch surveys.
- ‘Tuscan’ sketch survey.

Lan Kiam Cay
- Loai Ta Reef sketches.

Livock Reef
- See Southampton Reef sketches.

Loai Ta Bank
- Sketches of South West Cay
- BA and ROC chart plans.

Loai Ta Island
- BA 1201 and other charts, plus entrance sketches.
- ‘Steel Vendor’ sketch surveys and aerial photos.

London Reefs
- Sketches Central, East and West Reefs

Loveless Reef
- See Union Bank sketches and chart.

Luciona Shoals
- See Connell, Herald and Stigant Reefs.
- SSP and BSP topographic and hydrographic drilling maps.

Lys Shoal
- See also Trident Shoal
- ‘Safina-E-Najam’ surveys

Maralie Reef
(US name Bittern Reef)
- Sketch only, and not very good.

Mariveles Reef
- Sketch surveys
- See also Pub-161, page 21.
Menzies Reef
- Sketches only.

Mischief Reef = Mischief Shoal
- Sketches and chart copies US-DMA 93042.
- Sketch survey on BA and Japanese IJN survey.

Namvit Island

Nanshan Island
- Sketch, plus Japanese and ROC plans.

North Danger
- Sketch of cay, entrance leads from ‘Safina-E-Najam’ file.
- See also BA 1201; and USHO sketches from ‘Iroquois’ surveys (1926).

North Luconia Shoal
(Consisting of Aitken, Buck, Hardy, Moody and Seahorse shoals.)
- Sketch and Shell (BSP) topographic maps.

North Reef
- See North Danger sketches.

North-East Cay
- See North Danger sketches

Orleana Shoal
- See Rifleman Bank sketch.

Pearson Reef
- ‘Selatan Dua’ surveys.
- See also Pub-161, page 20.

Pennsylvania Reef
- Sketches only, circuit and ‘running survey’, inaccurate.

Petley Reef
- See Tizard Bank main sketches.

Pigeon Reef
BA name Tennent Reef
- Sketch of anchorage and boat passage.
- See page 88a, HO-93, also Pub-161, page 21.

Prince of Wales Bank
- Sketch of 4 fathom reef area.
Rifleman Bank
- See sketches for Bombay castle and Orleana shoals.

Royal Captain Shoal
- M/Salvtug ‘Winson’ surveys.
- M/Salvtug ‘Maria Rosello’.
- ‘Donada’ surveys.
- ‘Shannon’ surveys.

Royal Charlotte Reef
- Sketch survey ‘Cherry Vinter’
- Construction Proposal SSP maps of area.

Sabina Shoal
- Enlarged detail from ‘Frederich Engels’ surveys.
- ‘Farallon Glory’ surveys.

Sand Cay
- See Tizard Bank sketches.

Seahorse Breakers
- Shell/BSP surveys and constructors surveys.

Seahorse Shoal
Also known as ‘Routh Breakers’ on BA charts.
- Enlarged sketch survey from US and BA charts.

Second Thomas Shoal
- Sketch surveys based on US data, entrances to lagoon.
- Also Pub-161, page 17.

Sin Cowe Island
- Sketch of East Entrance, cay and general approaches.

South Luconia Shoals
- See ‘Aeakos’ survey on Richmond Reef.

Southampton Reefs
- See Hopps Reef plan.
- See Livock Reef sketches.

Southern Bank
- See sketch survey Foulerton Patch.

Spratly Island
- Sketch survey ‘Spratly Anchorage’ - with leads and anchorage.
- See BA 1201 - (1951 Dampier surveys).
- See USHO 5657 - includes plan of Spratly island.
Stigant Reef
- See South Luconia Shoal

Subi Reef
- See BA 1201.
- Sketch survey of cay entrance.
- Charted on US ROC-Taiwan, and Japanese IJN charts.

Swallow Reef
- See sketch surveys
- Salvage file ‘Cherry Vinter’.

Third Thomas Shoal
- See sketch survey.
- Noted as Hopkins Reef on our sketches.

Thitu Island and Reefs
- See BA 1201.
- Also JMSA and USHO charts.
- Sketch survey of anchorage.

Tizard Bank
- Sketch survey of anchorage.
- See also BA 1201 and derivatives in JMSA/IJN charts, ROC surveys.

Trident Shoal
- See sketch survey ‘Capetan Costis I’ August 1966.
- ‘Safina-E-Najam’ salvage files.
- Trident Shoal not to be confused with Triton Shoal/Island, otherwise known as ‘Treasure’ or ‘Not Again’ Island, lying south-west of Paracel Islands.

Union Banks and Reef
- See sketches in Sin Cowe Island.
- JMSA, ROC and USHO/US-DMA charts.

Vanguard bank
- Anzuk delineation sketches, and target moorings.

West London Reef
Also known as ‘West Reef’
- Sketch plans of cay entrances.

West York Island
- BEJ’s notes/sketches.
- Sketch and views of cay in Golden Cape’s Bridge Book.

Western Reef
- Sketch surveys made from two passages.
### Appendix III: Geographical Index

Features such as islands, rocks, reefs and shoals are listed alphabetically followed by the number of the entry in the descriptive section.

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Findlay, A.G. (1869 and 1889) *A directory for the navigation of the Indian Archipelago and the coast of China from the Straits of Malacca and Sunda, and the passages east of Java, to Canton, Shanghai, the Yellow Sea and Korea*, London: Richard Holmes Laurie, First and Third editions.


\(^{17}\) Curiously while he was up a tree with a mobile telephone!

\(^{18}\) This book was never released by the Admiralty and few copies have survived outside the Hydrographic Office archives.


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¹⁹ This is one sheet containing three maps of Spratly Islands (1:2 millions), Paracel Islands (1:800,000) and South China Sea (1:8.5 millions) with a list of place names in English, Chinese, Malaysian, Filipino, Vietnamese and French on the reverse.
Annex 257

Maritime Southeast Asia to 1500

Lynda Norene Shaffer

M.E. Sharpe
Armonk, New York
London, England
Metallurgy

Mainland Southeast Asia was also one of the earliest sites of bronze production. Bronze objects uncovered in northeast Thailand were once dated to 3600 B.C.E., but in recent years such early dates have been questioned. Some authorities now say that bronze was first manufactured in the region around 1500 B.C.E., in northern Thailand and Vietnam. Nevertheless, a recent report indicates that there are traces of copper production in central Thailand several centuries prior to 2000 B.C.E. (Bellwood, 1992: 121, 119). Although many more years may pass before the evidence is sorted out, even a date of 1500 B.C.E. for bronze metallurgy is early when compared to the corresponding date for most parts of the world.

Southeast Asian metallurgists took advantage of bamboo, using the hollow segments in the plant’s trunk to make a fire-piston capable of producing the high temperatures needed to liquefy ores (Sutaarga, 1971: 9–10). The finest products of this tradition of metalworking are large and exquisitely crafted bronze drums manufactured by people of the Dongsan culture in northern Vietnam from about the fifth to the first century B.C.E. The decorations on the drums, produced by the lost-wax method, portray various economic and political activities, thereby providing an invaluable window into Dongsan culture (Bellwood, 1992: 122–24).

The Malay Sailors

It is difficult to say precisely when, but by some point in the first millennium B.C.E. the Malay peoples were already intrepid sailors, traveling long distances. Pottery that belongs to the Sa-huynh-Kalanay tradition of Vietnam (dating to ca. 750–200 B.C.E.) has been found in many parts of Southeast Asia, not only in Vietnam but also in Thailand, the Philippines, Malaysia, and Indonesia (Glover, 1979: 178). It was also the Malay sailors who were responsible for the widespread distribution of northern Vietnam’s Dongsan drums to various parts of maritime Southeast Asia, beginning sometime around 300 B.C.E. So far, the Philippines and the island of Kalimantan are the only places in the region where these drums have not been found (Bellwood, 1992: 122–24).

The Malay sailors were highly skilled navigators, sailing over the oceans for thousands of miles without a compass or written charts.
They navigated by the winds and the stars, by the shape and color of the clouds, by the color of the water, and by swell and wave patterns on the ocean's surface. They could locate an island when they were still something like 30 miles from its shores by analyzing the behavior of various birds, the animal and plant life in the water, and the patterns of swells and waves (Taylor, 1976: 30, 45-46). This complex knowledge was passed on orally from generation to generation.

By the third century B.C.E. the Chinese had taken notice of Malay sailors approaching their shores from the "Kunlun" Islands in the southern seas, which the Chinese learned were "volcanic and invariably endowed with marvelous and potent powers" (Taylor, 1976: 32-33). In the Malay worldview, both the mountain heights and the depths of the sea were the site of powerful forces both generous and devastating. The highest reaches of the mountains were holy places, the home of ancestral souls, while the sea contained dangerous spirits that had to be propitiated and then enlisted in one's cause. The Chinese also knew these islanders as builders and as the crews of ocean-going vessels engaged in long-distance overseas trade. The Chinese, in fact, appear to have learned much from these sailors. The Malays independently
invented a sail, made from woven mats reinforced with bamboo, at least several hundred years B.C.E., and by the time of the Han dynasty (206 B.C.E. to 221 C.E.) the Chinese were using such sails (Johnstone, 1980: 191–92).

Chinese descriptions of Malay ships, the earliest of which dates to the third century C.E., indicate that the Malay sailed jongs (a Malay word), large vessels with multilayered hulls. The English word junk, which is often used to refer to Chinese vessels, is a derivative of the Malay jong. The Chinese also recognized that their word for Kunlun ships, büo, was a foreign word that had been incorporated into Chinese (Manguin, 1980: 266–67, 274). On average, the jong could carry four to five hundred metric tons, but at least one was large enough to carry a thousand tons. The planks of the ships were joined by dowels; no metal was used in their construction. On some of the smaller vessels parts might be lashed together with vegetable fibers, but this was not typical of larger ships. The jong usually had from two to four masts plus a bowsprit, as well as two rudders mounted on its sides. Outrigger devices, designed to stabilize a vessel, were used on many ships but probably were not characteristic of ships that sailed in rough oceans (Manguin, 1980: 268–74).

The Malays were also the first to use a balance-lug sail, an invention of global significance. Balance-lugs are square sails set fore and aft and tilted down at the end. They can be pivoted sideways, which makes it possible to sail into the oncoming wind at an angle or to tack against the wind—to sail at an angle first one way and then the other, in a zigzag pattern, so as to go in the direction from which the wind is blowing. Because of the way the sides of the sail were tilted, from a distance it looked somewhat triangular (see illustration 1, p. 50). It is thus quite likely that the Malay balance-lug was the inspiration for the triangular lateen sail, which was developed by sailors living on either side of the Malays, the Polynesians to their east and the Arabs to their west.

Precisely when the Polynesians and the Arabs began using the lateen sail remains unknown, but it would seem to have been in the last centuries B.C.E. It is known that the Arabs in the vicinity of the Indian Ocean were accomplished sailors by the first century C.E. and both they and the Polynesians apparently had the lateen sail by then (Hourani, 1951: 102). This pattern suggests that sailors who came into contact with the Malays’ balance-lug sail were inspired by it and attempted to copy its design. They might have misunderstood it to be a
triangular sail or, in the process of trying to duplicate it, discovered that a triangular sail would serve the same purpose.

Arabs sailing in Mediterranean waters were using a lateen sail by the second century C.E., but it did not appear on Atlantic ships until the fifteenth century, when Portuguese mariners put both the lateen and the traditional Atlantic square sails on their vessels. It was only after they came into possession of the lateen and learned how to tack against the wind that it became possible for them to explore the western coast of Africa, because the winds off Africa's western coast blow the same direction all year round. Without a lateen, Atlantic sailors, including the Portuguese, could not sail south in search of West African gold, since they would have no way to return to Europe. It is ironic that it was an Arabic sail, probably based on a Malay prototype, that made it possible for the Portuguese to round Africa, disrupt the Arab trade routes in the Indian Ocean, and eventually sail into Malay home waters, in pursuit of Southeast Asian spices.

It was also sometime in the first millennium B.C.E. that the Malays made one of the most significant discoveries in the history of navigation — how to ride the monsoons, the seasonal winds of Asia. The cause of this annual wind cycle lies far away in Central Asia, at the center of the Eurasian landmass, as far away from oceans as it is possible to get on this planet and thus a place of extreme temperatures. Because ocean water is warmer than the air in winter and colder than the air in summer, the air close to an ocean is cooled by the water in the summer and warmed by it in the winter. Air masses in Central Asia, however, are so distant from any ocean that they escape such influence, making the winter air in the region much colder in winter and hotter in summer than air over or near the oceans.

It is this difference in temperature between the air mass over Central Asia and the air mass over the far-off oceans that creates the monsoon. During summer the hot air over Central Asia expands and becomes relatively light, whereas the air over the ocean is cooler and thus relatively dense and heavy. As a result, the heavier ocean-influenced air begins to move inward against the lighter air, creating winds that move from the seas and oceans surrounding Asia toward Central Asia. It is almost as if the rising of the hot air over Central Asia creates a vacuum that the ocean-influenced air rushes in to fill. From May to August, when this moisture-laden air mass flows over the continent, it drops a considerable amount of rain on its way inland.
lished at an inland location, near the Tonle-Sap and Mekong Rivers, during the second century. Vyadhapura can be translated as “City of the Hunter-King,” apparently a reference to the second-century king, Hun Panhuang, who went into the forest, captured and domesticated large elephants, trained them for military purposes, and then used them to bring about the submission of his neighbors (K. Hall, 1982: 93). By the early part of the third century the great general Fan Shiman had extended Funan’s power westward along the northern rim of the Gulf of Thailand and down the Malay Peninsula as far as the Isthmus of Kra (Wolters, 1967: 37; K. Hall, 1985a: 63–64).

Indian merchants were not the only ones who visited the realm of Funan on their way to China. By the second century C.E. this mainland entrepôt was attracting merchants from the Middle East, and even from as far afield as Greece. Indeed, two men claiming to be envoys of the Roman emperor Marcus Aurelius appeared in China in 166 C.E., having arrived there by way of Funan. It is unlikely that they were truly official envoys: most probably they were Greek merchants (subjects of Rome) who had claimed diplomatic status in order to gain access to the city of Luoyang, which was then the capital of the Han dynasty (Yu, 1967: 159–60, 175; K. Hall, 1985a: 38).

The archaeological remains of at least one of Funan’s ports have been found near the present-day Vietnamese town of Oc-eo, which is located somewhat inland, about 3 miles from the coast, as was the settlement connected to the Funan port. Travelers reached it via a network of drainage canals that linked the Gulf of Thailand with the Mekong River (Taylor, 1992: 158). Objects unearthed there include local manufactures, goods exchanged within Southeast Asia, and imports from India, Iran, and the Mediterranean. Ceramics are abundant. Numerous seals and many pieces of jewelry are Indian in origin, and there are tin amulets, apparently made in Funan, with symbols of the Hindu gods Visnu and Siva. Items from China include small Buddhist statues and a bronze mirror, while from the Mediterranean are fragments of glassware, a second-century gold coin, and gold medallions bearing images of Antoninus Pius and Marcus Aurelius (K. Hall, 1985a: 59; Wolters, 1967: 38; Christie, 1979: 284–86).

**Funan and the Malay Sailors**

The market that Funan provided attracted Malay sailors from various parts of the maritime realm to its ports. They carried with them sup-
plies and raw materials such as iron for use in Funan itself (Wolters, 1967: 52; 1982: 35n), as well as products that they hoped to exchange for rare goods brought by merchants from faraway lands. Originally the international traders who congregated at Funan, intent on Chinese silk, had little or no interest in Southeast Asian specialties. But the Malays eventually succeeded in introducing their own products into the international trade.

The first such products might be construed as substitutes for the valuable goods that long-distance traders were transporting to China. Among these were frankincense from East Africa and southern Arabia and bdellium myrrh from East Africa, southern Arabia, southwestern Iran, and the dry and rocky areas of India (Wolters, 1967: 105, 113). These substances were usually used to make perfume and incense, but the Chinese used them in medicines as well. During the time of Funan, however, Malay sailors were able to substitute Sumatran pine resins for frankincense and benzoin (also known as benjamin gum) for bdellium myrrh. They also introduced a new product, camphor, a resin that was soon valued as a medicine and as an ingredient in incense and varnish (Wolters, 1967: 65, 103-4, 127). Ever since, the most highly prized camphor has been that of Barus, a port on Sumatra’s northwestern coast. Aromatic woods such as gharuwood and sandalwood (a specialty of Timor, about 1,800 miles southeast of Funan) became important trade goods at this time as well (Wolters, 1967: 65-66).

One indication of the significance of Funan to the maritime trade of China is provided by a Chinese mission sent from the kingdom of Wu to Funan in the third century. Wu, which controlled southern China, was one of the regional kingdoms that emerged after the fall of the Han dynasty in 221. Its king, who was interested in foreign trade, had heard that goods from India and other regions to the west could be had in Funan and thus sent two envoys there sometime between 245 and 250. In their subsequent report on this exploratory expedition, they offered the following description of Funan:

[The people of Funan] live in walled cities, palaces, and houses. . . . They devote themselves to agriculture. They sow one year and harvest for three. Moreover, they like to engrave ornaments and to chisel. Many of their eating utensils are silver. [Customs] taxes are paid in gold, silver, pearls, and perfumes. There are books and depositories of archives and other things. Their characters for writing resemble those of
Annex 258

C.F. Dai and T.Y. Fan, “Coral Fauna of Taiping Island (Ilu Aba Island) in the Spratlys of the South China Sea”, 
ATOLL RESEARCH BULLETIN

NO. 436

CORAL FAUNA OF TAIPING ISLAND (ITU ABA ISLAND) IN THE SPRATLYS OF THE SOUTH CHINA SEA

BY

CHANG-FENG DAI AND TUNG-YUNG FAN

ISSUED BY
NATIONAL MUSEUM OF NATURAL HISTORY
SMITHSONIAN INSTITUTION
WASHINGTON, D.C., U.S.A.
APRIL 1996
The possibility of oil pollution is also of concern because the Spratlys lie near to major shipping lines for oil and nuclear waste. Oil and nuclear waste could be released in the event of a tanker accident in these reef-studded waters (McManus, 1992). However, we found no substantial record or evidence of these pollutants.

The tropical position of Taiping Island places it within the area of frequent typhoon disturbances. The typhoon-generated waves and storm surges may erode reef crest corals and sediments down to about 20 m depth (Stoddart, 1985; Scoffin, 1993). The recognition of past storm disturbances may rely on several features such as the deposits of coral debris, the assemblages of corals and other reef biota, the reef framework structure, and the existence of reef flat storm deposits (Stoddart, 1971; Scoffin, 1993). During this survey, widespread coral debris were found to accumulate as talus at the foot of the fore-reef slope, on submarine terraces and in grooves on the reef front. In addition, on the shallow reef flat there are mainly massive, encrusting or stout branching corals that are basically wave-resistant forms. These facts indicate that typhoon disturbances are possibly the major destructive forces that have caused severe damage to the coral communities of Taiping Island.

The population outbreak of the crown-of-thorn starfish, *Acanthaster planci*, has been recognized as the most potent biotic disturbance affecting coral communities on many Indo-Pacific reefs (Endean and Cameron, 1990). However, on reefs where marked destruction of hard-coral cover was not apparent, *A. planci* was either not observed or found at very low populations densities. Since we did not find any individual of *A. planci* during this survey, it was unlikely that the crown-of-thorn starfish was the major destructive force to the coral communities of Taiping Island.

Global sea warming associated with El Niño events has caused widespread coral bleaching in the Caribbean and the Pacific (Glynn, 1984, 1988; Williams and Bunkley-Williams, 1990; Gleason, 1993). The ecological consequences of bleaching events include widespread mortality with resultant decreases in coral cover, changes in species composition, reduced growth rates and reproductive output of corals (Szmant and Gassman, 1990; Gleason, 1993). Mortality rates in bleaching events have ranged from zero (Hoeksema, 1991) to very severe (50-98%) as on the eastern Pacific during the 1982-83 El Niño event (Glynn, 1988). This severe event also had other associated secondary disturbances following coral mortality such as a subsequent increase in number of grazers and bioerosion rates (Glynn, 1988). Whether the widespread mortality of corals at Taiping Island is related to the El Niño-Southern Oscillation (ENSO) events need to be studied. Analysis of the environmental record in coral skeletons and marine environmental data are thus needed to answer this question.

In conclusion, the coral fauna of Taiping Island is dominated by scleractinian corals, distributed mainly on the shallow reef flat at depths of 1-3 m on the east, south and north sides of the island at which flourishing coral communities were found. Few
gorgonaceans and alcyonacean species were found mainly on deeper reef slopes. Coral cover and species diversity of Taiping Island are relatively low in comparison with other tropical Pacific coral reefs indicating that the coral communities of Taiping Island may have been destroyed by artificial or natural disturbances. Since flourishing of coral communities and reef-building activities are the basis of sustained development of this island, we propose that reef conservation and protection are urgent and should be enforced immediately by reducing artificial destruction and pollution to the reefs. In addition, the changes of reef environment and biotic communities should be monitored. On a broader scale, the Spratly Reefs, including Taiping Island, are ecologically important, with abundant and relatively unexploited resources and where endangered species still abound. The Spratlys may also serve as a pool of larvae for fishes and other marine organisms that recruit to depleted fringing reefs and coastal habitats of the South China Sea. For these reasons, it is worthwhile to conserve the ecosystem and genetic diversity of the Spratlys by establishing a marine park in the Spratlys as proposed by McManus (1992).

ACKNOWLEDGEMENTS

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Annex 259

J.P. Chen et al., “Checklist of Reef Fishes from Taiping Island (Itu Aba Island), Spratly Islands, South China Sea”, Pacific Science, Vol. 51, No. 2 (1997)
ABSTRACT: A total of 49 families and 399 species of fishes was recorded from the reef area around Taiping Island (Itu Aba Island) in the Spratlys (Nansha Islands), located at 114°21′–114°23′ E, 10°22′–10°23′ N. Data were collected by underwater observation, specimen identification, and photography during our survey of 19–23 April 1994. A checklist, including previous records, of 50 families and 421 species was compiled. If all midwater pelagic species are taken into account, the number of fish species occurring at Taiping Island is well over 450, a figure below that anticipated for a reef island located close to the equator and Indo-Australian diversity center. Limited reef area and recent reef degradation may be the principal causes of the disparity. Czekanowski similarities for eight regions around Taiwan and in the South China Sea show that the reef fish fauna of Taiping Island most closely resembles that of Green Island, then Orchid Island, Tungsha (Pratas Island), Hsiao-liu-chiu, southern Taiwan, Penghu, and northern Taiwan in that order. The fish fauna of the western coast of Taiwan, which has a predominantly sandy environment, is most different from that of Taiping. The results suggest that the fish fauna of Taiping Island originated by larval dispersal from the Kuroshio Current as is probably the case for southern Taiwan and its adjacent islets. However, 42 species found in this survey, of which 11 are probably undescribed, are not known from the waters around Taiwan. Most of the fish species (95.7%) at Taiping Island are widely distributed, particularly in the Indo-Pacific Region. Fewer than 20 species are restricted in their distribution.

TAIPING ISLAND (Itu Aba Island), located at 114°21′–114°23′ E, 10°22′–10°23′ N, is one of the southernmost islands in the South China Sea and is the largest reef island among the 104 islands, reefs, cays, and banks commonly called the Spratly Islands or Nansha Islands, which stretch 810 km from north to south and 900 km from east to west. Land area of Taiping Island, 1,500 km away from Taiwan, is about 489,600 m². Because of the remote location, its marine resources have not previously been fully investigated, explored, or conserved. In recent years, however, scientific investigations have been encouraged and the Ministry of Interior, National Science Council, Council of Agriculture, and Kaohsiung City Council of Taiwan, Republic of China, have initiated several ecological surveys in the South China Sea particularly in the areas of Tungsha (Pratas Island) and the Spratlys. In this report, our survey of the fishes at Taiping Island, which formed part of a joint ecological research project sponsored by the Council of Agriculture to Lee-Shing Fang, Director of the National Marine Biology Museum/Aquarium, is presented and serves primarily as an attempt to enhance the understanding of the biological resources in this marine region. The results may also contribute to increasing the distributional data base for fishes of the Indo-Pacific.

Information on the fishes in this region is scarce: 45 species of demersal reef fishes collected by handline were reported by Liu (1975); three reports (Wu 1981, Hsieh and Hong 1982, Chi 1989) stemming from marine environmental and biological surveys between 1980 and 1988 by the Taiwan Fishery Research Institute include checklists of primarily pelagic or economically
important deepwater fishes, although Wu's (1981) report included a few reef fishes. The more extensive surveys of Chang et al. (1981, 1982) reported 33 families and 173 species of reef fishes from their 1-week survey.

The validity of the fish species previously reported needs scrutiny. Some of the names listed by Chang et al. (1981) are synonyms, 13 species are unidentified, three species are dubious, and one is duplicated (Table 1), for a total of 156 valid species. Examination of the photographs illustrating Chang et al.'s (1982) book of the Spratlys fishes suggests several name changes: *Epinephelus* sp. and *Dampieria* sp. should read *E. spilotoceps* and *Pseudochromis fuscus*, respectively; the damselfish *Glyphidodontops* sp. may be an undescribed species; and the fishes identified as *Myripristis murdjan* and *Glyphidodontops biocellatus* appear to be *M. kuntee* and *Hemiglyphidodon plagiometopon*, respectively. These changes bring the total number of valid species to 161.

Apart from the records from mainland China, there are very few records of the fishery resources in this area, and most of the fishes listed are offshore and commercial species. J. R. Chen and Wei (1987), for example, listed 64 families and 137 species of larval or juvenile fishes; Yang (1987) reported 30 families and 53 species; Hwang et al. (1991a) recorded 57 families and 108 species from a cruise in 1988; Li et al. (1991) listed 85 families and 174 species from the southwestern area of the Spratly Islands Shelf using a bottom trawler in 1990; and Z. Chen and Chen (1991) reported 97 families and 214 species in their zoogeographical studies based on information collected on the same trip. Hwang et al. (1991b) reviewed the marine fishes reported from previous studies of parts of mainland China, but among the 138 families and 558 species listed, only about 40 species are from shallow reef areas.

The Spratly Islands fall into the region of the highest diversity of reef-building corals in the world (Veron 1986), as well as the diversity center of fishes in the Indo-Australian Region. Thus the coral-reef fish fauna should be relatively large compared with the faunas north of Taiping Island.

**Materials and Methods**

The study was made possible by a 15-day cruise, 19–23 April 1994, of the fishing training ship *Yu Shiu N. 2* of the Fishery Training Center, Council of Agriculture, Republic of China. Eleven stations with various physiographic features around the island were surveyed (Table 2, Figure 1). Seven subtidal stations were examined with scuba gear, and four intertidal or shallow-water stations by snorkel. Most fishes were identified by underwater observation supplemented with underwater photographs. Specimens of cryptic and/or other ambiguous species were collected by rotenone poisoning. They were deposited in the Museum of the Institute of Zoology, Academia Sinica (ASIZP).

The checklist (Appendix) includes our survey results along with earlier records. In addition to listing family and species names, literature citations, diving records, hand lining, comparative faunal records, guild types, and distributional records are noted. In the records of literature cited, only Chang et al. (1981) is listed because it is the only paper published in a scientific journal; Liu (1975) and Wu (1981) are excluded because their reports lack specific data on time and source, respectively. Specimens caught by hand line are specifically noted. Faunal records include references to species in Taiwan (Shen et al. 1990, Shao et al. 1993b) and adjacent islands, Penghu (Shao et al. 1993a), and Hsiao-liu-chiu (J. P. Chen et al. 1992) and Tungsha (J. P. Chen et al. 1994). Other records (for northern Taiwan, Lanyu, and Green Island) stem from unpublished data. Guild types include ecological characteristics from diurnal activity to spatial distribution, following Shen et al. (1990), J. P. Chen et al. (1992), and Shao et al. (1993a, b). Abbreviations for geographical distribution follow Myers (1991) and Shao et al. (1993a), except for reference to Indonesia or the South China Sea, which is denoted by “SC.”

**Results and Discussion**

A total of 49 families and 399 species was collected or observed during our survey at Taiping Island (Appendix). Number of species varied between stations: 157 species were found at
TABLE 1
UNIDENTIFIED SPECIES, DOUBTFUL SPECIES, AND SYNONYMS OF TAIPING ISLAND FISHES CITED IN CHANG ET AL. (1981)

<table>
<thead>
<tr>
<th>FAMILY</th>
<th>NAME IN QUESTION</th>
<th>SUGGESTED CORRECTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acanthuridae</td>
<td>Acanthurus sandviscens</td>
<td>Acanthurus triostegus</td>
</tr>
<tr>
<td>Apogonidae</td>
<td>Apogon robustus</td>
<td>Apogon cookii</td>
</tr>
<tr>
<td>Blenniidae</td>
<td>Cirripectes sp.</td>
<td>?</td>
</tr>
<tr>
<td></td>
<td>Istiblennius sp. A</td>
<td>?</td>
</tr>
<tr>
<td></td>
<td>Istiblennius sp. B</td>
<td>?</td>
</tr>
<tr>
<td></td>
<td>Plagiotremus townsendi</td>
<td>?</td>
</tr>
<tr>
<td>Caesionidae</td>
<td>Caesio xanthomonotus</td>
<td>Caesio teres</td>
</tr>
<tr>
<td></td>
<td>C. tile</td>
<td>Paracaeoio tile</td>
</tr>
<tr>
<td></td>
<td>C. diagramma</td>
<td>P. diagramma</td>
</tr>
<tr>
<td>Cirrhitidae</td>
<td>Cirrhitichthys serratus</td>
<td>Cirrhitichthys oxycephalus</td>
</tr>
<tr>
<td>Holocentridae</td>
<td>Adioryx spinosissimus</td>
<td>Sargocentron spinosissimus</td>
</tr>
<tr>
<td></td>
<td>A. spinifer</td>
<td>S. spiniferum</td>
</tr>
<tr>
<td></td>
<td>A. caudomaculatus</td>
<td>S. caudomaculatum</td>
</tr>
<tr>
<td></td>
<td>A. lacteoguttatus</td>
<td>S. punctatissimum</td>
</tr>
<tr>
<td></td>
<td>Flammulo samara</td>
<td>Neoplatypterus samara</td>
</tr>
<tr>
<td></td>
<td>Myripristis murdjan</td>
<td>Myripristis kunee</td>
</tr>
<tr>
<td>Labridae</td>
<td>Halichoeres centquadratus</td>
<td>Halichoeres hortulanus</td>
</tr>
<tr>
<td></td>
<td>H. kallochroma</td>
<td>?</td>
</tr>
<tr>
<td></td>
<td>Hemipteronotus sp.</td>
<td>?</td>
</tr>
<tr>
<td></td>
<td>Chelinus rhodochronus</td>
<td>Chelinus unifasciatus</td>
</tr>
<tr>
<td>Mugilidae</td>
<td>Parapercis polyphthalma</td>
<td>Parapercis heptapotamia</td>
</tr>
<tr>
<td>Mullidae</td>
<td>Parupeneus pleurospilos</td>
<td>Parupeneus heptacanthus</td>
</tr>
<tr>
<td></td>
<td>P. trifasciatus</td>
<td>P. multifasciatus</td>
</tr>
<tr>
<td>Muraenidae</td>
<td>Gymnothorax sp.</td>
<td>?</td>
</tr>
<tr>
<td>Nemipteridae</td>
<td>Scolopsis cancellatus</td>
<td>Scolopsis lineatus</td>
</tr>
<tr>
<td></td>
<td>Ophichthys sp.</td>
<td>?</td>
</tr>
<tr>
<td>Pomacentridae</td>
<td>Dischistodus notophthalmus</td>
<td>Dischistodus melanotus</td>
</tr>
<tr>
<td></td>
<td>Glyphidodontops sp.</td>
<td>Chrysipterus sp.</td>
</tr>
<tr>
<td></td>
<td>G. rex</td>
<td>C. rex</td>
</tr>
<tr>
<td></td>
<td>G. cyaneus</td>
<td>C. cyaneus</td>
</tr>
<tr>
<td></td>
<td>G. glansc</td>
<td>C. glansc</td>
</tr>
<tr>
<td></td>
<td>G. leucopomus</td>
<td>C. leucopomus</td>
</tr>
<tr>
<td></td>
<td>G. biocellatus</td>
<td>C. biocellatus</td>
</tr>
<tr>
<td></td>
<td>Paraglysichthys melanops</td>
<td>Neoglyphidodon melanops</td>
</tr>
<tr>
<td></td>
<td>P. melanops</td>
<td>N. nigrois</td>
</tr>
<tr>
<td></td>
<td>P. behni</td>
<td>N. nigrois</td>
</tr>
<tr>
<td></td>
<td>Eupomacentrus nigricans</td>
<td>Stegastes nigricans</td>
</tr>
<tr>
<td>Pseudochromidae</td>
<td>Dampieria sp.</td>
<td>Pseudochromis fuscus</td>
</tr>
<tr>
<td>Scaridae</td>
<td>Scarus sp. A</td>
<td>?</td>
</tr>
<tr>
<td></td>
<td>Scarus sp. B</td>
<td>?</td>
</tr>
<tr>
<td></td>
<td>Scarus sp. C</td>
<td>?</td>
</tr>
<tr>
<td>Scorpaenidae</td>
<td>Scorpaena alboubruenosa</td>
<td>Sebastapistes cyanostigma</td>
</tr>
<tr>
<td></td>
<td>Scorpaena sp.</td>
<td>?</td>
</tr>
<tr>
<td>Serranidae</td>
<td>Epinephelus megalochir</td>
<td>Epinephelus quoyanus</td>
</tr>
<tr>
<td></td>
<td>E. fario</td>
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<td></td>
<td>E. comae</td>
<td>Epinephelus mornua</td>
</tr>
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<td></td>
<td>Epinephelus sp.</td>
<td>E. spliotoceps</td>
</tr>
<tr>
<td>Tetraodontidae</td>
<td>Tetraodon nigropunctatus</td>
<td>Arothron nigropunctatus</td>
</tr>
</tbody>
</table>

station 67, an eastern subtidal station closely linked to the reef flat, and the most speciose station; 78 species were recorded at station 1 at the anchor area, the least speciose station. Species numbers seem to be related to station depth: more species occurred at subtidal stations (78–157 at stations 1–7) than at intertidal stations (57–112 at stations 8–11). Comparison of species numbers at two stations located in the same area but at different depths seems to indicate
Annex 260

International Law Rules and Historical Evidences Supporting China's Title to the South China Sea Islands

By JIANMING SHEN, S.J.D.*

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** All translations by author unless otherwise indicated.
I. Introduction

"Nanhai Zhudao (South China Sea Islands): This is the general name of our country's various islands, reefs and banks in the South China Sea. They belong to Guangdong Province. These islands include more than 200 islets, reefs and banks. They are divided, in accordance with their geographical locations, into the four major archipelagic groups of Dongsha, Xisha, Zhongsha and Nansha, the Huangyan Island and other islets. Among these, the Nansha Islands are the largest in scope and the most in the number of islets and reefs, which include our country's southernmost territory Zengmu Ansha [Tsungmu Shoals]. The Yongxing Island in the Xisha Islands is the largest island [in the South China Sea]. The Islands in the South China Sea ... have continuously been the fishing places for fishermen of Guangdong Province, and have always been our country's territories."

- Cihai, 1979, at 139-140

There has been tension in the South China Sea for more than two decades, involving a number of disputants and conflicting claims to some coral islands and their surrounding waters. The South China Sea (in Chinese, Nan Hai or Nanhai, meaning "the South Sea") is a large marginal sea between the mainland of China and southeast Asia on its western shore and groups of major islands on the eastern. Within the Sea are dotted more than 200 islands, islets, rocks, coral reefs, cays, shoals, banks and sands. These features, having been part of the territory of China "since ancient times," have been traditionally grouped into four major parts and one iso-

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lated island: (1) the Dongsha Islands, (2) Zhongsha Islands, (3) Xisha Islands, (4) the Nansha Islands, and isolated Huangyan Island.

The Dongsha (literally translated as "East Sand Reefs") Islands are located in the northeast of the South China Sea. These islands are about 150 nautical miles from the port city of Shantou, and are under the jurisdiction of Guangdong Province. Previously transliterated as the Tungsha Islands, the Dongsha Islands are sometimes known in the West as the "Pratas Reefs" and are in fact under the control of the local authorities in Taiwan. Since the Taiwan Island itself is part of China, local administration of the Dongsha Islands by Taiwanese authorities enhances rather than diminishes China's claim to sovereignty over these islands.

Situated in the center of the South China Sea, the Zhongsha (literally translated as "Central Sand Reefs") Islands are submerged coral reefs. For centuries, the sea surrounding the Zhongsha have been a place of much activity for Chinese fishermen. Prior to the establishment of Hainan Province in 1988, which administers the Zhongsha, Xisha, and Nansha Islands, the Zhongsha Islands were a part of Guangdong Province. "Zhongsha Islands" were transliterated as "Chungsha Islands" before the adoption of the pinyin system in China, and are sometimes called "Macclesfield Banks" in the West. According to Elizabeth Van Wie Davis, it is "undisputed" that "the submerged [Zhongsha] is clearly Chinese territory."

The Xisha (literally translated as "West Sand Reefs") Islands are located in the west of the South China Sea. This group of islands lies about 150 nautical miles south of the coast of Hainan Island, China's second largest island. The Xishas are composed of more than 20 islets and reefs.

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2. Id.; GUOJI FA [INTERNATIONAL LAW] 155 (Duanmu Zheng ed., Beijing, Peking University Press 1989) [hereinafter "Duanmu Zheng ed."]; see also Ren Mei'e & Li Jiatao, Nanhai Zhudao Ziran Tiaojian Ji Huanjing he Ziyuan Baohu [The Natural Conditions and the Protection of the Environment and Resources in the South China Sea Islands], in SYMPOSIUM ON THE SOUTH CHINA SEA ISLANDS: SELECTED PAPERS 92 (Beijing, Institute for Marine Development Strategy, State Oceanic Administration 1992) [hereinafter "SELECTED PAPERS"]


5. China, Philippines Revive Spratlys Dispute, ASIAN POL. NEWS, Apr. 3, 1995, available in 1995 WL 2224929. Prior to 1988, the Zhongsha, Xisha, and Nansha Islands were under the administration of the "Special Administrative Prefecture of Hainan" which had been part of Guangdong Province until it was "upgraded" to the rank of province in the same year. Id.


7. DAVIS, supra note 4, at 13 n.13.

8. Id. at 13.

Formerly transliterated as “Hsisha Islands,” western sources now refer to them as the “Paracel Islands.” The islands are divided into two subgroups: the Yongle Islands (previously transliterated as “Yung Lo Islands”) to the west and the Xuande Islands (previously transliterated as “Hsuan Deh Islands”) to the east. The Yongle Islands are known in the West as the “Crescent Islands” and the Xuande as the “Amphritite Islands.”

The Nansha (literally translated as “South Sand Reefs”) Islands lie about 550 nautical miles away from the Hainan Island and consist of some 230 coral islands, reefs, atolls, shoals and banks scattered throughout the southernmost part of the South China Sea. They stretch about 500 nautical miles from the north to south and 400 nautical miles from west to east. Known to some Westerners as the “Spratly Islands,” the “Spratlys,” or the “Spratlies,” the Nansha Islands are for the most part submerged with 11 islands, 5 sand cays, and 20 reefs rising above sea level. None of these islets, reefs and banks is habitable on a year-round basis. Even the largest islet in the area, Taiping Island (more commonly known in the West as “Itu Aba Island”), at approximately 0.43 square kilometers in area is not large enough “to sustain permanent, independent settlements.” Other islands whose area is greater than 0.1 square kilometers include the Zhongye Dao (Thitu Island/Pagasa), Xiyue Dao Island (West York Island/Likas), Nanwei Island (Spratly Island/Suong Sa/Lagos), Nanzi Dao (Southwest Cay/Song Tu Tay/Pugad), and Beizi Dao (Northeast Cay/Song Tu Dong/Parola). The highest one, the Hongxiu Dao (Namyit Island/Binago), is only 6.2 meters above sea level.

Legally and administratively, both the Xisha and Nansha Islands and the surrounding sea surface are under the jurisdiction of Hainan Province and, more specifically, are administered by the Hainan Provincial Ocean Bureau.

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11. Id.
12. Yao Bochu, Jiakuai Nansha Haiyu de Youqi Diaocha Hanwei Woguo de Ziyuan Quanyi [Accelerating the Oil and Gas Surveys in the South China Sea Area, and Protecting Our Country’s Rights and Interests in Natural Resources], in SELECTED PAPERS, supra note 2, at 213; Duanmu Zheng ed., supra note 2, at 156.
13. Yao Bochu, supra note 12, at 213. According to Greenfield, there are about only 20 features in the Spratlys which are above sea level at high tide. Greenfield, China, supra note 10, at 28-29.
15. Yao Bochu, supra note 12, at 213.
16. DAVIS, supra note 4, at 13 n.13.
Huangyan Island (Scarborough Reef) is located between the Zhongsha Islands and the Luzon Islands of the Philippines. The Huangyan Atoll includes the Huangyan Island per se, the Nanyan Island, and the Jiaotou Reef, which are all above sea level. Geographically speaking, the Huangyan Island is distant enough not to be considered a part of the Zhongsha Islands. In practice, however, the Huangyan Islands may also be grouped together with the Zhongsha Islands.

Some commentators appear not to look at the issue of the South China Sea islands from an objective point of view of historical facts and legal reasoning. Instead, their analyses all begin with dubious presuppositions: Do we want China to have control over the South China Sea islands? Is it in our interests to support China's claims? Or should we set aside the issue of sovereignty at all? For example, one commentator asserts that "China is beginning to assert itself in the region by making fallacious claims," while "[e]ach of the remaining [claimant] countries makes its valid claim to part of the islands or continental shelf." Another commentator states that "the efforts of the People's Republic of China ... to gain a more prominent position in the post-Soviet world order could turn a long-standing sovereignty dispute over the Spratlys into a serious international conflict," as if it were China that started all the controversies. These commentators have apparently ignored or forgotten one thing: China owns those islands and they are Chinese territory. Naturally, no country can be expected to remain silent if its territorial sovereignty is being offended.

The islands in Nanhai (the South Sea or the South China Sea) are considered Chinese territory by virtue of China's discovery of and long-running exercise of effective and reasonable sovereignty over them. China discovered these islands possibly as early as thousands of years ago, and at least no later than during the Tang Dynasty (206 B.C.-220 A.D.). At the latest, China began exercising jurisdiction over them during the North Song Dynasty (960-1127).

The Islands' status as Chinese territory went unquestioned until the 1930's, when France and later Japan unlawfully occupied some of the is-

17. Zeng Zhaoxuan, Zhongguo Nanhai Zhudao Huanjiao Mulu [A Catalog of Atolls of China's South China Sea Islands], in SELECTED PAPERS, supra note 2, at 283, 297.
lands by force. After the Japanese surrender and withdrawal in 1945, the Chinese government resumed authority over these islands and their status remained undisputed for years. However, in part because of the discovery of potential oil and gas deposits in the South China Sea, many of the islands and other features, especially those of the Nansha Islands, became objects of invasion, occupation, and claims by other nations, notably by Vietnam, the Philippines, Malaysia, and Brunei. Vietnam claims all of the Xisha Islands and Nansha Islands, and occupies more than twenty islands and reefs in the Nansha area. The Philippines claim part of the Nansha Islands and control more than eight of them. Malaysia and Brunei each claim a portion of the Nansha Islands on the premise that the claimed areas are within their respective continental shelf zones or exclusive economic zone. All these claimants have begun exploring and exploiting natural resources in the Nansha Islands area individually and in cooperation with Western oil companies. Malaysia even constructed a vacation resort on one of the islands and reefs it occupies.21

Some authors add one more competing claimant - Taiwan - to the already complicated disputes in the South China Sea. This is erroneous. It would be a serious mistake for them to consider Taiwan as a sovereign, independent State.22 China and Taiwan are one country temporarily in two parts. Consequently, the claims of mainland China and of local Taiwanese authorities to the South China Sea islands are one and the same. For this reason, this paper will not treat separately claims maintained by the local Taiwanese authorities.

It has been the consistent position of the People's Republic of China ("PRC") as well as of the local authorities in Taiwan, that the islands in the South China Sea, including the Nansha, Xisha, Zhongsha, and Dongsha Islands and Huangyan Island, are territories of China. China's title to Zhongsha, Dongsha and Huangyan Islands is virtually undisputed; therefore, these islands and reefs present no special problem. It is the status of the Xisha and Nansha Islands which has been a subject of heated disputes among the claimants in the South China Sea region. The most crucial issue in the South China Sea disputes remains which claimant country has sovereignty over the disputed islands and sea areas, i.e., whose claims may be justified under international law. This article explains why China's claims prevail over conflicting ones by analyzing rules of international law that are applicable to the unpopulated Xisha and Nansha Islands in the South China Sea and, more importantly, by evaluating historical records which

21. See infra text accompanying notes 205-287.

22. See, e.g., VALENCIA, CHINA, supra note 18, at 44; Bennett, supra note 14; Brian K. Murphy, Dangerous Ground: The Spratly Islands and International Law, 1 OCEAN & COASTAL L.J. 187 (1995).
evidence China’s discovery and long-time claims to and authority over these islands.

II. Rules of Title Applicable to Barely Inhabitable Territories

A. General Modes of Territorial Acquisition

Firstly, any answer to the problem of which State has sovereignty over the Xisha and Nansha Islands requires a general review of the relevant mode(s) of acquiring (and losing) title to territory, and the degree of State administration required for the maintenance of such title.

Traditional international law recognized five modes of acquisition of territory: occupation, prescription, accretion, cession and subjugation (annexation). Adjudication has been sometimes considered an additional method of acquiring or losing territory through the mechanism of adjudicative settlement of territorial disputes by third-party arbitrator(s) or tribunals. However, adjudication, whether in the form of arbitration or judicial decision, should be carried out in accordance with rules and principles of international law, i.e., the judges or arbitrators should function to declare which State is entitled to what territory under applicable rules of international law. In this sense, accordingly, adjudication is “declaratory rather than constitutive,” and is not of itself “the foundation of the title to the territory but rather a confirmation of the existence of the title.”

Occupation denotes the act of taking possession of and acquiring title to a territory which belongs to no State (terra nullius) at the time of such acquisition. In other words, in order to constitute terra nullius, the targeted territory must not be under the authority of other States in any form. This standard of terra nullius can be satisfied either by evidence of discovery of land or territory not known before, or by evidence of abandonment by other States of the land or territory in question, no matter when it was discovered or who discovered it. As a general rule, establishment of title to territory through occupation must be accompanied with effective exhibition of authority (often known as effectiveness principle). It must be borne in mind that there is virtually no terra nullius left on Earth. Therefore, occupation has little, if any, practical application in the acquisition of new territory under present-day international conditions. Nonetheless, this mode of acquiring territory remains significant in the determination of sov-

23. Santiago Torres Bemardez, Territory, Acquisition, in 10 ENCYCLOPEDIA OF PUBLIC INTERNATIONAL LAW 496, 503 (North-Holland 1987) [hereinafter “ENCYCLOPEDIA”].

ereignty over territory which was once *terra nullius* and was acquired through occupation in the course of history.

Prescription is a process of transfer of title to land or territory by "undisturbed continuous possession ... if the possession has lasted for some length of time" so that a general conviction can be generated to the effect that such continuing possession "is in conformity with international order." In contrast to occupation, possession of *terra nullius* is not required in the case of prescription - the object of possession is usually a piece of land or territory which was or has been previously owned or occupied by another State. This necessarily implies that the regime of prescription did not require lawfulness or justification in the original act of possession - "international law recognized prescription both in cases where the state is in *bona fide* possession and in cases where it is not." However, the possession must have continued over a relatively lengthy period of time. While there was not a general rule regarding the exact number of years of possession required, the requisite time may be assessed on a case-by-case basis. More importantly, in order to acquire title and sovereignty by prescription, the State’s possession during that period of time must be free from repeated and continuous protests and claims by other State(s).

"As long as other states keep up protests and claims, the actual exercise of sovereignty is not undisturbed, nor is there the required general conviction that the present condition of things is in conformity with international order."

Furthermore, it has become a fundamental principle of present-day international law for States to respect one another’s sovereignty and territorial integrity. Application of this principle renders prescription no longer acceptable to the extent that it involves unlawful or *mala fide* possession of territory already owned by others.

Accretion denotes the acquisition of new land or territory which has been formed or created through natural causes (e.g., fluvial or wind-blown sand or volcano) or perhaps by artificial force in certain justifiable cases. There is no need for the State whose territory is thus enlarged to assert title, whether such enlargement takes place gradually or abruptly. This method of acquiring territory is relevant to the South China Sea dispute when new coral islands or other features are formed within the sovereign sea zone of the State which holds title to the pertinent existing islands and

25. *Id.* at 706.
26. *Id.* at 706 n.6.
27. *Id.*
28. *Id.* at 706-07.
29. *Id.* at 696-98. *But see* The Chamizal Tract Arbitration (U.S. v. Mex.), 1911 For. Rei. U.S. 573 (holding that territorial changes take place in the case of accretions caused by slow and gradual erosion, but not in the case of accretions caused by sudden "great flood").
surrounding waters. Accretion in evaluating the sovereignty over the Xisha and Nansha Islands may be ignored unless there is evidence of newly formed islands, cays, and reefs in the South China Sea.

Cession is often a voluntary, at least in form, and sometimes compulsory transfer of title to territory, in whole or in part, from one State (the ceding State) to another (the acquiring State). It may take the form of a bilateral cession treaty concluded either after peaceful negotiations or after a conquest or war; or it may take the form of an agreement for the grant or sale of territory, or an agreement for the exchange of territories. The ceding State must indicate its intention to transfer its sovereignty in an agreement. Modern international law no longer recognizes the validity of transfer of sovereignty imposed by unequal cessionary treaties. Any grant as gift, sale, exchange, or cession of territory must be truly voluntary and not coerced. Since no cession has ever taken place in the South China Sea, this mode of acquiring territory is not relevant to solving the sovereignty disputes.

Finally, international law recognized the establishment of sovereignty over conquered territory through subjugation or annexation. Subjugation was lawful when resort to war was considered a regular means for resolving disputes between States. The mere conquest of one nation by another was not sufficient for the latter to acquire sovereignty over the former. It was necessary for the conquering State to declare its intent to annex the conquered territory and population such as in the form of a decree or proclamation. The main difference between subjugation and cession is that, in the case of cession, the transfer of sovereignty over State territory takes the form of a bilateral agreement between the ceding (conquered) State and the acquiring (conquering) State, whereas in the case of subjugation, the transfer of sovereignty takes the form of unilateral action of conquest followed by unilateral annexation. At any rate, resort to war and the threat or use of force have been denounced as means of resolving international disputes, and it therefore is no longer possible under modern international law for a State to acquire territory by means of subjugation or coerced cession following a conquest.

30. Id. at 679-82.
32. Id. at 698-99.
33. Id. at 699.
B. Criteria for Sovereignty over Uninhabitable Islands

Occupation was often preceded by discovery. Under pre-18th century rules of international law, discovery alone was sufficient to entitle the discovering State to maintain complete, not merely inchoate, sovereignty over the discovered terra nullius — effective occupation or administration was not necessary. It has been stated that discovery *per se* is the "oldest, and historically, the most important method of acquiring title to territory," and that "[u]p to the eighteenth century, discovery alone sufficed to establish a legal title."34 This was particularly true with respect to the fifteenth century and earlier periods of time. One observer noted: "During the classical era of discovery," "the diplomatic correspondence of Spain, Portugal, England, France and the Netherlands contained evidence that the foreign offices of these nations considered discovery with symbolic taking of possession an adequate basis for title to *terra nullius* . . . ."35

The importance of discovery has decreased since the 18th century. States began to differentiate between discovery of islands and discovery of continents. In the *Alaskan Boundary Case* of 1903 involving a dispute of sovereignty over the American Northwest among Russia, England and the United States, Lord Stowell stated the British position:

Possession does not appear in the opinion and practice of States to be founded exactly upon the same principles in the cases of islands and continents. In that of islands, discovery alone has usually been held sufficient to constitute a title. Not so in the case of continents . . . . [I]t has not been generally held, and cannot be maintained that the mere discovery of a coast gives a right to the exclusive possession of a whole extensive continent to which it belongs . . . . An undisputed exercise of sovereignty over a large tract of such a continent and for a long tract of time would be requisite for such purposes.36

Generally, under modern international law, discovery of territory, especially that of continents, must be followed by occupation and accompanied with effective exercise of authority over the territory for a State to have a claim of possession. According to the Permanent Court of International Justice in the *Eastern Greenland* case, the claiming State must demonstrate an "intention or will to act as sovereign" and "some actual exer-


cise or display of . . . authority." 37 According to the Permanent Court of Arbitration, long and continuous exercise and display of effective authority can establish title; discovery alone does not prevail over effective occupation (continuous display). 38 In normal circumstances, mere discovery, transient passage, or hoisting of national flags is not enough to establish title — it creates an inchoate title for a reasonable period of time during which the discovering State must "complete" it "by the effective occupation of the region claimed to be discovered." 39

On the other hand, the post-18th century principle of effectiveness merely states a general rule which may apply only if no distinction is made between the regular land or territory that is populated or inhabitable and the irregular land or territory that is not or barely inhabitable. The degree of effective exercise of authority is directly dependent on the ecological, climatic, geographic and other natural conditions of the claimed territory. The need for differentiating unpopulated or barely inhabitable territory from populated territory in assessing exercise of sovereignty has been widely recognized by international lawyers and international tribunals.

In the highly regarded Encyclopedia of Public International Law, Professor Bemardez observes:

As to the acts of sovereignty required to be effectively performed, the geographical circumstances of the area in dispute can be relevant, for it would not be logical to require the same intensity of exercise of sovereignty as elsewhere when an area is uninhabited, inhospitable and/or of difficult access . . . . Consequently, effectiveness is not impaired by an accidental weakening of government activities which might be attributed to the special physical characteristics of the area . . . . 40

As Michael Akehurst stated, "even in modern times, effective control is a relative concept; it varies according to the nature of the territory concerned. It is, for instance, much easier to establish effective control over barren and uninhabited territory than over territory which is inhabited by savage tribes; troops would probably have to be stationed in the territory in the latter case, but not in the former case." 41 Charles O'Connell in his well-received treatise of international law also convincingly wrote:

39. Id.
40. Bemardez, supra note 23, at 499.
41. MICHAEL AKEHURST, A MODERN INTRODUCTION TO INTERNATIONAL LAW 143 (5th ed. 1984).
The two authorities just discussed [i.e., the Palmas Island and Clipperton Island arbitrations] come very near . . . to proposing that very little is required in the way of display of authority if the intention and will to act as sovereign is unimpeachable; indeed in the case of uninhabited territories little more than lip service is paid to the requirement of physical control. This suggests that there is great relativity in the requirements of proof of occupation. Much less in the way of proof is required for sovereignty over remote and climatically unfavourable territories than would be required, for example, in the case of portions of European land . . .  

Similarly, the distinguished publicists George Schwarzenberger and E.D. Brown believed that the extent of "effectiveness required varies with circumstances, such as the size of the territory, the extent to which it is inhabited and, as in deserts or polar regions, climatic conditions."  

43. G. Schwarzenberger & E.D. Brown, Manual of International Law 97 (6th ed. 1976). See also G. Schwarzenberger, Title to Territory: Response to a Challenge, 51 Am. J. Int'l L. 315 (1957) (stating that in an isolated and unpopulated area such as the Clipperton Island, an original declaration of sovereignty would suffice to maintain title); F.D. Heydte, Discovery, Symbolic Annexation and Virtual Effectiveness in International Law, 29 Am. J. Int'l L. 463 (1935) (stating that the generally required effective occupation does not mean that the State's occupation must extend to every corner of its territory; a State may acquire sovereignty over unpopulated or barely populated territory simply by symbolic occupation, and this is not a departure from the general rule of effectiveness); D.H.N. Johnson, Consolidation as a Root of Title in International Law, 1955 Cambridge L.J. 223 (1955) (stating that the State displays its territorial sovereignty over its territory through different modes, depending on whether the area concerned is populated or inhabited); M. Shaw, Title to Territory in Africa 411 (Oxford, Clarendon Press 1986) (stating that what constitutes effective control depends on the circumstances, such as the geographical nature and conditions of the territory concerned and the existence or absence of contrary claims by other States); P.C. Hingorani, Modern International Law 45 (Oceana 1979) (holding that in the case of unpopulated heights which are barely inhabitable because of weather conditions, a claim based on a map is a sufficient evidence of exercise of sovereignty as long as there is no specific competing claim; in the case of bare-rock areas, since they are not suitable for permanent settlement, surveys or measurement of maps may turn them into objects of exercise of sovereignty); M.P. Tandon & R. Tandon, Public International Law 199 (Allahabad, India, Allahabad Law Agency 14th ed. 1973) (stating that where the territory concerned is unpopulated or virtually inhabited, it is not necessary to send officials to the territory so long as the claiming State can exercise local administrative authority over the territory when it deems necessary); Oscat Svatlien, The Eastern Greenland Case in Historical Perspective 57-58 (University of Florida Press 1964) (stating that in the case of uninhabited territory very little can be required to satisfy the effective exercise of sovereignty over such territory; it would be a mis-interpretation of the principle of effectiveness to require that the claiming State maintain effective occupation of uninhabited territory at all times).
In the well-known Clipperton Island arbitration (1931) between France and Mexico, the arbitrator (King Victor Emmanuel III of Italy) held that France, whose naval crew members had landed and proclaimed French sovereignty over the unpopulated Clipperton Island located in the south Pacific Ocean some 670 nautical miles from Mexico without doing more, nonetheless established sovereignty over the island. King Victor Emmanuel reasoned that while the exercise of effective sovereignty normally required the establishment of an administration "capable of securing respect of the sovereign's rights, this was not necessary in the case of uninhabited territory at occupying state's absolute and undisputed disposition."\(^44\)

In the Eastern Greenland case, the Permanent Court of International Justice also recognized that "[i]t is impossible to read the records of the decisions in cases as to territorial sovereignty without observing that in many cases the tribunal has been satisfied with very little in the way of the actual exercise of sovereign rights[,]... particularly ... in the case of claims to sovereignty over areas in thinly populated or unsettled countries."\(^45\) The International Court of Justice in the Western Sahara advisory opinion similarly stated that even an insignificant display of sovereignty can establish title to unpopulated or barely inhabited areas.\(^46\)

Even the often-cited Palmas arbitration itself acknowledged that the displays of "territorial sovereignty assume ... different forms, according to conditions of time and place"; while "continuous in principle, sovereignty cannot be exercised in fact at every moment on every point of a territory"; and "the intermittence and discontinuity compatible with the maintenance of the right necessarily differ according as [sic] inhabited or uninhabited regions are involved ...."\(^47\)

Symbolic acts such as landing and flag-hoisting may entitle the discovering State to acquire sovereignty over unpopulated islands or territories. For example, in the Aves Island Arbitration, the arbitrators distinguished between populated territories and uninhabited territories, holding that such symbolic acts as raising national flags or pronouncing a declaration of sovereignty would enable the State concerned to acquire title to an

\(^44\) Clipperton Island Arbitration (Fr. v. Mex.), 2 R.I.A.A. 1105, 26 AM. J. INT'L L. 390 (1931) (emphasis added).

\(^45\) Legal Status of Eastern Greenland Case, supra note 37.


\(^47\) Island of Palmas Arbitration, supra note 38. See also GUOJII GONG FA ANLI PINGXI [CASES OF PUBLIC INTERNATIONAL LAW ANNOTATED] 15 (Beijing, China University of Law and Political Science Press 1995).
uninhabited territory. The same result has also been noted in *The Bouvet Island Arbitration*.

According to Geoffrey Marston, Bouvet Island, located in the “sub-Antarctic waters of the South Atlantic,” was discovered by Captain Bouvet of the French Merchant Marine in 1739 by way of sighting (without landing). “Formal possession” of the island did not take place until 1825 when Captain George Norris of England hoisted the British flag on it. In February 1927, a Norwegian company applied to the Great Britain for a license to catch whales on and around Bouvet Island; however, in December, 1927, a Norwegian expedition occupied Bouvet Island. It was the British position that

... [t]he only act of sovereignty which can conveniently be performed over these uninhabited and inaccessible islands is to let them to an applicant, when one appears. It is in this way that we have acquired our title to several of these isolated islands, and there is a stock draft for the purpose .... It is unfortunate that our applicant did not appear a little earlier, as we should then have undoubtedly forestalled the Norwegians...

Accounts suggest that the dispute between Great Britain and Norway was resolved through compromise rather than by arbitration. Great Britain considered that “an adverse decision by an international tribunal might have an inconvenient repercussion on British claims to territory in Antarctica.” Consequently, on November 15, 1928, Great Britain “withdrew all claim to Bouvet Island” in exchange for the Norwegian Government’s willingness “to refrain from occupying any land within the territories” in Antarctica.

The rules of international law which were in force prior to the eighteenth century did not appear to require post-discovery display of effective control — discovery alone sufficed to establish title. While present-day international law does require a degree of effective control over discovered or occupied territories in general, a strict application of the effectiveness

49. *ibid.* at 17 (citing *Bouvet Island* arbitration; however, its source of origin remains to be ascertained.)*
50. *ibid.* at 337.
51. *ibid.* at 338.
52. *ibid.* at 339.
53. *ibid.* at 342.
54. *ibid.* at 342-43.
principle to unpopulated or barely inhabitable territory is neither reasonable nor necessary. The general requirement of effective control must be interpreted broadly so as to distinguish between continents and islands, and particularly so as to distinguish between uninhabitable or barely inhabitable territories and territories suitable for permanent settlements.

III. China's Historic Title to the Xisha and Nansha Islands

A. Discovery and Expeditions Prior to the Han Dynasty

Historical records, documents and other types of evidence strongly support China's claim of sovereignty over the Xisha and Nansha Islands. These two archipelagic groups were already destinations of Chinese expeditions during the East Zhou Dynasty (770-221 B.C.), comprised of the Spring and Autumn Period (770-476 B.C.) and the Warring States Period (475-221 B.C.). Moreover, these islands may have been discovered by the Chinese even earlier.

Professor Wang Hengjie of the Central Institute for Minority Nationalities, based on archaeological findings in the Xisha Islands in 1991, concludes that "the Chu State of the Spring and Autumn Period not only conquered the 'barbarians' in southern China, but also made expeditions in the South China Sea [islands] to include [them] as part of China." He continues:

Chinese people from the Hainan Island and southern China had a long history of engaging in production and living in the Xisha and Nansha areas . . . Since the remote primitive era, they had been engaging in fishing there, catching hawksbill turtles and other rare marine products needed by the central government, and giving them as tributes to the central government; after they died in the South China Sea, they were buried on the islands; the Chu State back in the Spring and Autumn Period had already controlled and occupied the South China Sea [islands].

Historical books and records bolster the above conclusions. In Yi Zhou Shu (Scattered Books of the Zhou Dynasty), a series of seventy-one

55. See infra text accompanying note 198.
56. Wang Hengjie, Xisha Kaogu Faxian de Xin Shiqi Shidai he Zhanqu, Qin Han Yiwu ya Nansha Lishi [Archaeological Discoveries of Remains of the New Stone Age, the Warring States Period, the Qin and Han Dynasties in the Xisha Islands and the History of the South China Sea], in SELECTED PAPERS, supra note 2, at 29, 36.
57. Id. at 37.
volumes written during the early Qin Dynasty, it was recorded that “in the Xia Dynasty [21st century-16th century B.C.] the tributes from the South Sea [by the southern barbarians to the Xia rulers] were zhuji dabei [pearl-carrying shellfish],” turtles and hawksbill turtles, and these tributes continued through the Shang Dynasty (16th century-11th century B.C.), the Zhou Dynasty (11th century-221 B.C.) comprising the West Zhou (11th century-771 B.C.) and the East Zhou (770-221 B.C.), and the Qin (221-206 B.C.) and Han (206 B.C.-220 A.D.) Dynasty. According to Yi Zhou Shu, six southern barbarian peoples were ordered to contribute “pearl-carrying shellfish” (zhuji), “hawksbill turtles” (dai mao) and other rarities to the rulers of the West Zhou Dynasty. Dai mao was described in Nanzhou Yiwu Zhi (Records of Rarities of the Southern Territories) as “living in the southern sea” (sheng nan fang hai zhong), which denotes the Xisha and Nansha Islands in the South China Sea.

The famous Shi Jing, a collection of classic poems of the Spring and Autumn Period, also referred to the South China Sea: “Yan yu Nanhai” (orders or words [from the Chu rulers] to the South Sea). He Qiutao (1824-1862), a Qing scholar, believed that when Shi Jing was written, the Chu State did not yet cover the South Sea. He Qiutao wrote, more than twenty centuries after the publication of Shi Jing, “at the time the territory of the Chu State did not extend to the South Sea, so [its rulers] prattled about sending orders to that place.” Professor Wang Hengjie responds to this analysis by noting that recent “archaeological findings in the Xisha Islands prove that what is stated in Shi Jing in fact is not prattle.” No matter what was originally meant by the words Yan yu Nanhai” in Shi Jing, it is apparent that more than two thousand years ago, the Chinese rulers and people were aware of the Nanhai, which referred to the South China Sea and the islands therein.

Zuo Zhuan (Zuo’s Commentaries), another set of classics of the Spring and Autumn Period attributed to Zuo Qiuming, a well-known historian and Confucius’ contemporary, stated that “hehe Chu Guo, fu you man

58. CIHAI, supra note 1, at 1059. The original title of the books was Zhou Shu. Books from the Qin Dynasty which were not officially adopted in the education system of the West Han Dynasty and therefore scattered among the private were called yi shu (literally “scattered books”). The Zhou Shu volumes were among such scattered Qin books. They were therefore retitled Yi Zhou Shu. Id.
60. Id. at 35-36.
61. Id. at 36.
62. Id (quoting SHI JING (n.d., Spring and Autumn))
63. Id. (“Shi Chu di wei zhi Nanhai, te chi yan zhi er”).
64. Id.
yi, yan zheng Nanhai, yi shu zhu Xia."\(^{65}\) Xia is the abbreviated form of Hua Xia, another name for Zhong Guo or China. When properly translated, the quoted passage means that "the illustrious Chu State appeased the barbarians to make expeditions to the South China Sea [islands], in order to make them belong to the various parts of China."

There was a third relevant set of classics of the Spring and Autumn Period titled Guo Yu (Statements of the States), also believed to have been authored by Zuo Qiuming. This 21 volume work contained statements of nobles of the West Xia Dynasty and the various states in the Spring and Autumn Period. One of the statements made a similar reference to the South China Sea: "Hehe Chu Guo, er jun lin zhi, fu zheng Nanhai, xun ji zhu Xia" (The illustrious Chu State was commanded by its emperor; it appeased [the barbarians] and made expeditions to the South China Sea [islands]; and its commands reached various parts of China).\(^{66}\)

The archaeological discovery of relics made in the primitive era and pre-Han eras, considered with the references in ancient Chinese books to tributes collected from and expeditions to the Nanhai, supports the conclusion that by the Spring and Autumn Period and the Warring States Period (770-221 B.C.), particularly during the Chu State's prosperity, the Chinese rulers and people were already in control of the South China Sea islands, the discovery of which might have taken place in a much earlier primitive era.

**B. Chinese Activities between the Han and Song Dynasties**

In the second century B.C., particularly during the West Han Dynasty (206 B.C.-23 A.D.), China's seafaring abilities were already highly developed. Chinese ships and crews "sailed as far as to [what is now] Sri Lanka, necessarily passing the South China Sea" and the Xisha and Nansha Islands on their way to and from each destination, and "in their practice of navigation and production, they discovered the South China Sea Islands."\(^{67}\) It might be more accurate to say that the Chinese in the Han era re-discovered rather than discovered the South China Sea Islands because their ancestors might have already discovered those islands and reefs. What is certain is that the sailors of the Han Dynasty knew of the existence of the South China Sea islands.

During the reign of Emperor Wudi of West Han (156-87 B.C., reigning 140-87 B.C.), the Chinese continued to sail the South China Sea, which was the only path to destinations around and beyond the Sea. Time and

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65. Id. (quoting Zuo Qiuming, Zuo Zhuang (n.d., Spring and Autumn)).
66. Id. (quoting Zuo Qiuming, Guo Yu (n.d., Spring and Autumn)).
67. Liu Nanwei, Zhongguo Gudai dui Nansha Zhudao de Mingming [The Naming of the South China Sea Islands in Ancient China], in SELECTED PAPERS, supra note 2, at 83.
time again they "rediscovered," or at least re-encountered the vast range of islands, reefs and banks in the Xishas and Nanshas area, renamed the South China Sea Zhanghai, and "peacefully and continuously exercised sovereign jurisdiction over these islands for a long time". 68 During the reign of Emperor Guangwudi of the East Han (23-220), Gen. Ma Fubo (Ma Yuan) led a naval fleet to conquer the barbarians in Rinan Prefecture (now central Vietnam) in 43. After the conquest, Han officials were stationed there on a permanent basis. 69 Xie Cheng in his Hou Han Shu (Books of the Latter Han Dynasty) recorded that Chen Mao, the Biejia of Han (a rank of officials lower than Cishi) who was dispatched to Jiaozhi Province (covering most parts of Guangdong and Guangxi as well as the central and northern parts of Vietnam), accompanied Zhou Chang, the Cishi (the highest official of a province) of Jiaozhou Province (the same area of jurisdiction as Jiaozhi which was being replaced with the name Jiaozhou at the time), to make a naval inspection and patrolling cruise to the islands in the South China Sea ("xing bu Zhanghai"). 70

In his book titled Yiwu Zhi (Records of Rarities), Yang Fu of the East Han Dynasty (223-220) described the geographical features of the South China Sea islands: "Zhanghai qitou, shui qian er duo cishi" ("There are islets, sand cays, reefs and banks in the South China Sea, the water [there] is shallow and filled with magnetic rocks or stones"). 71 Qitou was the collective term used by ancient Chinese to denote islets, reefs, shoals and similar features in the oceans. Cishi literally means magnetite, or magnetic "rocks" or "stones." It was vividly used in Yiwu Zhi in describing how an-

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68. Liu Wenzong, Zhongguo dui Xisha Qundao he Nansha Qundao Zhuquan de Lishi he Falii Yijii [Historic and Legal Bases of China's Sovereignty over the Xisha Islands and Nansha Islands], in SELECTED PAPERS, supra note 2, at 69; see also CHAI, supra note 1, at 956 (explaining that "Zhanghai [is] the ancient name for our country's South China Sea today"). The ancient name was referred to in the sixth volume of CHU XUE Ji, a 30-volume collection of selected works of various dynasties compiled by Xu Jing of the Tang Dynasty (618-907), which quotes HOU HAN SHU [BOOKS OF HISTORY OF THE LATTER HAN DYNASTY]. HOU HAN SHU was authored by Xie Cheng of the Wu State during the Period of the Three Warring States (222-280) and later rewritten by Fan Hua of the Song State of the Southern Dynasty (420-479). Id.

69. Liu Wenzong, supra note 68, at 69.

70. Id. (citing to XIE CHENG (Wu State), HOU HAN SHU [BOOKS OF THE LATTER HAN DYNASTY] (n.d.)).

71. QONG TAI ZHI [RECORDS OF HAINAN AND TAIWAN] (n.d.) (written and published during the reign of Emperor Zhengde (1506-1521) of the Ming Dynasty; quoting YANG FU (East Han), Yi Wu Zhi [RECORDS OF RARITIES] (n.d.), reprinted in 9 RARITIES, PART TWO 14 (Shanghai, Ancient Books Publishing House 1964). See Lin Jinzhi, infra note 69, at 181, n.1. See also HAN ZHENHUA ET AL., COLLECTION OF HISTORICAL MATERIALS ON THE SOUTH CHINA SEA ISLANDS (Beijing, Dongfang Publishing House 1988) [herein-after "HAN ZHENHUA ET AL."].
cient Chinese ships sailing to the South China Sea were stranded on the reefs, shoals and banks as if attracted by lodestones or magnetic rocks.\footnote{72}{See Lin Jinzhi, Zhongguo Renmin Zuizao Faxian, Jingying he sui Nanhai Zhu dao Xingshi Guanzia de Lishi [The History of the Earliest Discovery, Management and Exercise of Jurisdiction over the Islands in the South China Sea by the Chinese People], in SELECTED PAPERS, supra note 2, at 181.}

Further descriptions of the Xisha and Nansha islands appear in two famous books published in the Period of Three Warring States (220-280): Nanzhou Yiwu Zhi (Records of Rarities in the Southern Boundary) and Funan Zhuan (Journeys to and from Funan [now Cambodia]). Nanzhou Yiwu Zhi, authored by Wan Zhen of the Wu State (222-280), recorded the encounters of Chinese expedition sailors of the Han Dynasty (206 B.C. - 220 A.D.) on their way back from the Malay Peninsula to China: “Dongbei xing, ji da qitou, chu Zhanghai, zhong qian er duo cishi” (“Sailing north-eastward, one would encounter a large number of islets, reefs, shoals and banks becoming visible and noticeable in the South China Sea, where [the water is] shallow and filled with magnetic rocks”).\footnote{73}{LI FANG (North Song, 960-1127), Four Barbarian, sec. 11, Gouzhi Guo, in 790 TAIPING YU LAN [The Imperial Books of the Taiping Reign [of the Song Dynasty]] (n.d.) (quoting WAN ZHEN (Wu State, 222-280), Nanzhou Yiwu Zhi [Records of Rarities in the Southern Boundary] (n.d.)).} Wan Zhen noted elsewhere in the same work:

\[
\text{Zhanghai qitou, shui qian er duo cishì, wai jiao ren cheng da chuan,} \\
\text{jie yi tie die die zhi. Zhi ci guan, yi cishì, bu de guo} \\
\text{(There are islets, sand cays, reefs and banks in the South China Sea, and the water there} \\
\text{is shallow and filled with magnetic rocks. Officers on patrol missions} \\
\text{taking big boats all had to change to small boats to reach the area; when they} \\
\text{approached the area, they could not proceed further because} \\
\text{of the magnetic rocks).}\footnote{74}{LI FANG, Medicines: Magnetic Rocks, in 988 TAIPING YU LAN, supra note 73 (quoting WAN ZHEN).}
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Kang Tai, one of the famous navigators of the Wu State, wrote Funan Zhuan. In 226, Emperor Huangwu dispatched Kang Tai and Zhu Ying on diplomatic missions via the South China Sea to Funan\footnote{75}{Funan was an ancient state established in the first century in the southern part of Cambodia. In the seventh century, the Funan State was annexed by the State of Jimie (Khmer), which had been a vassal state of Funan in the northern part of Cambodia today. CHAI, supra note 1, at 516.} where they met envoys from the State of Tianzhu (now India), and numerous other states.\footnote{76}{Id. at 859.}

Kang Tai observed in his Journey to and from Funan: “Zhanghai zhong, dao shanhu zhou, zhoudi you panshi, shanhu sheng qi shang ye” (In the
South China Sea, there are coral islands and reefs; below these islands and reefs are rocks upon which the corals were formed).77

In a work authored by Pei Yuan of the Jin Dynasty (265-420) and entitled Guangzhou Ji ( Chronicles of Guangzhou), it was similarly stated: “Shanhu Zhou, zai [Dongguan] Xian nan wubai li, xi youren yu hai zhong pu yu, de shanhu” ( Shanhu Zhou [The Coral Islands and Reefs] lie five hundred lis south from the County of Dongguan; in the old days [prior to the Jin] people were already catching fish in the [South China] Sea, and they collected corals).78

The Jin people knew the geographical location of the Xisha and Nansha Islands by their nearest distance (500 ancient lis from Dongguan County, a coastal county south of Guangzhou). They were also calling the islands in the South China Sea by the collective name “Coral Islands and Reefs,” the earliest scientific naming of such islands known today. Further, the pre-Jin people of China, at least before 265, were already engaging in fishing and other production activities in the South China Sea islands area. Also, the local government of the Jin Dynasty (265-420) was also exercising jurisdiction over the Xisha and Nansha Islands by sending patrolling naval boats to the surrounding sea areas. In Guangdong Tong Zhi ( The General Records of Guangdong) authored by Hao Yülin, it was reported that Bao Jing, the Administrator of Nanhai (the highest official in charge of the South China Sea affairs) of the Jin Dynasty made patrols and inspection voyages in the South China Sea ( xing bu ru hai).79

In the South China Sea Islands, archaeologists found Chinese-made potteries, porcelains and other historical relics originating, inter alia, during the Southern Dynasty (420-589), the Sui Dynasty (581-618), the Tang Dynasty (618-907), the Song Dynasty (960-1279), the Yuan Dynasty (1206-1368), the Ming Dynasty (1368-1644), the Qing Dynasty (1644-1911), and since 1912.80 It is thus apparent that by the fifth century, Chinese people were already engaging in production activities in the South

77. Li Fang, Lands, sec. 34, Reefs and Islands, in 69 TAIPING YU LAN, supra note 73 (quoting KANG TAI (Wu State), FUNAN ZHUAN [JOURNEYS TO AND FROM FUNAN] (n.d.)). See also Lin Jinzhi, supra note 72, at 181; Wu Fengbin, Wo Guo Yongyou Nansha Qundao Zhuquan de Lishi Zhengji (Historic Evidences of China’s Possession of Sovereignty over the Nansha Islands), in SELECTED PAPERS, supra note 2, at 107, 107; Lü Yiran, Jiao Nansha Qundao "Wuzhu Tudi" Lun [Refuting the Fallacy of “Terra Nullius” Status of the Nansha Islands], in SELECTED PAPERS, supra note 2, at 47-48.


79. Liu Wenzong, supra note 68, at 69 (citing HAO YULIN (Jin), GUANGDONG TONGZHI [THE GENERAL RECORD OF GUANGDONG] (n.d.)).

80. See infra text accompanying notes 196-201.
China's administration of the South China Sea continued into the North and South Song dynasties (960-1279), during which references to the South China Sea islands were made in numerous chronicles, records and historic books. Greenfield notes:

Reliable Chinese historical reference to the Paracel Islands [i.e., the Xisha] is found in the famous 13th century book entitled Chufan Chi (A Description of Barbarous Peoples) written by Chau Jukua while he was inspector of foreign trade in Fukien Lu [sic.] Province during the Southern Song Dynasty (AD 1127-1279). The Paracel Islands were described in the section dealing with Hainan Islands of the Southern Song Dynasty in the following words: "To the east [of Hainan] are the 'Ch'ienli Changsha' (thousand li banks) and the "Wanli shihch'uang" (ten thousand li rocks), and [beyond them] is the boundless ocean ..." The Western sinologists who translated this work identified these two places as the Paracel Islands. 83

Chufan Chi is the traditional transliteration of the book Zhu Fan Zhi (Records of the Various Barbarian Peoples), written in 1225. Chau Jukua is a different transliteration of the same author Zhao Rushi. "Ch'ienli Changsha" is now transliterated as "Qianli Changsha" and "Wanli shihch'uang" as "Wanli Shitang" or "Wanli Shichuang." Changsha literally means "long ranges of shoals", while Shitang and Shichuang both literally mean "atolls surrounding a lagoon." The context in Zhu Fan Zhi in which "Qianli Changsha" and "Wanli Shitang" appeared is quoted below:

82. Liu Rongzi, Ying Shi Nansha Yuye Ziyuan Wei Guoyou Ziyuan [The Fishery Resources in the Nansha Islands Area Should be Considered China's State-owned Resources], in SELECTED PAPERS, supra note 2, at 96.
83. Greenfield, China, supra note 10, at 31. One li now equals 0.5 kilometer. The exact length of a li in ancient China may not necessarily be the same as that used today.
In the fifth year of Zhenyuan [of the Tang Dynasty, i.e., in the year of 789 A.D.], Qiong was named the capital [of Hainan], and that has been followed to date. When one reaches Jiyang, that would be the southernmost point of Hainan [Island], and there would be no further road on the land. Beyond [Jiyang], there are *zhou* [islands in the sea], and they are respectively called Wuli and Sujilang. To the south is Zhancheng; to the west is Zhenla; and to the east are Qianli Changsha and Wanli Shitang. The [Changsha and Shitang] area is vast and without a limit, and the sky and water meet with the same color. Ships and boats sailing through the area are solely dependant on the compass to guide their navigation. Days and nights the compass has to be carefully observed, because even an slightest error may make a difference between life and death.  

Wuli Zhou and Sujilang (i.e., Sumijilang, an ancient transliteration of Sa Karang or Sa Bat Karang) Zhou are small islands off the coast of central-northern Vietnam. Zhancheng is located in central-southern Vietnam. Zhenla is the ancient name for Cambodia. While some Western sinologists and a few Chinese authors hold that *Qianli Changsha* and *Wanli Shitang* both denote the Xisha Islands, most Chinese historians and legal scholars believe that the words *Qianli Changsha* (Chienli Shoals, or “Thousand Li Shoals”) refer to the Xisha Islands while the words *Wanli Shitang* (Wanli Atolls or “Ten Thousand Li Atolls”) referred to the Nansha Islands. Those who believe that both groups belong to the Xisha Islands probably have taken Jiyang or Hainan Island as the viewing point: logically, they would find that Zhancheng (of Vietnam) is in the south, Zhenla (Cambodia) is in the west, while the Xisha islands are in the east (Interpretation One). However, if one strictly takes Jiyang as the viewing point, the ambiguous paragraph quoted above could be even more confusing: to the west of Jiyang, one would not find Zhenla, but central-northern Vietnam; and neither the Nanshas nor the Xishas lie to the east of Jiyang - they are in fact *southeast* of Hainan. The ancient Chinese understanding of the orientation of the east, west, south and north might not be exactly the same as

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85. Han Zhenhua, *Song Dai de Xisha Qundao yu Nansha Qundao* [The Xisha Islands and Nansha Islands in the Song Dynasties], in SELECTED PAPERS, supra note 2, at 305, 309.

86. See, e.g., Wang Liyü, supra note 48, at 24; Lü Yiran, supra note 77, at 48; Wu Fengbin, supra note 77, at 107.
that as understood today, and their descriptions of geographical objects could be inaccurate. This is still true even among some contemporary Chinese, especially those with little or no modern education. For example, it is not unusual for one who asks for directions and distance information in rural areas of China to get the same answer in different places vis-à-vis the same destination:

“What is the distance from here to Beili Village?”, a walker might ask the first farmer he encounters.

“Five lis,” the first farmer would probably respond.

The walker proceeds, walks a few lis, and then asks a second farmer: “How many lis ahead is Beili Village from this point?”

“Five lis.”

The walker walks another few lis, and then encounters a third farmer: “How many more lis do I have to go to get to Beili Village?” he asks.

“Five lis” might still be the third farmer’s answer . . .

While the above situation is often talked about as a joke, it does take place from time to time. Qianli Changsha is not to be taken as an exact measure of “one thousand lis” of shoals, nor is Wanli Shitang to be understood to represent an accurate scale of “ten thousand lis” of coral atolls. They were so called just as names which were typically colored with permissible literary and artistic exaggerations and rhetoric in the Chinese language. If the author of Zhu Fan Zhi could write, from the point of view of Jiyang, that Cambodia, which is in fact southwest of Jiyang, was to the west, there is no reason why he couldn’t mean that Qianli Changsha and Wanli Shitang, which he described as being to the “east” (of Jiyang, if one may so interpret), referred to the Xisha and Nansha Islands even if they are in fact southeast of Jiyang (Interpretation Two).

Another possibility might be that the viewing points could have changed from Jiyang to Zhancheng, or from place to place referred to in Zhu Fan Zhi. Zhancheng is truly to the south of Jiyang and/or the Wuli Zhou and Sumijilang Zhou; Zhenla is exactly to the west of Zhancheng; more or less to the east of both Zhenla and Zhancheng are the Xisha and Nansha Islands (Interpretation Three).

Nevertheless, none of the above three possible interpretations, including the first, can be ruled out at this time. In any event, Qianli Changsha and Wanli Shitang included at least part of the South China Sea islands, and they were considered Chinese territory. In an official chronicle book published in the South Song Dynasty (1127-1279) titled Qiong Guan Zhi (Records of the Qiong Prefecture and its Jurisdiction), it was specifi-
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cally mentioned that the Qianli Changsha and Wanli Shitang were under the jurisdiction of the Qiong Prefecture (now Hainan Province). Similar references can also be found in such Song-related books as Song Hui Yao Ji Gao (Selected Manuscripts of the Digests of the Song Dynasty), Song Shi (The History of the Song Dynasty), and Zhu Fan Tu (Maps of the Various Barbarian Peoples, the North Song Dynasty). According to a Chinese textbook on international law, the Chinese government of each dynasty since the Songs (960-1279) has exercised jurisdiction over Xisha and Nansha Islands. There are historic records which indicate that the navy of the North Song Dynasty (960-1127) sailed to the Xisha Islands to patrol the area.

There does not appear to have been any uniform designation for the Xisha or Nansha group. Sometimes the words Shitang or Shichuang designated the Nansha Islands; at other times, they referred to the Xisha or Zhongsha Islands. So too with the understanding of the term Changsha. The actual group of islands which these words referred to must be determined in the concrete context in which they were used. For example, in Zhu Fan Tu (Maps and Charts of the Various Barbarian Peoples) and its illustrations, which were charted in the Song Dynasty, it was stated that “Shichuang, Changsha zhi xian, Jiao Yang, Zhu Yu zhi xian” (“The dangerous water areas of the Shichuang and Changsha are the outer limits of the Jiaozhi Sea and the Natuna Islands”). Here, Shichuang (Shitang) denotes the Xisha Islands whereas Changsha refers to the Nansha Islands. Jiao Yang is an abbreviated form of Jiaozhi Yang (Jiaozhi Sea), the sea area west of the Xisha Islands. In the phrase Zhu Yu, Zhu was the traditional transliteration of “Datcu”; Yu means islands. The combination of these two words refers to the Datcu Islands (now known as the Natuna Islands). The above passage means that once one passes the dangerous water areas of the Xisha and Nansha Islands, one reaches the sea boundaries between China and foreign countries. This interpretation is supported by

89. Zhancheng Zhan [Chronology of Zhancheng], in 489 Song Shi [The History of Song Dynasty] (Tuo Tuo (1314-1355, Yuan), Alu Tu (Yuan) & Ouyang Xuan (1274-1358, Yuan) eds., n.d., Yuan) (Zhancheng is now part of Guangdong, Guangxi and Vietnam).
90. Han Zhenhua, supra note 85, at 305, 311-12.
91. Duanmu Zheng ed., supra note 2, at 156.
92. Id.
93. Han Zhenhua, supra note 85, at 311 (quoting Zhu Fan Tu [Maps and Charts of the Various Barbarian Peoples] (n.d., Song Dynasty)).
94. Han Zhenhua, supra note 85, at 311-12.
the following quotation from the Song scholar Zhou Qufei’s ten volume Lingwai Daida (1178), a title which, although difficult to translate, literally means Substitute Replies from Lingwai (now Guangdong and Guangxi):

Among those foreign states which are rich in resources and treasures, none is comparable to the State of Dashi; the next is the State of Shepo, and next comes the State of Sanfoqi, followed by the other states. Sanfoqi is the strategic pass for communications between various states via sea routes. [Here is how] to travel from Sanfoqi to China: One would sail by boats northward, pass the upper and lower Daticus and the Jiaozhi Sea, and then respectively enter the territory of China [on the sea]. To reach Guangdong, one would go through Tunmen; to reach Quanzhou, he would go through Jiazimen. From Shepo to China, one sails northwest for some distance, passing the Twelve Rock-Islets, and meeting the sea route between Sanfoqi and China right before the Daticus Islands. From the State of Dashi to China: Taking small boats southbound, reaching the State of Gulin, changing large boats and sailing eastward, arriving at the State of Sanfoqi, and then taking the same sea route to enter China. Other tributary states such as Zhancheng and Zhenla are all close south of the Jiaozhi Sea, and their distances to China are far shorter than half of the distances to the State of Sanfoqi and Shepo, while the distances of Sanfoqi and Shepo to China are again shorter than half of the distance between the State of Dashi and China. To travel from the various foreign states to China, one can complete the round trip in one year, with the only exception being the State of Dashi, the round trip between it and China taking more than two years to complete (emphasis added).

Sanfoqi is the same kingdom of Sriwidjaja which existed on part of what is now Sumatra Island with Palembang as the center. Shepo State was located in Java and part of Sumantra. The State of Dashi refers to the empire of Taziks, and the word Dashi comes from the Persian word Tazi and was used since the Tang and Song dynasties to denote the Arabian

Empire. Tunmen is in Kowloon, Hongkong, and was a gateway to Guangzhou. Shi’er Zishi (Twelve Rock-Islets) refers to the small islets north of the Karimata Islands near Java. Gulin State is the Chinese transliteration of the kingdom of Kulam which existed on the southwest coast of India. Shang Xia Zhu (Upper and Lower Datcus) and Zhu Yu (Datcu Islands) both refer to the Natuna Islands. Quanzhou is located in Fujian Province. Zhancheng was a state in central-southern Vietnam and part of Cambodia with Qui Nhon as its capital. Zhenla consisted mostly of what is now Cambodia.

The sea route between Sanfoqi and Guangdong and Fujian was newly opened during the Song Dynasty. Part of the new sea route, that between Zhancheng and Guangdong and Fujian, was the same as the old one. From Sanfoqi to Zhancheng, the old sea route was along the coasts of Malay Peninsula and Indo-China, while the newly developed sea route passed the Natuna Islands and then immediately entered the domain of China in the South China Sea, namely, the Nansha Islands water area which was then called Changsha Hai (Changsha Sea). Along this new sea route, one would then exit the Chinese territory in the Changsha Sea area, passing Zhancheng on the central-southern Vietnamese coast, proceed through the Jiaozhi Sea, and then re-enter the Chinese territory in the Xisha Islands water area called Shitang Hai (Shitang Sea). The major difference between the new route and the old one is that using the new route, one would enter China’s territory on the sea twice, once in the Nansha Islands area and the other in the Xisha Islands area, whereas along the old coastal sea route between Sumantra and Zhancheng, one did not need to enter and traverse China’s Changsha Sea (Nansha) area. Instead, he only needed to enter China’s territory once in the Shitang Sea (Xisha) area. The words “li Shang Xia Zhu yu Jiao Yang, naizhi Zhong guo zhi jing” mean that by using the new sea route, one could “enter the territory of China both after passing the Upper and Lower Datcus and after traversing the Jiaozhi Sea.”

Taking both Zhu Fan Tu and Lingwai Daida into consideration, one can conclude that during the Song Dynasty, the area where the dangerous zone of the Shitang Sea (Xisha area) and the Jiaozhi Sea met was considered the sea boundary between China and the Jiaozhi Sea, and the beginning of the dangerous zone of the Changsha Sea (Nansha) was considered the sea boundary between Natuna Islands and China. Once one reached those sea boundaries, one then “reached Chinese territory.” It is thus evident that no matter how one is to interpret the words Qianli Changsha and Wanli Shitang in the famous Zhu Fan Zhi, both the Xisha Islands and the Nansha Islands were within the boundary of the Song Empire.

96. Han Zhenhua, supra note 85, at 312.
97. Id. at 311-12.
D. Chinese Activities in the Yuan Dynasty

In 1279, the emperor of the Yuan Dynasty (1279-1360) sent Guo Shoujing, the famous high-level official and astronomer, to the South China Sea to survey and measure the islands and the surrounding ocean. Guo’s research base was located exactly in the Xisha Islands. The Yuan Shi (History of the Yuan Dynasty) clearly recorded Guo’s activities, which are also discussed in some detail by Chinese historians and legal scholars.98

Around the same time as Guo’s survey, an “expeditionary force” was dispatched to Java in 1292. It was noted:

Records of the voyage report that it sailed through “Chi’chou yang” (the ocean of the seven islands) and the “Wanli shif[sic.]-t’ang” (Myriad on ten thousand li rocks). The “Chi’chou yang” [now spelled Qizhou Yang] (Seven Islands) were the seven islands of the present Paracel Islands and “Wanli shih-t’ang” [now spelled Wanli Shifang] apparently referred to the present Spratly Islands.99

The official Yuan Shi (History of the Yuan Dynasty) completed during the Ming era not only contained a geographical description of the South China Sea islands, but also recorded the Yuan navy’s inspections and patrols of the Qizhou Yang (Xisha Islands) and Wanli Shitang (Nansha Islands). The “Shi Bi Zhuan” (Supplementary History) of the work recorded that Chinese naval forces:

... guo Qizhou Yang, Wanli Shitang, li Jiaozhi Zhancheng jie .... ru Hundun Dayang, Ganlan Yu, Jialimada, Julan deng shan, zhubing famu, zao xiao zhou .... (.... sailed through the Qizhou Yang and Wanli Shitang, passing the territory of Jiaozhi and Zhancheng .... [They then] landed such islands as Hundun Dayang, Ganlan Island, Jialimada and Julan, where they stationed and cut down lumbers to build small boats ....)100

Respectively, Qizhou Yang and Wanli Shitang refer to the Xisha Islands and Nansha Islands. “Shan” means the islands in and surrounding the South China Sea. Jialimada refers to the Kalimantan Island (Borneo). The above passage suggests the range and breadth of naval activities of the Yuan Dynasty in the South China Sea.

Wang Dayuan, a prominent Chinese navigator of the Yuan Dynasty who made numerous voyages to the South China Sea and beyond, recorded

100. Shi Bi Zhuan [Supplemental History], in YUAN SHI, supra note 98.
the Yuan naval inspection and patrol activities in his publication entitled *Dao Yi Zhi Lue* (Abridged Records of Islands and Barbarians):

The base of Shitang originates from Chaozhou. It is tortuous as a long snake lying in the sea, and across the sea it reaches various states, and it is popularly called: Wanli Shitang. According to my estimates, it is less than ten thousand *lis* . . . . Its veins can all be traced. One such vein stretches to Java, one to Boni and Gulidimen, and one to the west side of the sea toward Kunlun in the distance . . . . One would be safe to avoid it, and dangerous to come across it.\(^{101}\)

Here, *Boni* denotes Bumi, a kingdom which existed in what is now Brunei and its vicinity on the Kalimantan Island. *Gulidimen* was another kingdom on the Kalimantan. *Kunlun* denotes Kunlun Island, located outside the mouth of the Mekong River and about 200 nautical miles away from Saigon. Given the description that the three “veins” of the *Wanli Shitang* respectively extend to Kalimantan, Java and the western South China Sea overlooking the Kunlun Island in the distance, it would appear that Wang Dayuan meant the Nansha Islands (and perhaps other islands in the South China Sea) by *Shitang* and *Wanli Shitang*. Wang Dayuan further recorded that when the navy of the Yuan Empire was patrolling the South China Sea islands and sea zones near Kalimantan, “you bing zu bai yu ren, buneng qu zhe, sui liu shan zhong” (there were more than a hundred sick soldiers who could leave and had to stay on the islands).\(^{102}\) Given only the number of soldiers who could no longer patrol because of illness, more than one hundred, one can imagine the scale of patrols by the Yuan navy in the Nansha Islands area.

Moreover, *Yuan Shi* clearly stated that the South China Sea islands were within the boundary of the Yuan Dynasty.\(^{103}\) Maps published in the Yuan era invariably included the *Changsha* (the Xisha Islands) and the *Shitang* (the Nansha Islands) within the domain of Yuan. Such maps included the *Yuandai Jiangyu Tu Xu* (Map of the Territory of the Yuan Dynasty Illustrated), the *Sheng Jiao Guang Bei Tu* (also a map of the Yuan Dynasty) of 1330 by Li Zemin, the *Hunyi Jiangli Tu* (Consolidated Maps of Territories) of 1380, and the authoritative *Yu Di Tu* (The Maps of the

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103. **Dili** [Geography], in *Yuan Shi*, *supra* note 98 (stating that the territory of the Yuan Dynasty to the north extended to the Mountain (Bei yin shan), and to the south across the South China Sea (Nan yue hai biao)). *See* Wu Fengbin, *supra* note 77, at 109.
Territory [of Yuan]) drawn and illustrated by Zhu Siben (Yuan). 104 Professor Wu Fengbin of Xiamen University writes:

In addition to the illustrations of Shi-tang and Changsha in the Dong-nan Hai Yi Tu [Map of the Seas and Barbarians in the Southeast] of the Yu Di Tu, Zhu Siben of the Yuan Dynasty in the Xinan Hai Yi Tu [Map of the Seas and Barbarians in the Southwest] also drew illustrations of Shi-tang. This “Shi-tang” is located west of “Boni” (Brunei), north of “Pinggaolun” (Natuna Island), southwest of “Pu’er” (the Philippines), and northeast of “Zhimen” (the Chaoman Island off the east coast of the Malay Peninsula). From the point of view of the above geographical locations, coupled with the support of historic books, the term Shi-tang refers to the Nansha Islands. Zhu Siben stated in his Zi Xu (Self-Illustrations) appended to the Maps that the barbarians and foreign territories which presented tributes to the imperial court [of the Yuan] were located at “Zhanghai zhi dong nan, shamo zhi xibei” [southeast of the South China Sea and northwest of the desert]. Now that the foreign States were located outside the South China Sea, the Shi-tang (the Nansha Islands) in the South China Sea naturally was within the boundary of the territory of the Yuan Dynasty. 105

E. Chinese Activities During the Ming and Qing Dynasties

Local annals and other historic materials of the Ming Dynasty (1367–1644) and the Qing Dynasty (1644–1911) also contained geographical descriptions of the Xisha Islands and Nansha Islands. 106 The Qiongzhou Fu (Qiongzhou Prefecture i.e., the name of the highest administrative authority in Hainan), exercised jurisdiction over the Xisha and Nansha Islands throughout the Ming and Qing dynasties. 107 For example, Tang Zhou of the Ming Dynasty recorded in his Zhengde Qiong Tai Zhi (Records of Qiong[zhou] and Tai[wan] During the Reign of Emperor Zhengde) that the sphere of jurisdiction of the Qiongzhou Prefecture included the Qianli Changsha and Wanli Shi-tang, which respectively referred to the Xisha Is-

105. Id.

In the Ming Dynasty, fu was an administrative and geographical subdivision at a level between a sheng (province) and a zhou (prefecture), but the word fu has been translated as “prefecture” as well. The hierarchy of the administrative structure of the Ming Dynasty (and in most part of the Qing Dynasty) is as follows: 1) the Emperor, 2) zhi li sheng (provinces directly under the central government), 3) fu, 4) zhou, and 5) xian (counties). To avoid confusion, this paper translates fu as “prefecture”, and zhou as “sub-prefecture” — the latter thus appears above counties but certainly below a higher level prefecture.
lands and Nansha Islands. 108 Qiong Guan Gu Zhi (Ancient Records on the Jurisdiction of Qiong[zhou Fu]) written in the same era contained the same information. 109 According to Guangdong Tong Zhi (General Records of Guangdong Province) prepared by Jin Guangzu of the Qing Dynasty, in the Ming era, Wan Zhou (Sub-Prefecture) of Qiongzhou Prefecture not only had jurisdiction over the Qianli Changsha and Wanli Shitang, but also had authority over the “Changsha Hai, Wantang Hai” (Changsha Sea and Wantang Sea), the sea areas surrounding the Xisha Islands and Nansha Islands. 110 Various maps and charts drafted in the Ming Dynasty also indicated that the South China Sea islands were Chinese territory. For example, in an atlas entitled Hunyi Jiangli Lidai Guodu zhi Tu (Consolidated Map of Territories and Geography and Capitals of Past Dynasties) prepared in 1402 by Li Hui and Quan Jin of the Ming Dynasty, the South China Sea islands were all included within the boundary of China. On the map, there are three places in the South China Sea respectively marked “Shitang”, “Changsha” and “Shitang”. “From the geographical locations [of these places] as marked on the map, the first Shitang denotes the Dongsha Islands, Changsha denotes the Xisha Islands, and the second Shitang denotes the Nansha Islands.” 111 Another Ming map published in 1637 also included the entire South China Sea islands as part of the Ming Empire’s territory. 112

In addition to Zheng He’s well-known seven voyages to the Pacific and Indian Oceans through the South China Sea, the navy of the Ming Dynasty continued to patrol the Xisha Islands and Nansha Islands and the surrounding seas. With regard to Zheng He’s activities:

When the famous Chinese navigator Cheng Ho [i.e., Zheng He] of the Ming Dynasty . . . sailed seven times through the South China Sea and the Indian Ocean between 1403 and 1433, his fleet passed through the

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109. Wu Fengbin, supra note 77, at 110.
110. JIN GUANGZU (Qing), Shanchuan: Wan Zhou [Land: Wan Sub-Prefecture], in 13 GUANGDONG TONG ZHI [GENERAL RECORDS OF GUANGDONG] (n.d.). See Wu Fengbin, supra note 77, at 110. The Wan Sub-Prefecture was a zhou level local administration in the southeast part of Hainan Island, covering areas such as Wanning County and Lingshui County.
111. Liu Nanwei, supra note 67, at 84. See also Wang Liyu, supra note 48, at 23 (concluding that on the same map, the mark Changsha denotes both the Xisha and Zhongsha Islands, while the two marks of Shitang respectively refer to the Dongsha and Nansha Islands).
112. Wang Liyu, supra note 48, at 26 (referring to WUBEI MISHU DILI FU TU [A GEOGRAPHICAL MAP ANNEXED TO THE SECRET MANUAL ON DEFENSE PREPARATIONS] (1637)).
Paracel and Spratly Islands on several occasions and the locations of these two islet groups were recorded on a detailed map drawn between 1425 and 1430 (the exact year cannot be determined). The Paracels were referred to as "Shih-t'ang" (Rocks) and "Wansheng shih-t'angyu" (Islands of ten thousand rocks), and the Spratly as "Shihshing shih-t'ang" (Stone star rocks). A subsequent Ming Dynasty publication on the products and geography of the sea entitled "Haiyu" (On the Sea) also clearly described the location of these islet groups. The text explicitly states that the "Wanli changsha" (Myriad on ten thousand sand banks) is located southeast of "Wanli shih-t'ang" (Myriad on ten thousand li rocks). The Spratly Islands are indeed located south-east of the Paracels.113

Zheng He’s fleet used the Xisha and other islands in the South China Sea as stop-over points during voyages to and from the Indian Ocean and other destinations. According to Bruce Swanson, a U.S. naval historian, the sea routes followed by Zheng He’s “naval captains had been known and used for several centuries. Since the Song Dynasty, in fact, the routes had been systematized into two major sea lanes: the East Sea Route and the West Sea Route. Each was subdivided into a major and minor route.”114 Swanson continues:

Following the period of intensive training, the fleet wound its way through the Taiwan Strait and sailed directly into the South China Sea, where land falls were made on Hainan Island and the Xisha Islands (Paracel Islands). From the Xishas the fleet turned westward and made for an anchorage at modern-day Qui Nhon on the Champa [i.e., southern Vietnam] coast. The total time of the Fujian-Champa transit was about ten days. Once there, provisions were taken aboard and the crews had “liberty” and “sim call.” From Qui Nhon the fleet sailed southward toward the west coast of Borneo, making land falls on the various islands in the southern portion of the South China Sea.115

The navy of Hainan Garrison Force (Hainan Wei) in the Ming Dynasty was responsible for inspections and patrols as part of exercising its jurisdiction over the entire South China Sea. It was recorded that “Guangdong bin da hai, hai wai zhuguo jie neishu” (Guangdong is adjacent to the grand [South China] Sea, and the territories beyond the Sea all internally belong [to the Ming State]), and that “Gong tong bing wanyu, ju jian wushi sou, xunluo hai dao ji wan li” (the General led more than ten thousand sol-

113. Greenfield, China, supra note 10, at 31.
115. Id. at 38.
diers and fifty huge ships to patrol several ten thousand lis on the South China Sea. The patrolled area included the Nansha Islands, the Xisha Islands and the Zhongsha Islands.\(^{116}\)

Chinese activities in the South China Sea continued to grow, as did Chinese knowledge about the Sea during the Qing (Ch'ing) Dynasty (1640-1911). The geographical positions of the Xisha Islands and Nansha Islands were described in *Haiguo Wenjian Lu* or *Haikuo Wenchien Lu* (Notes on Lands across the Sea), a book authored by Chen Lunjiong (Ch'en Lunchung), a famous Qing scholar, and published in 1730.\(^{117}\) Chen Lunjiong created a set of maps called "*Sihai Zongtu*" (transliterated "Szuhai Tsungtu") (General Maps of the Four Seas), which referred to the Xisha group of islets as "Changsha" and "Qizhou Yang" ("Chichou Yang") and the Nansha group as "Shitang" ("Shih-t'ang").\(^{118}\) Chen is the first Chinese person known to have identified the South China Sea islands into five large groups: the Qi or the Nan'ao Qi (Dongsha Islands), the Shatou (the Nanxu Shayin in the Dongsha Islands), Qizhou Yang (Xisha Islands), Changsha (Zhongsha Islands) and Shitang (Nansha Islands).\(^{119}\) It is notable that Chen's chart placed Qizhou Yang in the west of the South China Sea, thereby denoting the whole or part of the Xisha Islands; Shitang was located in the south of the South China Sea between Wenlai (Brunei) and Kunlun Island, the approximate location of the Nansha Islands.

\(^{116}\) Wu Fengbin, *supra* note 77, at 110 (citing 14 Li Xi, *Qiongshan Xian Zhi* [Records of the Qiongshan County] (n.d.). *See also* Hu Ruishu, *Bian Hai Waiguo* [The Boundary Seas and Foreign Countries], in 4 *Wan Zhou Zhi* [Records of the Wan Sub-Prefectur] (n.d.).


\(^{119}\) Wu Fengbin, *supra* note 77, at 108.
In the twenty-fourth year of Emperor Daoguang's reign (1844), Yang Bingnan recorded the oration of Xie Qinggao, a Qing official, in the book *Hai Lu* (Illustrations of the Sea), in which the South China Sea islands were described in four groups: Jichuan, Dongsha, Changsha and Shitang.  

Although some Chinese authors disagree as to the islands corresponding to the Jichuan and Dongsha groups, they all agree that Changsha refers to the Xisha Islands and Shitang to the Nansha Islands.  

Also during Daoguang's reign (1821-1851), a sea chart entitled *Yiban Lu* (Particular Illustrations), prepared by Zheng Guangzu contained the marks of "Luoji," "Dongsha," "Xisha," and "Shitang" positioned respectively in the locations of the Dongsha, Zhongsha, Xisha and Nansha Islands.

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Various maps charted and published by the Qing Dynasty, without exception, included the islands of the South China Sea within the territory of the Great Qing. Virtually all these maps specifically referred to the Xisha Islands as Qianli Changsha and the Nansha Islands as Wanli Shitang. Examples of such official maps included, but were not limited to, the following:

1. the *Da Qing Zhong Wai Tianxia Quan Tu* (The Complete Sino-Foreign Maps of the Great Qing) of 1709;
2. the *Qing Zhi Sheng Fen Tu* (Individual Maps of the Provinces Directly under the Administration of the Qing Empire) of 1724;
3. the *Huang Qing Ge Zhi Sheng Fen Tu* (Individual Maps of the Provinces Directly under the Administration of the Royal Qing) of 1755;
4. the *Da Qing Wan Nian Yitong Quan Tu* (The Complete Maps of the Unified Great Qing for Ten Thousand Years) of 1767 charted by Zhu Xiling and revised by Huang Zhengsun;
5. the *Qing Hui Fu Zhou Xian Ting Zong Tu* (The Qing-Charted General Maps of the Capital Cities, Prefectures, Counties and Tings) of 1800 charted by Xiao Feng;
6. the *Da Qing Wan Nian Yitong Tianxia Quan Tu* (The Complete Maps of the Whole Unified Country of Great Qing for Ten Thousand Years) of 1803 charted by Yang Senzhong;
7. the *Da Qing Wan Nian Yitong Dili Quan Tu* (The Complete Geographical Maps of the Unified Great Qing for Ten Thousand Years) of 1810;
8. the *Da Qing Yitong Tianxia Quan Tu* (The Complete Maps of the Whole Unified Country of Great Qing) of 1817;
9. the *Gu Jin Di Yu Quan Tu* (The Complete Maps of the Lands and Territories Then and Now) of 1895;
10. the *Da Qing Tianxia Zhonghua Ge Sheng Fu Zhou Xian Ting Dili Quan Tu* (The Complete Geographical Maps of the Provinces, Capital Cities, Prefectures, Counties and Tings of the Whole China of the Great Qing) of 1904 charted by Wu Changfa; and

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123. *Tings* were created in the Qing Dynasty as an administrative locale at both the prefecture level and the county level in newly established provinces. The prefecture-level Tings were called *Zhili Ting* (Tings Directly under Provinces) which were parallel to the capital cities (*Fus*) and prefectures (*Zhous* or *Zhili Zhous*); the county-level Tings were called *San Ting* (Scattered Tings or sub-Tings) which were parallel to counties (*Xians*) and sub-prefectures (*San Zhou*). CHAI, supra note 1, at 146.
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(11) the *Da Qing Tianxia Zhonghua Ge Sheng Fu Zhou Xian Ting Dili Quan Tu* (The Complete Geographical Maps of the Provinces, Capital Cities, Prefectures, Counties and *Tings* of the Whole China of the Great Qing) of 1905 charted by Wang Xingshun.124

During the reign of Emperor Kangxi (1662-1722) of the Qing Dynasty, the Navy of Guangdong (Canton) was responsible for patrolling the South China Sea. Records of the era reflect that from 1710 to 1712, the Vice-Admiral of the Guangdong Navy (Guangdong Shuishi Fujiang), Wu Sheng, personally led his fleet to the Xisha Islands and the surrounding vicinity to patrol the seas: “Zi Qiongya, li Tongku, jing Qizhou Yang and Si­geng Sha, zhou zao sanqian li gongzi xunshi” ([The fleet] started from Qiongzhou [of Hainan] by way of Tonggu, passing through the Qizhou Yang [the Xisha Islands] and the Sigeng Sha, traveling three thousand lis [about 1,500 km], with [General Wu Sheng] leading the patrol personally).125

The Qing Government “on several occasions” went to the rescue of both foreign ships or their crews caught in distress in the South China Sea.126 For example, in the twentieth Year of Emperor Qianlong (1755), the Qing Government rescued sixteen foreign sailors whose were wrecked by storms in the Xisha Islands area.127 In the twenty seventh Year of Qianlong (1762), the Governor of Guangdong ordered his subordinates to rescue some ships from Xianluo (now Thailand) which had met with mishap in Qizhou Yang (the Xisha Islands).128

In 1883, the Qing Government lodged strong protests against Germans surveying in the Xisha and Nansha areas; as a result of such protests, the Germans terminated their surveys.129 In 1887, the Qing government was compelled to accept an inequitable treaty with France concerning the delineation of boundaries between China and Vietnam (then known as An’nam and Tonkin). The 1887 treaty expressly provided that islands east of a delimitation line belonged to China.130 The Xisha and Nansha Islands are all located east of the Sino-Tonkin delimitation line.

126. Lin Jinzhi, supra note 72, at 191.
127. *Id*. (citing the Archives of the Ming and Qing Dynasties in the Archives Department of the Beijing Imperial Palace).
128. *Id*.
130. Convention relative à la délimitation de la frontière entre la Chine et le Tonkin, Peking, June 26, 1887, 169 C.T.S. 345. ZHAO LIHAI, HAIYANG FA DE XIN FAZHAN [NEW DEVELOPMENTS IN THE LAW OF THE SEA] 216 (Beijing, Peking University Press 1984);
During the reign of the Qing Emperor Tongzhi (1862-1874), the Qing Customs and General Revenue Office planned to establish lighthouses in the Dongsha Islands to facilitate navigation in the South China Sea.\footnote{QINGJI WAIJIAO SHI LIAO [HISTORIC MATERIALS ON THE DIPLOMACY OF THE QING DYNASTY]. See Lin Jinzhi, supra note 72, at 188.} Later, in response to requests by foreign States, the customs office of the Qing made plans in 1908 for erecting lighthouses on the Xisha Islands to improve navigation.\footnote{Lin Jinzhi, supra note 72, at 188.}

In 1909, the Liang Guang Zongdu (Governor of both Guangdong and Guangxi) Zhang Renjun sent the naval officer-in-charge, Li Zhun, to the Xisha Islands area, where his crew identified and renamed 15 islands and islets. Stone markers were erected there, Chinese flags were raised and cannon-shooting ceremonies were held as a show of China’s sovereignty over the islands.\footnote{Lin Jinzhi, supra note 72, at 188.}

In 1910, the Qing Government decided to “zhao lai hua shang cheng ban dao wu” (invite Chinese merchants to contract for the administration of the development affairs of the South China Sea islands). Meanwhile, it demanded that “guan wei baohu weichi, yi zhong lingtu, er bao quanli” (officials shall provide protection and maintenance in order to highlight [Qing’s] territory and to protect [Qing’s] titles and interests).\footnote{Lin Jinzhi, supra note 72, at 188, 189.}

In addition to these examples, numerous other history and geography texts of the Qing Dynasty state without exception that the sphere of jurisdiction of the Qiongzhou Prefecture (or of the Wan Sub-Prefecture under it) included what are now known as the Xisha and Nansha Islands, or recorded the Qing Government’s activities in the South China Sea.\footnote{Guangdong Shuishu Guofang Yaosai Tushu [STRATEGIC DEFENSE FORTRESSES OF THE GUANGDONG NAVY ILLUSTRATED] (Li Zhun (Qing) ed., 1910). Lin Jinzhi, supra note 72, at 188.} In short, the Qing government, like its predecessors, not only claimed, but actually exercised sovereignty over, the Xisha and Nansha Islands. Throughout the history of the Qing Dynasty, that sovereignty was never challenged by China’s neighboring states.


131. QINGJI WAIJIAO SHI LIAO [HISTORIC MATERIALS ON THE DIPLOMACY OF THE QING DYNASTY]. See Lin Jinzhi, supra note 72, at 188.
132. Lin Jinzhi, supra note 72, at 188.
133. Duanmu Zheng ed., supra note 2, at 181; Lin Jinzhi, supra note 72, at 188, 189.
135. See, e.g., JING GUANGZU (Qing), GUANGDONG TONG ZHI [GENERAL RECORDS OF GUANGDONG] (n.d.); XU JIAGAN (Qing), YANG FANG SHUO LUE [A BRIEF INTRODUCTION TO DEFENSE ON THE SEA] (n.d.); MING YI (Qing), QIONGZHOU FU ZHI [RECORDS OF THE QIONZHOU PREFECTURE](n.d.); ZHONG YUANDI (Qing), YA ZHOU ZHI [RECORDS OF THE YA SUB-PREFECTURE] (n.d.); YAO WEN (Qing), JIANG FANG HAI FANG CE [STRATEGIES OF RIVER DEFENSE AND SEA DEFENSE] (n.d.); See also Lin Jinzhi, supra note 72, at 183; Wu Fengbin, supra note 77, at 110.
IV. Continuing Exercise of Sovereignty since 1911

A. Exercise of Sovereignty by the Republic of China

Since the replacement of the Qing Dynasty with the Republic of China in 1911, the Chinese government entrusted administration of the Xisha, Nansha and Zhongsha Islands to the local government of Hainan, which was a special prefecture within Guangdong Province until April 1988 when it was "upgraded" to the status of a province. The Republic of China continued to exercise authority over the South China Sea islands through such means as granting licenses or contracts to private Chinese merchants for the development and exploitation of guano and other resources on those islands. Official and non-official maps published in the Republic era invariably included the Xisha and Nansha Islands as Chinese territory.

In 1911, the new Government of Guangdong Province decided to place the Xisha Islands under the jurisdiction of the Ya Xian County (Ya County) of Hainan Prefecture. In 1921, the Southern Military Government reaffirmed the 1911 decision. These decisions do not imply that China did not assume jurisdiction over the Xisha Islands until 1911. Rather, these decisions were matters of internal administrative and geographical redistribution, which took place repeatedly throughout the history and territory of China. Nor do they suggest that China had sovereignty merely over the Xisha Islands. They simply mean that beginning in 1911, the Ya County of Hainan, rather than the higher level government or governments, had original administrative and other jurisdiction over the Xisha Islands, while China's sovereignty over the Nansha Islands and other islands in the South China Sea remained under the control of the relevant governments at the prefecture, provincial and central level.

In the initial decades of the Republic, the central and local governments took effective measures to encourage Chinese companies and businessmen to participate in the development of the Xisha Islands. The Xisha Islands are closer to Hainan Island and the mainland. Their geographical and other natural conditions, although less than ideal, are more favorable than those of the Nansha Islands. This explains why the Chinese Government, especially that of the Republic of China, considered the development and exploitation of the Xisha Islands a priority. Nothing suggests that

137. For an incomplete list of such maps, see Wu Fengbin, supra note 77, at 111.
138. Liu Wenzong, supra note 68, at 70; Lin Jinzhi, supra note 72, at 191.
139. Lin Jinzhi, supra note 72, at 191.
China ever had any intention of ignoring or abandoning the Nansha Islands.

Since the 1910s, an increasing number of Chinese merchants and businessmen applied for license to develop and exploit minerals and other natural resources on the Xisha Islands. Examples of development and exploitation activities in the Xisha Islands include the following:

• In 1917, a Chinese businessman of the Hai Li Company, He Cheng’ en, applied to the Office of the Governor of Guangdong Province for permission to mine phosphorus ore; \(^{140}\)

• In 1919, businessman Deng Shiying applied to develop selected islands in the Xisha for planting and farming. \(^{141}\)

• In 1921, the Ministry of Internal Affairs of the Republic of China approved the application of a businessman of Guangdong, He Ruinian (Ho Shui-nien), to engage in fishing, reclamation and cultivation, as well as to develop and exploit minerals. However, when the Chinese Government later discovered that Mr. He had assigned his license to a Japanese company, Nanxing Shiye Company, it revoked the license. \(^{142}\)

• In May 1928, the Government of Guangdong Province organized a team of military officers, government officials and scientific and technological personnel, which sailed to the Xisha Islands on board a warship to carry out field surveys and investigations. The team produced a detailed Report of Surveys on the Xisha Islands. \(^{143}\)

• Also in 1928, the Provincial Government of Guangdong entrusted Zhongshan University of Guangzhou with the administration of the Xisha Islands provisionally. \(^{144}\)

• From 1929 to 1931, Chinese businessmen including Song Xiquan and Yan Jingzhi submitted applications for licenses to exploit guano. The Guangdong Provincial Government approved these licenses. \(^{145}\)

• In 1932, the Chinese Government contracted with the Zhonghua Guochan Feitian Gongsi (China National Fertilizer Co.) for the development and exploitation of natural resources. \(^{146}\)

\(^{140}\) Liu Wenzong, supra note 68, at 70.

\(^{141}\) Id.

\(^{142}\) Id. See also Lin Jinzhi, supra note 72, at 191 (citing CHEN TIANXI, XISHA DAO CHENG AN HUBIAN [A COMPILATION OF MATERIALS CONCERNING THE XISHA ISLANDS CASE] (1928)).

\(^{143}\) Liu Wenzong, supra note 68, at 70; Lin Jinzhi, supra note 72, at 191.

\(^{144}\) Lin Jinzhi, supra note 72, at 191.

\(^{145}\) Id.

\(^{146}\) Id.
In 1932, the Industrial Testing Institute of the Department of Construction of the Guangdong Provincial Government began mining guano on the Xisha Islands. 147

In 1933, the Department of Construction of the Guangdong Provincial Government made preparations for the construction of a Guano Fertilizer Producing Plant on the Xisha Islands and made plans for developing the entire Xisha Islands. 148

Between 1932 and 1933, the Chinese Government established a Committee for the Review of Maps of Lands and Waters, which was officers and officials from the military Department of General Staff, the Ministries of Internal Affairs, Foreign Affairs, Navy, Education and the Tibetan and Mongolian Affairs Commission. In December 1932 and March 1935, the Committee convened two meetings, specifically reviewing the names of the islands in the South China Sea and reaffirming the division of China's Nanhai Zhudao into four groups which were respectively called at that time the Xisha Islands, the Nansha Islands (now the Zhongsha Islands), the Dongsha Islands and the Tuansha Islands (now the Nansha Islands). 149

In April 1935, the Committee for the Review of Maps of Lands and Waters charted and published a map entitled Zhongguo Nanhai Ge Daoyu Tu (Map of the Islands of China in the South [China] Sea), which specifically depicted the Xisha Islands and the Tuansha (Nansha) Islands, among others, as within the boundary of the territory of the Republic of China, and detailed the specific names and locations of all islands, shoals, reefs and banks. 150

In 1936, in accordance with a resolution adopted by the 1930 Hong Kong Conference on Meteorology in the Far East, the Chinese Government in the Xisha Islands constructed meteorological observatories, radio stations, lighthouses and similar types of structures. Broadcasts from Xisha radio stations reached Liaoning Province in the north and beyond Singapore to the south. 151

Throughout the 1930s and 1940s, the Chinese Nationalist Government was constantly at war on the mainland with forces led by the Chinese Communist Party and with Japanese invaders. Nevertheless, the Chinese Government, far from “forgetting” or “neglecting” the South China Sea

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147. Id.
148. Id.
149. Id. at 192.
150. Id.
151. Id. at 191.
islands, took every opportunity it could to reiterate China's sovereignty over the Xisha Islands and Nansha Islands. 152

B. The French and Japanese Occupations in the 1930's

On May 21, 1921, French Premier and Foreign Minister Aristide Briand recognized, with regard to the Xisha Islands, that "since the Chinese Government has established her sovereignty since 1909, it is impossible for us now to lay a claim on these islands." 153 Briand's belief that China established sovereignty over the Xisha Islands only in 1909 was a mistaken one, arising from the false impression that the flag-raising and cannon-firing ceremony held on the Xisha Islands in 1909 constituted China's first ever declaration of China's title to the Xishas. The ceremony was in fact a reaffirmation of China's sovereignty on the occasion of renaming fifteen of the Xisha Islands. Nevertheless, Premier Briand correctly acknowledged that at the time of his speech the Xisha Islands were Chinese territory.

On December 4, 1931, France attempted to invade the Xisha Islands on the ground that it needed the islands for the protection of An'nan (Vietnam). France's territorial claims were condemned by the Chinese Government. 154 The French claims were based on the alleged 1816 occupation of the "Hoang Sa" by the emperor of Vietnam and his alleged construction of temples and monuments there in 1835. On July 27, 1932, the Chinese Foreign Ministry instructed the Chinese Envoy to France to lodge a diplomatic protest to the French Foreign Ministry and to deny France's claims to the Xisha Islands. On September 29, 1932, the Chinese Government dispatched a note to the French Government stating that the Guangdong Provincial Government of China had granted applications to Chinese nationals to develop and exploit natural resources in the Xisha Islands, that China had long exercised sovereignty over these islands, that the Chinese Government was skeptical about the alleged Vietnamese activities in the Xisha Islands in 1816 and 1835, and that the Chinese Government would require the French to provide confirmation of the locations of the alleged Vietnamese-built monuments and temples. 155 In a subsequent diplomatic note presented to the French Government by the Chinese Embassy in Paris, the Chinese Government stated:

152. Id. at 192-93; Liu Wenzong, supra note 68, at 71-73. See also infra text accompanying notes 155-79.
153. Liu Wenzong, supra note 68, at 71 (quoting WAJJIAO PINGLUN ZAZHI [JOURNAL OF DIPLOMATIC REVIEW] 77 (No. 4, 1934)).
155. Liu Wenzong, supra note 68, at 71 (citing WAJJIAO BU GONGBAO [GAZETTE OF THE MINISTRY OF FOREIGN AFFAIRS (Nanjing)], July-Sept. 1933, at 203-09.)
... Based on our research and investigation, in 1816, An’nan was subject to China. Whether in terms of might or in terms of reason, it was impossible for An’nan to invade China’s territory. What’s more, in the history and books of China, there is no recordation whatsoever that the Xisha Islands were once occupied by [China’s] vassal State An’nan. The records of the Vietnamese history must have been inconsistent with the facts. The hoisting of flags and firing of cannons by [General] Li Zhun in 1909 [in the Xisha Islands] were merely a kind of commemorative ceremony for renaming the islands. The fact that these islands became occupied and owned by China took place long before General Ma Fubo of the Han Dynasty made expeditions to the south .... All these prove that these islands are China’s territory. The Chinese Government has been always exercising effective administration [of the Xisha Islands].

No further response from France to the above diplomatic statement was received. One might infer that the French authorities did not have evidence to substantiate their allegation that Vietnam once controlled the Xisha Islands.

After France’s attempted occupation of the Xisha Islands in 1931 failed, French forces subsequently invaded and occupied Nanwei Island (referred to by the French as Storm Island; also known as Spratly Island) and five other islands in the Nansha area without notifying the Chinese Government. On July 25, 1933, France declared that it had occupied and acquired sovereignty over nine of the islands in the South China Sea.

On August 4, 1933, the Chinese Government promptly notified the French Government that China reserved its title to the islands in question pending an investigation. The diplomatic note, which was delivered by the Chinese Ministry of Foreign Affairs to the Minister of the French Legation in Nanjing, stated:

The Chinese Government is very much concerned with this matter [i.e., the French-declared occupation of and sovereignty over nine islands in the South China Sea]. She hereby requests Your Excellency, the Minister of the French Legation, to inquire into and ascertain the name, the exact location and the longitude and latitude of each island and report the same to the Chinese Government. Pending such investigation and

156. Liu Wenzong, supra note 68, at 71 (quoting Xisha Qundao An [The Case of the Xisha Islands], Ministry of Foreign Affairs of the Nationalist Government, No. 2, Archive No. 483-1 (March 1934).
158. Tao Cheng, South China Sea, supra note 157, at 268-69.
verification, the Chinese Government reserves her titles vis-à-vis the afore-mentioned declaration of the French Government. 159

The Chinese Government may have merely "reserved" its rights in the above note because the French declaration did not specify the names and locations of the nine islands in the South China Sea. While China had always considered the Dongsha, Zhongsha Islands, the Xisha Islands, the Nansha Islands, and Huangyan Island and their surrounding waters as part of China, it did not claim sovereignty over the entire South China Sea. One could not exclude the possibility that there might be undiscovered islands or newly formed coral features within the South China Sea but outside of the scope of islands and waters rightfully owned by China. Given the lack of sufficient certainty and specificity in the French declaration, a reservation of title pending investigation was the most appropriate response to the French claims.

Probably because it later became apparent that the nine islands occupied by the French authorities were in fact islands of China's Nansha Islands, Ambassador William Koo (Gu Weijun) of the Chinese legation in France, shortly after the above diplomatic communications, delivered China's protest against the French occupation, stating that those islands and the entire Nansha (Spratly) Islands were the territory of the Republic of China. 160 Because the Chinese Government troops were at war with the communist forces, diplomatic protest and reservation of rights were the most China could do at the time.

The Japanese Government also protested the 1933 French occupation of the nine Nansha Islands on the ground that they had been discovered by the Japanese in 1920 and therefore were Japanese territory. 161 This signaled that the Japanese might later invade the same area.

Despite China's protest, the French maintained possession of the nine islands until the Japanese invasion in 1939. At the time of the occupation, the French Government stated that the islands in question were terra nullius, but conceded that during their occupation, "the only people living on the islands were Chinese." 162


162. Bennett, supra note 14, at 437 n.68. See also Chiu & Park, supra note 160, at 18.
On July 3, 1938, French troops invaded and occupied China’s Xisha Islands. This took place shortly after the Japanese invasion against China; China was fully engaged in resisting Japan’s invasion. In Paris, Ambassador William Koo immediately lodged a diplomatic protest with the French Government. On July 6, 1938, the Japanese Foreign Ministry also issued a declaration in protest of the French occupation, stating:

The statements of Great Britain and France made respectively in 1900 and 1921 already declared that the Xisha Islands were a part of the Administrative Prefecture of Hainan Island. Therefore, the current claims of An’nan or France to the Xisha Islands are totally unjustifiable.

While the Japanese protest against the French seizure of the Xisha Islands effectively recognized China’s sovereignty over the Xisha Islands, in substance it was reserving for itself an opportunity for future Japanese intervention by denying the French claims. Thus, in 1939, the Japanese navy occupied the Xisha and Nansha Islands after Japan had invaded China and other parts of Asia. After the Japanese troops took over the nine islands and other islands in the South China Sea in 1939, Japan renamed the islands Shinnam Gunto (New South Islands), incorporated them into the jurisdiction of the Japanese Governor General of Taiwan (which was then under Japanese rule), and remained in control of the Xisha and Nansha area until the end of the Second World War.

Like the French occupation, the Japanese occupation of the South China Sea islands had no legitimate justification. Japan did not and could not gain title to the Xishas and Nanshas, no more than it did or could over the mainland of China, even though it invaded and occupied the Chinese mainland for more than eight years and the South China Sea islands for more than six years. Japan’s relatively brief invasions and occupations did not and could not divest China of rightful title to its territory, including the South China Sea Islands.

C. The Return of the South China Sea Islands to China

On August 15, 1945, Emperor Hirohito formally announced Japan’s surrender to the Allies through a broadcast to the entire Japanese people.

163. Liu Wenzong, supra note 68, at 72.
164. Liu Wenzong, supra note 68, at 72 (quoting Ministry of Foreign Affairs of Japan, Declaration, NAN HUA ZAO BAO [SOUTH CHINA MORNING POST], July 7, 1938).
Japanese forces withdrew from the Xisha and Nansha Islands on August 26, 1945.\(^{167}\)

From October through November 1946, the Nationalist Government of the Republic of China formally retook the Xisha, Nansha and other islands in the South China Sea, thus confirming the division of China's islands in the South China Sea into the Dongsha, Zhongsha, Xisha and Nansha Islands, and reiterating China's territorial sovereignty.\(^{168}\) It should be emphasized that neither the French nor the Japanese occupations changed the territorial status of the South China Sea islands because they were illegal and invalid under international law. It was a natural consequence of the defeat of Japan for China to resume its sovereignty over those islands. According to a Chinese naval officer, "[t]he Xisha and Nansha Islands have always been our territory. They were occupied by the Japanese during the war. Now that we are victorious naturally we have to have them back."\(^{169}\)

Following Japan's retreat from the South China Sea, France made no attempt to regain control of the Nansha area or the Xisha area. Between the Japanese withdrawal in 1945 and the Chinese reoccupation in 1946, the South China Sea was virtually empty of military forces for about one year. That did not mean that the islands became terra nullius during that time, as China never gave up its rights and sovereignty over the South China Sea islands. It should not be forgotten that the Chinese people and the Nationalist Government were faced with many other post-war priorities before they could dispatch a naval contingent to take over the Xisha and Nansha Islands in October and November 1946.\(^{170}\)

It is noted that "one of the first operations carried out by the ex-British ship the Fubo (formerly HMS Petunia) was the reoccupation of the Xisha (Paracel) and Nansha (Spratly) islands. In October and November 1946, a Chinese naval squadron visited these islands and assisted in setting up radio and meteorological stations."\(^{171}\) Along with the naval contingent went officials from the Ministry of Internal Affairs to survey and engage in other administrative functions with regard to major islands and reefs of the Xisha and Nansha Islands.\(^{172}\) On Taiping Island, troops were stationed to

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\(^{167}\) Liu Wenzong, *supra* note 68, at 72.


\(^{169}\) SWANSON, *supra* note 114, at 169.


\(^{171}\) SWANSON, *supra* note 114, at 169.

\(^{172}\) Id.
oversee and patrol neighboring islands and sea area, and a weather station was built there.\textsuperscript{173}

In January 1947, China made several demonstrations of its sovereignty over the Xisha Islands. First, in response to a renewed French claim on January 19, 1947, the Chinese Embassy in France issued a public notice that the Republic of China had sovereignty over the Xisha Islands.\textsuperscript{174} This was rapidly followed by the Chinese foreign ministry’s delivery of a diplomatic note to the French embassy in Nanjing, which solemnly stated that sovereignty over the Xisha Islands belonged to China, and rejecting the French claims to the Xisha Islands as illegitimate.\textsuperscript{175} Finally, on January 28, 1947, the Chinese Foreign Ministry delivered another diplomatic note to the French Embassy in Nanjing protesting France’s invasion and occupation of the Shanhu Dao (Shanhu Island or Coral Island) in the Xisha Islands.\textsuperscript{176}

Additional evidence of China’s claim to Xisha and Nansha was offered in June, 1947, when the Government of Guangdong Province organized an Exhibition Fair of Items and Rarities from the Xisha and Nansha Islands, covering more than 1,300 types of items.\textsuperscript{177} China made other gestures of administrative and military authority over the Xisha and Nansha Islands in late 1947 and early 1948. For example, the Committee on Natural Resources of China requested the central government to consider entrusting the Zhongyuan Qiye Gongsi (Zhongyuan Enterprise Co.) with mining guano in the Xisha Islands. Two months later, the Chinese Ministry of Internal Affairs renamed many of the islands on the basis of comprehensive surveys conducted jointly by the navy and the Ministry of Internal Affairs officials.\textsuperscript{178} In March 1948, more than one hundred Chinese marines were sent to the Xisha Islands, Nansha Islands and Dongsha Islands to relieve previously stationed troops.\textsuperscript{179} Civil war in China in the late 1940s as well as the harsh conditions in the Xisha and Nansha areas prevented the Chinese Government from pursuing a more active program for the development and administration of the South China Sea islands.

\textbf{D. Exercise of Sovereignty by the People’s Republic of China}

After the Nationalists fled to Taiwan Province in 1949, fearing that the People’s Liberation Army (PLA) might continue on to the South China

\begin{footnotes}
\item[173.] Id.
\item[174.] Lin Jinzhi, \textit{supra} note 72, at 193.
\item[175.] Id.
\item[176.] Id.
\item[177.] Id.
\item[178.] Id.
\item[179.] Id.
\end{footnotes}
Sea, they withdrew their troops from the area, including Taiping Island, in May 1950.\textsuperscript{180} Local Taiwanese troops did not return to the South China Sea until 1956. The withdrawal, however, could in no sense be interpreted to be an act inconsistent with China's sovereignty over the South China Sea islands.

First, even if authorities in Taiwan had indeed intended to "abandon" the South China Sea islands, they could have done so only on behalf of their own political forces, not on behalf of China as a country, for the new Government in Beijing had replaced the Nationalists as the sole legitimate Government of China.

Second, the Nationalists' withdrawal of troops was in fact based solely on military and political considerations—they had no intention of abandoning the islands on behalf of China.

Third, given the virtual uninhabitability of these islands, permanent stationing of troops was not legally necessary for the purpose of maintaining China's well-established ownership. Indeed, the People's Republic of China's (PRC) delay in sending PLA troops to replace the Nationalist troops in the South China Sea could not in any manner affect the legal status of the islands there. The continuing claim of well-rooted sovereignty by the PRC should be sufficient to maintain such sovereignty irrespective of the absence or presence of any military force in the area. This was particularly true when the PRC was preoccupied with other important matters on the mainland and was further prevented from sending troops to the South China Sea due to the temporary lack of naval capacity. The fact that a State is temporarily unable to actively patrol, administer or defend part of its territory does not in itself result in the loss of such territory. Contemporary international law no longer recognizes the validity of the taking of territory by one State from another simply because the latter lacks the ability to defend itself.

Upon the founding of the People's Republic of China in 1949, the South China Sea Islands continued to be incorporated into the Hainan Special Administrative Prefecture.\textsuperscript{181} Chinese fishermen continued to fish in the Xisha and Nansha waters and to take shelter in these islands as well. The local Chinese governments continued to exhibit authority over the Xisha and Nansha Islands on behalf of the central government. The following are examples of the PRC's exercise of such authority:\textsuperscript{182}

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\textsuperscript{180} Duanmu Zheng ed., \textit{supra} note 2, at 156.
\textsuperscript{182} Lin Jinzhi, \textit{supra} note 72, at 194-98.
\end{flushleft}
From 1950 to 1952, the governments of Wenchang County, Qionghai County, Lingshui County and others organized fishermen of Hainan to exploit the waters surrounding the Xishas and Nanshas; this practice has continued ever since. 183

In 1953, the Aquatic Products Corporation of the Hainan Special Administrative Prefecture began to mine and exploit guano in the Xisha Islands. 184

In May and June 1955, the Hainan Special Administrative Prefecture dispatched a survey and reconnaissance group to the Xishas to assess the natural resources on the islands. Members of the group included personnel from the Hainan Supply and Marketing Cooperative, the Water Conservancy Bureau of Hainan, the Public Health Bureau of Hainan, the Construction Engineering Corporation of Hainan, the Department of Agriculture of Guangdong Province, and the Supply and Marketing Cooperative of Guangdong Province. 185

In April 1956, the Aquatic Products Department of Guangdong Province organized a reconnaissance team to investigate the aquatic resources in the Xisha Islands. A central working station was established on Yongxing Island, and branch stations were set up on other islands. More than two hundred team members worked all over the islands. The team also set up Supply and Marketing Cooperatives (small shops), medical clinics, clubs and power stations. 186

In 1957, the Guano Corporation of the Hainan Special Administrative Prefecture mined guano and phosphate rocks on the Yongxing Island, with more than one hundred workers participating. 187

In 1958, the Hainan Special Administrative Prefecture established an "Administrative Bureau of the Xisha, Nansha and Zhongsha Islands" with its headquarters stationed on the island of Yongxing, one of the Xisha Islands, the largest island in the South China Sea. 188

From the Winter of 1959 to April 1960, the Aquatic Products Bureau of the Hainan Special Administrative Prefecture organized 131 fishing boats and 1752 fishermen from the coastal counties to engage in large-scale fishing in the waters surrounding the Xisha and Nansha Islands. 189

183. Id. at 197.
184. Id.
185. Id. at 197-98.
186. Id. at 198.
187. Id.
188. Id. But see Duanmu Zheng ed., supra note 2, at 156 (stating bureau established in 1959).
189. Lin Jinzhi, supra note 72, at 198.
• In March 1969, the Administrative Bureau of the Zhongsha, Xisha, and Nansha Islands was renamed “The Revolutionary Committee of the Xisha, Zhongsha and Nansha Islands of Guangdong Province.” At the same time, a People’s Armed Forces Department and a local Public Security Station were set up on Yongxing Island.  

• In 1979, “The Revolutionary Committee of the Xisha, Zhongsha and Nansha Islands of Guangdong Province” was renamed “The Committee of Guangdong Province on the Affairs of the Xisha, Nansha and Zhongsha Islands,” placing these islands under the direct jurisdiction of Guangdong Province.

• In April 1988, upon the establishment of Hainan Province, the administrative organ for the South China Sea islands was renamed “The Committee of Hainan Province on the Affairs of the Xisha, Nansha and Zhongsha Islands,” transferring the jurisdiction over these islands from Guangdong Province to Hainan Province.

• In August 1988, an Oceanic Meteorological Observation Station was set up on the Yongshu Reef in the Nansha Islands.

Meanwhile, the naval force of the PLA, although young and not well-equipped, has been assigned responsibility for patrolling and protecting the South China Sea islands and their surrounding waters. For example, a naval unit that is to be stationed in Hong Kong after July 1, 1997, “was originally a submarine chase brigade established in 1959 and . . . had played an active role in patrolling the Spratlys.” China’s exercise of sovereignty has also been reflected in its responses to foreign claims and activities with regard to the South China Sea islands.

V. Archaeological Discoveries in the South China Sea

In 1920, ancient Chinese coins were discovered in the Xisha Islands by Japanese fishermen. In 1947, Professor Wang Guangwei of Zhongshan University (located in Guangzhou) found on the Xisha Islands additional numismatic artifacts from in ancient China. Similar ancient Chinese coins

190. Id. See also Duanmu Zheng ed., supra note 2, at 156.
191. Lin Jinzhi, supra note 72, at 198.
192. Id.
193. Id.
were also uncovered in 1935 by Fang Jun, Director of the Radio Station in the Dongsha Islands.196

Between 1974 and 1975, archaeologists of Guangdong Province uncovered thousands of pieces of historical relics on Jinqing Island, Yongxing Island, nine other islands, and sand cays and reefs of the Xisha Islands. Among the relics unearthed include pottery and porcelain items dating from the Southern Dynasty (420-589), the Sui Dynasty (581-618), the Tang Dynasty (618-907), the Song Dynasty (960-1279), the Yuan Dynasty (1206-1368), the Ming Dynasty (1368-1644), the Qing Dynasty (1644-1911), and modern times (1912-) originating from such provinces as "Jiangxi, Zhejiang, Fujian, Guangdong and Guangxi."197

During May and June 1991, a group of experts led by Professor Wang Hengjie, an authoritative and prominent Chinese archaeologist, uncovered valuable historical Chinese relics in the Xisha Islands. Among the islands they visited were Ganquan, Jinyin, Zhongjian, Shanhu, Yongxing, Guangjin, Shi Dao, and Chenhang. Relics of pottery and stoneware unearthed from the Xisha group included those made in the primitive era (pre-21st century B.C.), the Spring and Autumn Period (770-476 B.C.), the Warring States Period (476-221), the Qin Dynasty (221-206 B.C.), the Han Dynasty (206 B.C.-220 A.D.), the Tang Dynasty (618-907), the Song Dynasty (960-1279), the Yuan Dynasty (1279-1368), the Ming Dynasty (1368-1644), and the Qing Dynasty (1644-1911).198

In early 1995, Chinese archaeologists discovered residential houses of the Ming and Qing dynasties (1368-1911) on the Xisha Islands. According to Professor Wang, a leading archaeologist, the discovery of these houses, the largest residential area discovered so far on the islands, proves that "Chinese people have lived in the South [China] Sea area for quite a long period in history."199

Through April and May 1996, a Chinese research team discovered numerous stone sculptures, granite pillars, beams and other items "in the middle west of the South China Sea, to the northeast of Shanhu Island of the Xisha Islands, more than 200 nautical miles off the Chinese mainland."200 These "remarkable finds" include a 300-year-old "headless stone sculpture of a man dressed as an ancient minister", a "small sculpture of a stone lion" and other sculptures, as well as "a great number of fragments of

196. Lin Jinzhi, supra note 72, at 187.
197. Id.; see also Wang Liyi, supra note 48, at 24.
pottery and porcelain from the Song (960-1279), Yuan (1271-1368), Ming (1368-1644) and Qing (1644-1911) dynasties. These archaeological discoveries demonstrate China’s historical ties to the Xisha Islands and other areas in the South China Sea.

VI. Competing Claims and Activities

A. The Vietnamese Claims

1. The Impact of the 1951 San Francisco Peace Conference

At the 1951 San Francisco Allied-Japanese Peace Conference, Japan renounced all of its claims to the South China Sea islands and other territories it had occupied before and during the Asian-Pacific War. The resulting peace treaty, however, failed to make any reference to the return of these islands to China. Neither the new Government of the People’s Republic of China nor the remaining local Nationalist authorities in Taiwan participated in the Peace Conference. Immediately prior to the convening of the Peace Conference, the Chinese Premier and Foreign Minister Zhou Enlai (Ch’ou En-lai) made a declaration to warn against any prospective conflicting claims by other countries to the South China Sea islands:

[The Xisha Islands and Nansha Islands] have always been China’s territory. . . . Although they [had] been occupied by Japan for some time during the war of aggression . . . they were all taken over by the then Chinese government following Japan’s surrender . . . . Whether or not the U.S.-British Draft Treaty contains provisions on this subject and no matter how these provisions are worded, the inviolate sovereignty of the People’s Republic of China over Nanwei Islands [i.e., Nansha Islands] and Hsisha Islands [i.e., Xisha Islands] will not be in any way affected.

201. Id.

The San Francisco peace treaty’s failure to specifically mention China as the recipient of the South China Sea islands may have been due to China’s absence from the peace conference. Even the Japanese renunciation of Taiwan was not accompanied with an express provision for Taiwan’s return to China. Professor Cheng observes: It may be noted that Article 2 of the San Francisco Treaty provides for the Japanese renunciation of claims in two different ways in terms of their recipients, which may be determinable: (1) in the case of Korea and the League Mandate territory the recipients are specifically mentioned; and (2) in the case of those territories acquired by Japan from Russia or China the names of the recipients are left open. This was understandable in view of the cold-war situation in which the Treaty was made. Neither the Soviet Union
While France made no further claim to the South China Sea islands, at the Peace Conference Vietnam for the first time laid claims to the Nansha Islands on the basis of the prior French occupation. It was asserted that the Vietnamese claims were not contested by other participants in the Peace Conference. However, the fact that the Peace Treaty did not identify whom the South China Sea islands should be returned is itself a rejection of Vietnam's claims. Had the Chinese Government participated in the Conference, China would have objected to any conflicting claims by Vietnam or any other country. The Treaty's silence on the post-war status of the Xisha and Nansha Islands should not be interpreted as having left the issue of ownership open. Rather, it should be interpreted against recognizing any conflicting and ungrounded claims such as those advanced by the Vietnamese. Further, even assuming that the Treaty had a provision that would in effect transfer the South China Sea islands to Vietnam, such a hypothetical provision would have been valid only if China's express consent had had been obtained.

Although an express reference should have been made regarding the return of the Xisha and Nansha Islands' to China, such a reference was not legally necessary, as China had always been the sole title holder of the South China Sea islands prior to the illegal French and Japanese occupations of the 1930s. Neither the French nor the Japanese could have legally established title to the islands as they were not terra nullius and were therefore not capable of being the targets of discovery and legal occupation. France's physical occupation and Japan's subsequent takeover of the South China Sea islands were without any validity under modern international law. When the Japanese Government renounced its claims to these islands, they could be returned to no other party than the Chinese Government, the sole legitimate title holder.

2. Activities and Claims of South Vietnam from 1951 to 1975

The following is a non-exhaustive list of relevant South Vietnamese activities:

- In April 1956, South Vietnamese armed forces invaded and occupied the Shanhu Dao (Coral Island) in the Xisha Islands. In July 1956,
South Vietnam invaded and occupied the Gan Dao (Gan Island) in the Xisha Islands.\(^\text{205}\)

- In February 1957, South Vietnam claimed sovereignty over the Xisha and Nansha Islands.\(^\text{206}\)

- In February 1959, South Vietnamese warships invaded the Chenhang Island in the Xisha Islands. Their crew members destroyed the Chinese national flags flown on the island, destroyed Chinese fishing boats, and forcefully abducted eighty two Chinese fishermen and seized five fishing boats and other property of these fishermen.\(^\text{207}\)

- In March 1959, South Vietnam established a Kangshi Taisha (transliteration from Chinese) Company, attempting to engage in the exploitation of phosphate deposits in the Xisha Islands.\(^\text{208}\)

- In April 1959, South Vietnam invaded and occupied Chenhang Island and Jinqing Island in the Xisha Islands.\(^\text{209}\)

- From 1960 to 1967, South Vietnamese warships, on numerous occasions, invaded the Anbo Shazhou (Anbona Sand Cay, known in the West as Amboyna Cay), Zhongye Island (Thitu Island), Nanyao Island (Loaita Island), Shuangzi Jiao (Shuangzi Reef) and eleven other features in the Nansha Islands, engaging in illegal surveys and mapping, and destroyed Chinese stone tablets and buildings long present on the islands.\(^\text{210}\)

- In July 1961, South Vietnam declared its annexation of the Xisha Islands into its Guang Nan (Chinese transliteration) Province.\(^\text{211}\)

- In May 1971, South Vietnam invaded Zhongjian Island in the Xisha Islands to conduct surveys.\(^\text{212}\)

- In May 1973, South Vietnam invaded the Zhongye Island, Nanyao Island and Beizi Island (Northeast Cay) in the Nansha Islands to complete surveys which China considers illegal.\(^\text{213}\)

- In July 1973, South Vietnam invaded and occupied the Hongxiu Dao (Nam Yit Island) in the Nansha Islands and renamed it Nanxie (Nam Yit) Island.\(^\text{214}\)

\(^{205}\) Id.
\(^{206}\) Id.
\(^{207}\) Id.
\(^{208}\) Id.
\(^{209}\) Id.
\(^{210}\) Id. at 245-46.
\(^{211}\) Id. at 245.
\(^{212}\) Id.
\(^{213}\) Id. at 246.
\(^{214}\) Id. The Hongxiu Island is sometimes mistakenly transliterated as Hung Ma Island.
• In July 1973, South Vietnam "granted" concessions to foreign companies for the exploitation of natural resources in the Xisha Islands.215
• In September 1973, South Vietnam published a new map which incorporated the Xisha Islands as part of its territory.216
• In January 1974, South Vietnam invaded and occupied Jinyin and Ganquan Islands in the Xisha Islands. The Chinese navy and local residents firmly responded and forced the Vietnamese out of the area.217
• In February 1974, South Vietnam invaded and occupied Nanzi Island (Southwest Cay), Dunqian Shazhou (Dunqian Sand Cay), Jinghong Island (Sin Cowe Island), Nanwei Island (Spratly Island), and Anbona Sand Cay in the Nansha Islands.218
• In February 1975, South Vietnam issued a White Paper on the Hoang Sa (Paracel) and Truong Sa (Spratly) Islands, declaring that the Vietnamese had sovereignty over the Xisha and Nansha Islands.219


Between its establishment in September 1945 and its victory over South Vietnam in April 1975, the Democratic Republic of Vietnam (DRV or North Vietnam) not only failed to contest China's declared sovereignty over the South China Sea islands, but on numerous occasions expressly recognized China's sovereignty over the Xisha and Nansha Islands. The following is a non-exhaustive list of statements made by high-level DRV officials, and of other DRV activities with bearings on China's sovereignty over the Xisha and Nansha Islands:

• On June 15, 1956, during his meeting with Li Zhimin, China's Chargé d'Affaires ad Interim to the DRV, the Vietnamese Vice Foreign Minister Yong Wenzhan (transliteration from the Chinese characters) stated that "according to the material of Vietnam, from the point of view of history, Xisha Islands and Nansha Islands should be part of Chinese territory."220

215. Id. at 245.
216. Id.
217. Id.; Duanmu Zheng ed., supra note 2, at 156.
218. Hou Mengtao, supra note 204, at 246.
219. Id. The white paper was published by the Ministry of Foreign Affairs of the Republic of Vietnam, Saigon, 1975. See MARWYN S. SAMUELS, CONTEST FOR THE SOUTH CHINA SEA 176, 179 (Methuen & Co. 1982).
• On the same day, Li Lu (Chinese transliteration), the Acting Director of the Asian Affairs Division of the Vietnamese Foreign Ministry, who was present at the same meeting, further acknowledged to the Chinese Chargé d'Affaires ad Interim, through the presentation of specific evidence, that “from the point of view of history, Xisha Islands and Nansha Islands already belonged to China back in the Song Dynasty.”

• On September 4, 1958, the same day that China issued its Declaration on Territorial Seas, the People's News, the official newspaper of the Vietnamese Communist Party and the DRV, covered the contents of the Declaration in detail on the front page. No objection or demurrer was made to the Declaration's explicit provision that the principles therein should equally apply to China’s Xisha Islands and Nansha Islands.

• On September 14, 1958, Vietnamese Premier Fan Wentong (Chinese transliteration) dispatched a note to Premier Zhou Enlai. Premier Fan's note solemnly declared that “the Government of the Democratic Republic of Vietnam recognizes and agrees with the Declaration of the Government of the People’s Republic of China dated September 4, 1958 concerning its territorial sea,” and “respects such a decision” of the PRC on the 12-mile territorial sea - thereby recognizing that the Xishas and Nan-shas are Chinese territory.

• In 1960, the Headquarters of General Staff of the Vietnamese People’s Army published a Map of the World charted by its own cartographers. That map clearly identified and marked the Xisha Islands and Nansha Islands by their Chinese names and specifically noted that these islands belonged to China.

• On May 9, 1965, the Vietnamese government issued a declaration regarding the U.S. government’s announcement of an escalation of the war in Vietnam and its surrounding waters. The declaration stated that “President Johnson of the United States has designated as the combat area the entire Vietnam and the water areas near it - an area about 100 nautical miles away from the Vietnamese coast and part of the territorial sea of the Xisha Islands of the People’s Republic of China.”

• In May 1972, the North Vietnam’s Bureau of Survey and Cartography published an Atlas of the World which continued to use the Chinese

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221. Foreign Ministry Document, supra note 220.
222. Id.
223. Id. See also Vietnam Recognizes the Our Government’s Declaration Concerning Its Territorial Sea, PEOPLE'S DAILY, May 15, 1979.
names for the Xisha Islands and Nansha Islands, thereby recognizing Chinese sovereignty.\footnote{Id.}  

- In 1974, the Vietnamese Education Publishing House published an official textbook on Geography for ninth graders. In its lesson on the "People's Republic of China," the textbook wrote: "From the Nansha Islands and the Xisha Islands to the Hainan Islands, Taiwan Island, Penghu Islands, Zhoushan Islands, . . . these islands form an arch, and constitute a Great Wall protecting the mainland of China,"\footnote{Id.} further indicating that Chinese sovereignty over the islands was axiomatic to the Vietnamese.

4. Activities and Claims of the Unified Vietnam since 1975

The attitude of the DRV dramatically changed after it defeated South Vietnam and unified Vietnam in April 1975. It not only continued to occupy those islands, cays, and banks which had been occupied by the South Vietnamese authorities, but also began to increase its military presence and expand its sphere of occupations in the sea region, especially in the Nansha Islands area. Since its unification in 1975, Vietnam has engaged in the following activities in the Nansha Islands.

- In April 1975, North Vietnam replaced South Vietnam to continue its occupation of the Nanzi Island (Southwest Cay), Dunqian Shazhou (Dunqian Sand Cay), Jinghong Island (Sin Cowe Island), Nanwei Island (Spratly Island), and Anbona Sand Cay.\footnote{Id.}

- In May 1975, Vietnam declared the incorporation of the Xisha Islands and Nansha Islands into the territory of Vietnam, renaming the Xisha Islands as Hoang Sa (Hoang Archipelagoes) and the Nansha Islands as Truong Sa (Truong Archipelagoes).\footnote{Id.}

- In March 1976, Vietnam incorporated the Nansha Islands into the Province of Tongnai (transliteration from the Chinese pronunciation).\footnote{Id.}

- In March and April 1978, Vietnam invaded and occupied the Ranqing Shazhou (Ranqing Sand Cay), Zhong Jiao (Zhong Reef) and Bisheng Jiao (Bisheng Reef, Pi Sheng Reef, or Pearson Reef) in the Nansha Islands.\footnote{Id.}

- In July 1978, the Vietnamese government and Japanese companies signed cooperation agreements for the exploration and exploitation of oil and natural gas resources on and around the Nansha Islands.\footnote{Id.}
• In 1979, Vietnam invaded the Zhongjian Island in the Xisha Islands and engaged in what China regarded as “provocative activities.”

• In July 1980, Vietnam and the Soviet Union reached an agreement for the cooperative exploration and exploitation of oil and natural gas resources in the South China Sea.

• In March 1982, a Vietnamese reconnaissance vessel invaded the Xisha Islands sea zone and engaged in alleged “illegal activities.” It was captured by the Chinese navy.

• In February 1987, Vietnam invaded and occupied the Bo Jiao (Bo Reef) of the Nansha Islands, which include the Danzhu Shi (Danzhu Rock) and the Wugui Ding Shi (Wugui Ding Rock).

• In January 1988, Vietnam invaded and occupied the Xi Jiao (Xi Reef or West Reef) in the Nansha Islands.

• In February 1988, Vietnam invaded and occupied the Riji Jiao (Riji Reef), Wumie Jiao (Wumie Reef), Dong Jiao (Dong Reef or East Reef) and Daxian Jiao (Daxian Reef or Great Discovery Reef) in the Nansha Islands.

• In March 1988, Vietnam invaded and occupied the Nanhua Jiao (Nanhua Reef), Guihan Jiao (Guihan Reef), Qiong Jiao (Qiong Reef) and Liumen Jiao (Liumen Reef) in the Nansha Islands.

• In April 1988, Vietnam invaded and occupied the Bolan Jiao (Bolan Reef) and Nailuo Jiao (Nailuo Reef) among the Nansha Islands.

• Between June and July 1989, Vietnam invaded and occupied the Guangya Tan (Tuangya Shoals), Pengbo Bao (Pengbo Barrier Reef) and Wan'an Tan (Wan'an Shoals, Vanguard Reefs) of the Nansha Islands.

• In May 1991, Vietnam announced that it would set up a satellite television ground reception station on one of the islands it occupies in the Nansha Islands.

5. Flaws in the Vietnamese Claims

Vietnam’s claims rest largely on two points: (1) Vietnam’s alleged historic control over the Xisha Islands; and (2) its succession to the alleged
rights acquired by France. Neither of these claims is persuasive. In the first place, China discovered the Xisha and Nansha Islands more than two thousand years ago, and has been maintaining sovereignty over them from dynasty to dynasty continuing into modern times. Although international law does not require China to demonstrate uninterrupted activity in these virtually uninhabitable islands and sea areas, China has effectively maintained its sovereign title through naval patrols, official surveys, namings and renamings of the islands, ongoing geographical descriptions of the islands, charting and publishing maps showing sovereignty, sponsoring and encouraging Chinese fishermen and businessmen to engage in production and development activities in the South China Sea islands, and protesting against foreign invasions and occupations. China has never lost its title to the islands in question, even if many of them have been forcibly occupied by Vietnam and other States. Since no terra nullius is involved, there is no room for Vietnam to make any claim.

Secondly, China’s title to the islands in the South China Sea was expressly recognized by North Vietnam before 1975. According to the well-settled principle of estoppel in international law, Vietnam is not allowed to assert something which is contrary to what it specifically admitted in the past. The Vietnamese Government must be held to its express declarations made prior to 1975 with regard to China’s sovereignty over the South China Sea islands.

Thirdly, notwithstanding its allegations to the contrary, Vietnam has no historic connection with any of the South China Sea islands. Vietnam claims that there are references in its history books to Truong Sa and Hoang Sa, and maintains that they respectively denote the Nansha Islands and Xisha Islands. However, the alleged Truong Sa and Hoang Sa which are referred to in Vietnamese history books are neither the Nanshas nor the Xishas. Rather, as Professor Liu Wenzong’s study points out, they denote the Canton Islands off the coast of Vietnam which are far from both the Xishas and the Nanshas. The Chinese Foreign Ministry reached the


... The principle of estoppel undoubtedly has a place in international law..., and it has played a significant role in territorial disputes...

In many situations acquiescence and express admissions are but part of the evidence of sovereignty. Estoppel differs in that, if it exists, it suffices to settle the issue because of its unambiguous characterization of the situation.... Id.


245. Liu Wenzong, supra note 68, at 65-69. See also Dai Kelai, Yuenan Guji zhong de “Huangsha”, “Changsha” Bushi Woguo de Xisha he Nansha Qundao [The “Hoang
same conclusion in 1988 that the Truong Sa consists of coastal islands off Central Vietnam and that it has nothing to do with the Nansha Islands.246

Furthermore, Vietnam’s alleged connection with the South China Sea islands did not allegedly come to be until the nineteenth century, while China’s documented domination of the area had been in effect for more than two thousand years.

Moreover, ever since General Ma Fubo (Ma Yuan) of the East Han Dynasty conquered Vietnam about two thousand years ago, Vietnam basically had been a “subjugated state” or “tyrannized” vassal state subordinated to the Chinese central rulers until the French took over Vietnam and turned it into a dependent state in the latter part of the 19th century. The Vietnamese themselves acknowledge that the “Nguyens family,” which ruled the central and southern part of Vietnam from 1558 to 1775, “always maintained an attitude of blindly yielding to the Manchurian Qing Dynasty;” and “because of this completely subservient yielding consciousness, [the Nguyens family] was afraid of offending the Great Qing Empire.”247 It is unlikely that the subordinate Vietnamese rulers would be able to replace the Chinese central rulers as the title-holders to the South China Sea islands.

Finally, because France did not acquire any title to the South China Sea islands despite its occupation,248 there is nothing in the South China Sea for the subsequently independent Vietnam to succeed to from France. Had France acquired title to the Nansha or Xisha Islands prior to the Japanese occupation in 1939, then France, being one of the major powers dominating at the 1951 San Francisco Peace Conference, would not have allowed the San Francisco Peace Treaty to fail to specifically mention France as the recipient of the Paracels and the Spratlys. Despite the Peace Treaty’s failure to specify that Chinese and Soviet territories occupied by Japan before and during the Second World War should be returned to them (largely due to China and the Soviet Union’s absence from the conference), the fact that Japan under the Treaty renounced all its claims to these territories of Russia and China naturally and logically leads to a conclusion that they should be returned to their respective prior legitimate title holders. Moreover, the fact that the Republic of Vietnam, an attendee of the San Francisco Conference which made claims to the Xishas and Nanshas at the

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248. See supra notes 153-64 & 203 and accompanying text.
Conference, failed to win support for its claim further indicates that Vietnam never has had a valid claim to these islands.

B. Activities and Claims of other Countries

1. The Philippines

The Philippines maintains claims to a substantial portion of the Nansha Islands, and is in possession of some of the islands, cays, shoals, and reefs. It did not start asserting title to the claimed area until the 1950s, and did not take physical possession of some of the islands and reefs until the 1970s. The Philippines bases its claim on three grounds: (1) the islands are vital to the Philippines' security and economic survival; (2) the Philippines are the most proximate State to these islands; and (3) none of the claimed islands, cays, shoals, or reefs legally belonged to any country, and they were therefore either terra nullius when they were “discovered” by a Philippine exploration team, or, alternatively, if there had been prior claims by other states, those claims had been abandoned.249

The following is a list of events and activities associated with the Philippines' claims.

• In 1948, Tomas Cloma, the President of the Navigation School of Manila, led a surveying expedition to Taiping Island and its vicinity in the Nansha Islands.250 Mr. Cloma and his team claimed to have discovered these islands and named them in aggregate “Kalayaan” (Freedomland), a new state which they attempted to establish on those islands.251 In October 1954, Filipino ships once again sailed to Taiping Island and its vicinity.252 In May 1956, Mr. Cloma wrote to the Foreign Ministry of the Philippines and requested permission to occupy the Nansha Islands.253

• On May 19, 1956, the Philippine Vice President and Foreign Minister asserted that the Philippines had discovered a chain of islands and reefs in the South China Sea which he asserted were neither owned by any country nor inhabited by any humans, and, based on this discovery, formally advanced a claim to Taiping Island (otherwise known in the West as Itu Aba), Nanwei Island (known as Spratly Island proper) and a number of other islets and reefs in the Nansha Islands, asserting that “the Philippines

250. Hou Mengtao, supra note 204, at 246; Lu Yiran, supra note 77, at 47.
252. Hou Mengtao, supra note 204, at 246.
253. Id.
has the right to occupy [these islands] upon their discovery."\textsuperscript{254} He further explained in a subsequent press meeting that these islands should inevitably have belonged to the Philippines because of their proximity to the Philippines.\textsuperscript{255}

- In May 1957, Mr. Cloma and his crew invaded the Shuangzi Jiao (Shuangzhu Reef).\textsuperscript{256} In September 1970, the Philippines invaded and occupied the Mahuan Dao (Mahuan Island or Nanshan Island) and Feixin Dao (Flat Island).\textsuperscript{257} From May to July 1971, the Philippines invaded and occupied Zhongye Dao (Thitu Island), Nanyue Dao (Loaita Island), Beizi Dao (Northeast Cay) and Xiyue Dao (West York Island).\textsuperscript{258}

- In July 1971, President Ferdinand Marcos announced that the Philippines had granted a foreign concession to explore and exploit oil and natural gas in the Nansha Islands.\textsuperscript{259}

- In June 1973, a Philippine reconnaissance vessel invaded the Nanzi Dao (Southwest Cay), Beizi Dao (Northwest Cay), Nanyue Dao (Loaita Island), Zhongye Dao (Thitu Island) and other areas of the Nansha Islands and engaged in surveys and investigations.\textsuperscript{260}

- In March 1974, the commander-in-chief of the Philippine Navy announced that the Philippines had erected a lighthouse on Beizi Dao (Northwest Cay).\textsuperscript{261}

- In January 1976, the Philippines signed a secret agreement with Swedish companies to explore Liyue Tan (the Reed Banks).\textsuperscript{262}

- In June 1976, the Philippines "granted" a concession area covering the Zhenghe Qun Jiao (Chengho Reefs) and Andu Tan (Andu Banks) as "licensed areas" to foreign companies.\textsuperscript{263}

- In February 1978, the Philippines constructed a small airport on Zhongye Dao (Thitu Island).\textsuperscript{264}

- In June 1978, the Philippines issued Presidential Decree No. 1596, declaring that some of the islands and reefs of the Nansha Islands were to be incorporated into the Philippines territory.\textsuperscript{265}

\textsuperscript{254} Lü Yiran, \textit{supra} note 77, 47; Hou Mengtao, \textit{supra} note 204, at 246.

\textsuperscript{255} Lü Yiran, \textit{supra} note 77, at 47; Hou Mengtao, \textit{supra} note 204, at 246.

\textsuperscript{256} Hou Mengtao, \textit{supra} note 204, at 246.

\textsuperscript{257} \textit{id.}

\textsuperscript{258} \textit{id.}

\textsuperscript{259} \textit{id.}

\textsuperscript{260} \textit{id.}

\textsuperscript{261} \textit{id.}

\textsuperscript{262} \textit{id.}

\textsuperscript{263} \textit{id.}

\textsuperscript{264} \textit{id.}

\textsuperscript{265} \textit{id. at 247.}
• In 1980, the Philippines invaded and occupied Siling Jiao (Commodore Reef).

• In September 1994, the Philippine naval force arrested 55 Chinese fishermen for alleged “illegal entry” into “one of the [Nansha] islands claimed by the Philippines” in an attempt to establish homes.

• In February 1995, the Philippines announced that it was constructing lighthouses on Philippine-occupied islets and reefs of the Nansha Islands.

• On March 25, 1995, the Philippine navy intercepted four Chinese fishing boats and detained sixty-two Chinese fishermen in the vicinity of the Banyue Huanjiao (Half-Moon Shoal) who were fishing in waters they believed to be in China’s territory.

• In April 1995, the Philippines announced that it had destroyed Chinese territorial markers on several islands and seized four Chinese trawlers in the Nansha Islands area.

• In June 1995, the Philippines announced that it was erecting lighthouses on the Liyue Tan (Reed Banks), Nares Bank and Seahorse Bank, all in the Nansha Islands, in order to create legal bases for asserting new boundary lines.

From an international law perspective, none of the grounds advocated by the Philippines for its alleged sovereignty over the islands appears to be justifiable. A territorial claim based on economic and security interests does not by itself confer legitimate sovereignty. Even if the Philippines were truly in desperate need of oil and other natural resources to keep its economy moving, and even if its national security were endangered, there is no justification to claim territories under the sovereignty of another State.

Second, the proposition that because the Nansha Islands are so close to the Philippines they should only belong to the Philippines is not persuasive. According to this proposition, the Nicobar Islands should belong to Indonesia rather than to India, because they are right by the north-west tip

265. Id.; see also Bennett, supra note 14, at 425 n.84 (1992) (citing Diane C. Drigot, Oil Interests and the Law of the Sea: The Case of the Philippines, 12 OCEAN DEV. & INT’L L.J. 23 (1983)).

266. Hou Mengtao, supra note 204, at 247.

267. VALENCIA, CHINA, supra note 18, at 44.

268. Id. at 47.


270. Philip Shenon, Rival Claims to Island Chain Bring Edginess to Asia’s Rim, N.Y. TIMES, Apr. 5, 1995, at A11; see also VALENCIA, CHINA, supra note 18, at 46-47.

271. VALENCIA, CHINA, supra note 18, at 47 (citing REUTERS, Philippines to Build Lighthouses on the Spratlys, June 14, 1995).
of Sumatra Island; the Falkland Islands (Malvinas) are so near to Argentina and so remote from the United Kingdom that they would more easily appear to be the former’s territory; St. Pierre and Miquelon would belong to Canada rather than to France because they are just off the coast of Newfoundland; Gibraltar located at the southern tip of Spain would be Spanish rather than British territory; and Greece would lose title to some of its islands in the Aegean Sea because of their proximity to Turkey, and so on. Just as none of these title-holding states would accept the proximity-based rationale for ceding their territory, China should not accept that some of its islands and water areas in the South China Sea must be transferred to the Philippines simply because they are closer to the Philippines than to the mainland of China.

Third, and most important, the Philippines’ assertion that the South China Sea islands were *terra nullius* is totally contrary to fact. The Philippines knew and should have known that China had owned and administered the Nansha Islands and other islands in the South China Sea for centuries. Whether the Philippines actually knew or not, China’s discovery of and continuous sovereignty over the entire chain of the Nansha Islands were well-known and well-established. In order for a territory to constitute *terra nullius*, it must be one which either has never been discovered hitherto, or, after being discovered and titled, has been clearly abandoned by the prior discoverer.

Abandonment does not mean simple withdrawal or failure to station troops or effectuate settlements after discovery. It requires the presence of an intention to disown and never to re-claim again. For hardly inhabitable islands, one cannot expect the discoverer and title holder to maintain a permanent presence on the islands. Few would argue that uninhabitable islands are not ownable. The United States, for example, owns many uninhabited islands in the Pacific, but can hardly be said to be in danger of losing its sovereignty over them absent its declared intention and will to abandon them.

The presumption that if the islands claimed by the Philippines were once owned by other States, and that their ownership had been abandoned is simply untenable. China has never abandoned its title to any of its islands and waters in the South China Sea, nor has the local regime in Taiwan. To the contrary, China, through the central government and the local Taiwanese authorities, has taken reasonable measures required of it by international law to maintain its sovereignty over the Nanshas and other areas. No one can discover or “rediscover” an already owned island no matter whether it is inhabited or actually occupied at the time of the alleged “discovery” or “rediscovery.” Therefore, the Nansha Islands were not *terra nullius* when the Cloma team happened to arrive - they were not discoverable or rediscoverable by Tomas Cloma or anyone else.
2. **Malaysia**

Malaysia’s claims to some of the features of the Nansha Islands are similarly motivated by economic considerations. Malaysia did not become an interested party to the South China Sea disputes until the late sixties, and more particularly since the seventies. Some of its claims overlap with those of the Philippines and Brunei and all of its claims contradict those of China and Vietnam. What follows highlights the Malaysian claims and activities in the South China Sea area from the 1960’s to the 1990’s.

- In 1968, Malaysia declared that the Nankang Ansha (Nankang Shoals), Haining Jiao (Haining Reefs), Beikang Ansha (Beikang or Peikang Shoals) and Zengmu Ansha (Zengmu or Tsungmu Shoals), all in the Nansha Islands, were within its “mining area,” and granted a concession to the Shell Oil Company of the United States.\(^{272}\)

- In 1970, Malaysian vessels started drilling in the Nankang Shoals and Beikang Shoals.\(^{273}\)

- In 1971, Malaysia began drilling in Haining Jiao (Haining Reefs) and Tanmen Jiao (Tanmen Reefs) in the Nansha Islands.\(^{274}\)

- In 1972, Malaysia started drillings in the Kangxi Ansha (Kangxi Shoals) in the Nansha Islands.\(^{275}\)

- In 1973, Malaysia started drillings in the Mengyi Ansha (Mengyi Shoals) in the Nansha Islands.\(^{276}\)

- In December 1979, Malaysia published a map which formally incorporated into its territory the Siling Jiao (Commodore Reef), Polang Jiao (Polang Reef), Nanhai Jiao (Mariveles Reef), Anbo Shazhou (Amboyna Cay), Nanyue Ansha (Nanyue Shoals), Xiaowei Ansha (Xiaowei Shoals) and the sea zone south of these islands, all among the Nansha Islands.\(^{277}\)

- In August 1983, Malaysia invaded and occupied the Danwan Jiao (Swallow Reef) in the Nansha Islands.\(^{278}\)

- In October 1986, Malaysia invaded and occupied the Guangxing Zai Jiao (Little Guangxing Reef or Andasier Bank) and Nanhai Jiao (Mariveles Reef) in the Nansha Islands.\(^{279}\)

- In May 1991, Malaysia announced that it would develop a tourist resort on the Danwan Jiao (Swallow Reef).\(^{280}\)

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\(^{272}\) Hou Mengtao, *supra* note 204, at 247.

\(^{273}\) Id.

\(^{274}\) Id.

\(^{275}\) Id.

\(^{276}\) Id.

\(^{277}\) Id.

\(^{278}\) Id.

\(^{279}\) Id.

\(^{280}\) Id.
• On March 23, 1995, Malaysian naval forces opened fire on a Chinese fishing vessel in the South China Sea and injured four Chinese fishermen. 281

• In May 1995, Malaysian Prime Minister Mahathir paid a visit to the Danwan Jiao (Swallow Reef), which Malaysia had occupied since 1983.

The Malaysians base their claims mainly on the assertion that those islands and reefs so claimed are within Malaysia’s zone of continental shelf. 282 Under the continental shelf approach, if Malaysia could claim title to some of the islands in the South China Sea, there necessarily must be a pre-condition, i.e., those islands must not have been owned by any other State and must be thus terra nullius. Malaysia’s assertion of the continental shelf approach is hardly justifiable, as it is an inadequate application of the continental shelf approach to acquiring rights to islands in the high seas. The reefs and islands claimed by Malaysia are not terra nullius; China has title to these islands based on historical use and control. China’s title makes it impossible for Malaysia to base its claim on the allegation that the claimed reefs and islands are within its continental shelf zone. Even the zone of the Malaysian continental shelf itself may be subject to doubt. If China had not had sovereignty over the disputed islands, they might well be located within the natural or legal zone of Malaysia’s continental shelf as permitted by international law. Unfortunately, that is not the case. Malaysia may not extend its continental shelf into the territory or sovereign domain of China or any other State, no matter how short the distance between the shores of Malaysia and the claimed islands, reefs and banks in the South China Sea. To determine where its continental shelf ends, Malaysia would have to negotiate with China on the delimitation of continental shelf (and other sea zones) between its own territories and the relevant Chinese-owned islands and other areas in the South China Sea in accordance with international law, particularly the United Nations Convention on the Law of the Sea, to which both China and Malaysia are now parties.

3. Brunei

Brunei was once under British rule and did not become independent again until 1984. In 1954, the British authorities claimed a line of sea area 100 fathoms away from the Brunei coast. Following the prior British claim, Brunei has advanced a claim to a portion of the area on the basis of

280. Id.
282. Valencia, Spratly Solution, supra note 249; see also ZHAI LIHAI, YANYI, supra note 225, at 28-29; see also Lü Yiran, supra note 77, at 47; see also ZHAI LIHAI, XIN FAZHAN, supra note 130, at 30.
the Law of the Sea Convention provisions relating to the Exclusive Economic Zone (EEZ). Brunei claims China's Nantong Jiao (Louisa Reef) at 6°20'N and 113°14'E, which is also claimed by Malaysia. In addition, in a 1988 map published by Brunei, the continental shelf area claimed by Brunei extended further over China's Jindun Anjiao (Rifleman Bank), currently occupied by the Vietnamese. The Brunei claim "takes the form of a corridor extending to the south of the Spratlys proper and beyond 200 nautical miles from its coast to include Rifleman Bank and a small corner of Kalayaan." However, Brunei maintains no physical occupation of any island, reef, or shoals in the Nansha Islands.

As in the case of Malaysia, any claims that Brunei can validly make to the above area must rest on a predicate assumption that no part of the claimed EEZ is already owned by any other State. Since a substantial portion of Brunei's claimed EEZ intrudes into China's Nansha Islands and their surrounding water areas, this portion of the Brunei EEZ claims has no merit under international law. The real issue that exists is the delimitation of the sea zone boundaries between Brunei and China in accordance with international law.

C. Responses of the People's Republic of China

The Chinese Government has consistently declared against any foreign encroachment of the Xisha and Nansha areas and China's other islands in the South China Sea. The following is a partial list of occasions involving China's unyielding position on its sovereignty over the Xisha and Nansha Islands.

- On August 15, 1951, in his Declaration Concerning the Draft Peace Treaty between the United States, the United Kingdom and Japan at the San Francisco Conference, Chinese Premier and Foreign Minister Zhou Enlai solemnly declared: "The Xisha Islands and Nansha Islands, like the Dongsha and Zhongsha Islands, have always been China's territory. China's sovereignty over the Xisha Islands and Nansha Islands shall not be affected no matter whether the U.S./U.K. Draft Peace Treaty with Japan

284. VALENCIA, CHINA, supra note 18, at 8.
would contain provisions [pertaining to these islands] and how it would provide [for them]."

286

- After the Philippines’ Vice President and Foreign Minister laid claims to some islands in the Nansha area in May 1956, the Chinese Government protested the Philippine claim by reiterating that the “Taiping Island and Nanwei Island in the South China Sea, together with the small islands in their vicinity, are known in aggregate as the Nansha Islands. These islands have always been a part of Chinese territory. The PRC has indisputable, legitimate sovereignty over these islands.”

287

- On May 29, 1956, partly in response to the South Vietnamese authorities’ invasion and occupation of the Shanhu Island in April 1956, the spokesman of the Foreign Ministry of the PRC issued a Declaration of Sovereignty over the Nansha Islands, emphasizing that “China’s legitimate sovereignty over the Nansha Islands shall under no circumstances be violated by any country on any ground or by any means.”

288

- On September 4, 1958, the Chinese Government issued the PRC’s Declaration on Territorial Sea. Articles 1 and 4 of the Declaration expressly stated that the Xisha Islands and Nansha Islands, as well as the Dongsha and Zhongsha Islands, belong to China and that the principles of the Declaration shall equally apply.

289

- On February 27, 1959, following South Vietnam’s violation of China’s territory in the Xisha Islands and abduction of Chinese fishermen off Chenhang Island, the Chinese Foreign Ministry lodged a strong protest, reiterating that “the Xisha Islands are China’s territory.”

290

- On April 5, 1959, the Chinese Foreign Ministry protested against the South Vietnamese encroachment over Chenhang Island and Jingqing Island in the Xisha Islands, and their seizure and maltreatment of Chinese fishermen.

291

- From May 1959, through December 1971, U.S. military airplanes and warships violated China’s territorial air space and territorial sea in the Xisha Islands area more than 200 times. The Chinese Foreign Ministry issued stern warnings against such actions after each violation.

292

286. 2 DOCUMENTS OF FOREIGN RELATIONS OF THE PEOPLE’S REPUBLIC OF CHINA 32 (Beijing, World Knowledge Publishing House 1958) [hereinafter “FOREIGN RELATIONS DOCUMENTS”].
287. Greenfield, China, supra note 10, at 33 (quoting Shao Hsun-cheng, supra note 203).
288. 4 FOREIGN RELATIONS DOCUMENTS, supra note 286, at 62.
289. 5 id. at 162-63.
290. 6 id. at 27-28 (1961).
291. Id. at 37-38.
292. Lin Jinzhi, supra note 72, at 194.
• On July 16, 1971, the Chief of the General Staff of the PLA stated that "the Xisha and Nansha Islands have always been China's territory."293

• On January 11, 1974, the spokesman of the Foreign Ministry protested against South Vietnam's territorial claim over the Taiping Island, Nanwe Island, and other islands.294

• On January 15-19, 1974, in response to South Vietnam's invasion of China's Xisha Islands, the PLA and local militia fought back in self-defense, defeated and drove away the South Vietnamese armed forces from the islands they had invaded.295 The Chinese Foreign Ministry, in its declaration of January 20, 1974, reiterated that the "Xisha Islands, Nansha Islands, Zhongsha Islands have always been China's territory."296

• On February 4, 1974, the spokesman for the Chinese Foreign Ministry, in his declaration in protest against the South Vietnamese invasion of several of China's Nansha Islands, once again pointed out: "The Nansha Islands, Xisha Islands, Zhongsha Islands and Dongsha Islands, are all part of Chinese territory. The People's Republic of China has indisputable sovereignty over these islands and their surrounding sea area."297

• On July 2, 1974, in his speech at the Third United Nations Conference on the Law of the Sea, Cai Shupan, the head of the Chinese Delegation, asserted: "The Xisha Islands and Nansha Islands in the South China Sea have always been an inalienable part of Chinese territory. The Chinese government and the Chinese people shall under no circumstances allow the Saigon Authorities to violate China's territorial sovereignty."298

• On June 14, 1976, the spokesman for the Chinese Foreign Ministry stated that China has maintained indisputable sovereignty over the Xisha Islands and Nansha Islands and their surrounding sea areas, and the natural resources in these areas are China's property.299

• On December 29, 1978, the spokesman for the Chinese Foreign Ministry made an additional declaration, stating that "as in the case of the


Xisha Islands, Zhongsha Islands and Dongsha Islands, the Nansha Islands are always part of Chinese territory.  

- On April 26, 1979, at the second meeting of negotiations between vice foreign ministers of China and Vietnam, Han Nianlong, the head of the Chinese Delegation, asserted in a speech: "The Xisha Islands and Nansha Islands have always been an inalienable part of Chinese territory. The Vietnamese part should come back to its original position of recognizing that fact, respect China's sovereignty over these two sets of islands, and withdraw all its personnel from those islands of the Nansha Islands which it occupies."  

- On September 26, 1979, the spokesman for the Chinese Foreign Ministry reiterated that China has indisputable sovereignty over the Xisha Islands and Nansha Islands and their surrounding sea areas, and the natural resources in these areas are China's property.  

- On January 30, 1980, the Chinese Ministry of Foreign Affairs issued a document titled "China's Sovereignty over the Xisha Islands and Nansha Islands Indisputable." The document significant historical material, records, maps, and cultural relics to demonstrate that these islands had been China's territory since the Song Dynasty.  

- On July 21, 1980, the spokesman of the Chinese Foreign Ministry made a statement concerning the signing of an agreement between the Soviet Union and Vietnam on cooperative exploration and exploitation of oil and gas on the "Southern Continental Shelf of Vietnam," an area intruding into Xisha and Nansha Islands and the surrounding waters. The statement stressed that "the Xisha and Nansha Islands, just like the Dongsha and Zhongsha Islands, have always been part of Chinese territory; the natural resources in the above areas belong to China"; it further pointed out that the Soviet-Vietnamese agreement and the like are invalid.  

- On March 4, 1982, PLA forces stationed in the Xisha area seized a Vietnamese reconnaissance warship within the territorial sea of the Xisha Islands.

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• On November 28, 1982, the spokesman for the Chinese foreign Ministry declared: "The so-called Beibu Wan [Tonkin Gulf] Boundary claimed by the Vietnamese Government is illegal and invalid. It is hereby reiterated that the Xisha Islands and Nansha Islands are an inalienable part of China’s sacred territory."306

• On April 24, 1983, the Place Name Commission of China published a partial list of standard names for 287 islands and other features in the South China Sea. This was part of the nation-wide process of standardization of place names.307

• On November 14, 1983, Qi Huaiyuan, the Head of the Press Division of the Chinese Foreign Ministry, made the following statement at a press conference:

Recently, the Danwan Reef of China’s Nansha Islands was illegally occupied by foreign armed forces; some other countries subsequently made territorial claims towards certain islands and reefs of China’s Nansha Islands. China has indisputable sovereignty over the Nansha Islands and the surrounding sea areas, and the natural resources within such areas are China’s property. China’s legitimate sovereignty over the Nansha Islands under no circumstances ought to be violated by any country on any ground by any means. Any and all occupations, exploitation, exploitation and other activities in the Nansha Islands areas by any country other than China are all illegal and impermissible.308

• On April 15, 1984, the Foreign Ministry of China issued a declaration in strong protest of Vietnam’s illegal occupation of some of the islands of China’s Nansha Islands, and requested the Vietnamese to withdraw from all islands which it had occupied illegally.309

• In May 1987, the Chinese navy dispatched warships to the Nansha Islands area to perform patrols.310

• On January 18, 1988, the Chinese Navy entered the Yongshu Jiao (Fiery Cross Reef) area; in February 1988, China began to construct an oceanic observatory on the reef.311

306. Xisha and Nansha Islands are China’s Sacred Territory, PEOPLE’S DAILY, Nov. 29, 1982, at 1.


310. Lin Jinzhi, supra note 72, at 196.

311. Id.
On February 12, 1988, the Chinese Foreign Ministry spokesman stated that China’s normal patrols and other operations in some of the Nansha Islands and their surrounding waters were matters within China’s sovereign rights and that Vietnam had no right to interfere.\(^{312}\)

On March 14, 1988, Vietnamese naval forces opened fire on and engaged in other provocative activities against China’s naval forces which were conducting surveys on the Chigua Jiao (Mabini Reef). The PLA was compelled to return fire in self-defense.\(^{313}\)

In February and March 1988, Chinese naval forces landed on the Huayang Jiao (Cuarteron Reef), Nanxun Jiao (Gaven Reefs), Dongmen Jiao (East Gate Reef), Chigua Jiao (Mabini Reef) and Zhubi Jiao (Chowwei Reef).\(^{314}\)

On December 27, 1990, the spokesman for the Chinese Foreign Ministry reiterated the Chinese position that the Nansha Islands have been China’s territory since ancient times, that the Vietnamese Government recognized China’s sovereignty prior to 1975, that in 1975 the Vietnamese Government suddenly changed its position, and since then had continuously sent troops to invade and occupy parts of the Nansha Islands, and that such actions constituted blatant encroachment upon China’s territorial sovereign rights. The Foreign Ministry demanded that Vietnam withdraw from all islands and reefs it occupied in the Nansha area.\(^{315}\)

In February 25, 1992, China passed its Law on Territorial Sea and Contiguous Zone, which reiterates that “the territory of the People’s Republic of China includes . . . the Dongsha Islands, Xisha Islands, Zhongsha Islands, Nansha Islands, and all other islands that belong to the People’s Republic of China.”\(^{316}\)

In May 1995, in reference to the Malaysian Prime Minister’s visit to the Malaysian-occupied islet Danwan Jiao (Swallow Reef) of China and his assertion of Malaysian sovereignty over it, the Chinese Foreign Ministry’s spokesman “issued a strong rebuttal” to the Malaysian assertion.\(^{317}\)

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\(^{312}\) *China’s Patrol of Nansha Islands Wholly within Sovereign Rights*, *People’s Daily*, Feb. 23, 1988, at 1.

\(^{313}\) *Vietnamese Military Provocation Near Nansha Islands, PLA Forced to Defend Itself*, *People’s Daily*, March 16, 1988, at 1.

\(^{314}\) Lin Jinzhi, *supra* note 72, at 197.


On May 11, 1995, Chinese Foreign Minister Shen Guofang condemned the Philippines' organizing of tours of the Nansha Islands for foreign journalists as an encroachment of China's "irrefutable sovereignty." Shen stressed that "China is an independent state and is a country which will stick to its principles and will not bend down in the face of any pressure. China will not give limitless tolerance to these encroachments and provocation on China's sovereignty and dignity." 318

On December 29, 1995, a spokesman for the Chinese Foreign Ministry demanded that Manila release four Chinese fishermen sentenced to 10 months in jail for entering waters claimed by the Philippines in the Spratly Islands, saying the verdict was "illegal." He repeated China's position that "China has indisputable sovereignty over the Nansha islands," and noted that "these Chinese fishermen were conducting normal fishing activities" in Chinese waters. He concluded by asserting that "[t]he verdict passed on the fishermen by the Philippine side is illegal, null-and-void, and unacceptable, and the Philippine side should release the fishermen and the fishing boats at an early date." 319

On April 18, 1996, in response to a report on a contract signed on April 10 between Petro Vietnam and the U.S. company Conoco for joint operations in oil and gas prospecting and drilling in the Wan'an Tan (Vanguard Bank) area of China's Nansha Islands, the Chinese Foreign Ministry spokesman again asserted that China has incontestable sovereignty over the Nansha Islands and their adjacent waters. 320

On May 15, 1996, the Standing Committee of the Chinese National Peoples' Congress passed a Decision to Ratify the United Nations Convention on the Law of the Sea. The Decision declares that China reiterates its titles and rights to the various islands referred to in Article 2 of the 1992 Law on Territorial Sea and Contiguous Zone. 321 On the same date, China issued the Chinese Government's declaration on its territorial sea boundaries, announcing these boundaries as "part of its territorial sea adjacent to the mainland and those of the territorial sea adjacent to its Xisha Islands," and leaving the baselines for the Nansha Islands and other islands of China.

318. Id.
to be issued separately.322 These efforts to reiterate and protect China's sovereignty over the South China Sea islands continue to this day.

VII. Conclusions

The subjects of ancient Chinese rulers discovered the entire chain of the South China Sea islands no later than the Spring and Autumn Period and perhaps at a much earlier stage in ancient Chinese history.323 Even if the exact date of Chinese discovery cannot be ascertained, it is safe to conclude that, based on an abundance of historic evidence, China was the first recorded discoverer of the Xisha, Nansha and other groups of islands in the South China Sea.

Under rules of international law prior to the eighteenth century, China's discovery alone would suffice to entitle China to establish and maintain sovereignty over the Xisha Islands, the Nansha Islands and other claimed features in the South China Sea. According to principles of inter-temporal and international law, the evaluation and determination of historic titles should be made in light of the rules of international law which were in force at the time such title was allegedly acquired, not in accordance with the rules of law at the time of subsequent disputes.324

More importantly, even if one does not take due account of the principle of inter-temporal law and instead applies the standards of present-day international law to the South China Sea disputes, China can still prove and justify its exclusive sovereignty over the claimed islands. While contemporary international law requires extensive exhibition of authority over a claimed territory, it has also created both less-demanding rules and exceptions concerning the acquisition of unpopulated or uninhabitable lands and territories. It is unrealistic and unnecessary to require the claiming State to transport a sizable population to the discovered or claimed territory for the purpose of establishing and maintaining permanent settlements where the territory in question has insufficient resources to support such settlements. Nor is it necessary for the title-holding State to station troops or maintain an administrative presence in such territories. Where the title State considers it necessary and possible to administer, patrol or even sta-


323. See supra text accompanying notes 55-66, 198.

324. See, e.g., The Grisbadarna Case, Hague Ct. Rep. (Scott) 121 (Court of Tribunal), 11 R.I.A.A. 147; Clipperton Island Arbitration, supra note 44; The Western Sahara Advisory Opinion, supra note 46; The Palmas Arbitration, supra note 47. See also 10 Encyclopaedia, supra note 23, at 499; see also Zhao Lihai, Yanjiu, supra note 225, at 2-4; Wang Liyü, supra note 48, at 19.
tional troops in such territory, then international law does not require that the State must do so at all times and with regard to every corner of the territory. It is undisputed that virtually the entire South China Sea islands are uninhabitable or barely able to sustain permanent settlement. Even the biggest among them, Yongxing Island in the Xisha group, did not have fresh water until 1996. With regard to these irregular territories discovered by the Chinese, it is clear that China did not and does not need to display such extensive acts of sovereignty as transferring migrants, setting up administrations and stationing troops in order to perfect its title to them. All that is required of China by the rules of international law is to maintain its claims, which China has been doing for more than two thousand years.

Even if one conceded that the exceptional rules do not apply, China still has valid claims to the islands under the general rules of international law on the basis of extensive and continuous display of Chinese authority following discovery. At the least, China's discovery at least gave it an inchoate title to the South China Sea islands. China perfected that inchoate title into a complete title by repeated exhibition of authority over the islands throughout history. China's documented official exploitation of the areas (e.g., for collecting tributes to and satisfying the needs of the Chinese rulers) since the Chu State, its naval forces' repeated surveys and patrols in the area from the Chu State, the Han Dynasty and Song Dynasty, and on through the modern eras of the Republic of China and the People's Republic, both government-sponsored and private Chinese activities on and surrounding the South China Sea islands, all constitute evidence of effective administration of and sovereignty over the islands in the South China Sea.

China's well-founded sovereignty over the South China Sea Islands has been recognized by legal commentators. For example, Professor Greenfield states that "China appears to have a considerable amount of historical evidence to support her claims" of sovereignty over the Spratly Islands. Elsewhere, she recognizes that "[f]or many centuries, ... Chinese fishermen used these islands as landing posts and they were mapped," that "China has also continuously expressed its intention not to abandon its title to the islands," that "China ... has quite strong historical arguments in its favour" and that "China's modern (post-1945) presence in the South China Sea is regarded by it as a consistent reiteration of historic rights."

On the other hand, there have been some misunderstandings concerning the South China Sea disputes. For example, some might say that other parties took early actions to occupy certain islands in the Spratlys,
whereas China "waited" until the 1980s.\textsuperscript{327} Others consider that the concept of sovereignty "is becoming obsolete" and "less important due to the emergence of global economics," and therefore "Sovereignty over the Spratly archipelago is a non-issue."\textsuperscript{328} These propositions may be refuted in the following ways.

This author does not believe that the concept of sovereignty has become antiquated. States are far from ready to give up their authority and sovereignty. Globalization of the world economy requires cooperation and coordination among States in economic life for their balanced interests, but it neither requires nor suggests a trend of States relinquishing their exercise of internal and external sovereignty. The cooperation itself results from the exercise of such sovereignty. A determination or clarification on who owns the South China Sea islands does not solve all the disputes, but it may help solve many other controversies which depend on the outcome of the sovereignty issue. While nothing restricts the legitimate title holder from reaching compromised settlements with conflicting claimants either now or in the future to promote peace and reduce conflicts, such holder is under no obligation to do so. Even if the title holder chooses to do so, it has every right to clarify the sovereignty issue before entering into any settlement.

Further, it is mistaken to say that China began to take possession of some of the reefs and other features in the Nansha Islands only in the 1980s. Since the entire area of the Nansha Islands has been Chinese territory at least since the Song Dynasty, and since most of the islets, reefs, and other features in the Nansha Islands are not inhabitable, the PRC did not need to physically "occupy" them in order to establish and/or maintain title, nor was there a need for a permanent Chinese military presence in the area. Nothing in international law requires a State, for the purpose of keeping the State whole, to maintain a permanent population, much less a military presence, in areas within its territory which are not suitable for settlement or other activities due to weather or geographical conditions. Consequently, failure to establish settlements in no sense amounts to an abandonment of the areas. Among the more than 13,660 islands and reefs owned by Indonesia, only 931 of them are inhabited and therefore physically "occupied,"\textsuperscript{329} yet it cannot be said that Indonesia has not acquired sovereignty, or if it has sovereignty, it must lose its sovereignty over the

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\textsuperscript{327} See, e.g., Murphy, supra note 22, at text accompanying note 22 (stating that "while China may base part of its claim to the Spratlys on [the] 1887 treaty [between China and France for boundary delimitation], China waited more than a century (until 1988) to actually occupy any of the islands").
\textsuperscript{328} Dubner, supra note 19, at 325.
\textsuperscript{329} PHIPHAT TANGSUBKUL, ASEAN AND THE LAW OF THE SEA 9 (Singapore, Institute of Southeast Asian Studies 1982).
\end{flushleft}
remaining islands and reefs because the Indonesians have not "occupied" them. By the same logic, China should not be expected to disown or lose title to any part of the Xisha and Nansha Islands merely because of a lack of permanent Chinese presence and settlement.

In addition, the People’s Republic of China restraint in handling the dispute with other states does not weaken its sovereignty over the Islands. It has to the greatest possible extent attempted to avoid direct military conflicts with neighboring states, and has called for a peaceful withdrawal of foreign armed forces and other personnel from the occupied areas. Although China did not physically obstruct the majority of the foreign occupations of the islands in the Nansha area, this in no sense constitutes China's agreement or concession to the legitimacy of foreign claims. On the contrary, China has protested against every foreign occupation or activity in the South China Sea islands, and time and again reiterated China’s sovereignty. One cannot expect that the occupying States would over time mature their claims into valid titles, because modern international law no longer recognizes that a State can acquire territories by means of prescription, namely, by prolonging its occupation of territories that belong to another State.

In the last analysis, a State has the right to defend itself against foreign intrusion and occupation. Increasing unlawful foreign occupations and activities in the Nansha Islands that required China send troops to protect China’s sovereignty and the interests of Chinese fishermen, marine researchers and other personnel in the area. China continues to exercise a high degree of self-restraint in order to seek a peaceful solution through negotiations. The restraint and patience, however, should not be interpreted as any form of compromise of its sovereignty over the Nansha Islands and other Chinese-owned islands in the South China Sea. China reserves, and should reserve, the right to take military actions to take back those islands and sea areas being unlawfully occupied and exploited by foreign states.
Annex 261

SECRET
HYDROGRAPHIC
SURVEYS
IN THE

Spratly Islands

David Hancox
Victor Prescott

ASEAN
ACADEMIC PRESS
London
SECRET HYDROGRAPHIC SURVEYS
IN THE SPRATLY ISLANDS

For late 18th and early 19th century mariners the “labyrinth of detached shoals” [1] in the South China Sea presented an area of considerable hazard that was best avoided. The eastern and western boundaries of the area were not well known until the mid 1860s, although Dalrymple’s charts of the late 18th century showed the Palawan Passage with some accuracy. However it was inevitable that European ships bound to and from Chinese ports via the Sunda Strait, and other ships crossing to and from Malaya/Indo-China to the Philippines would unintentionally stray into the Archipelago of Reefs. Other ships, possibly under the command of more intrepid or more foolhardy Masters, deliberately chose to take
short cuts through the Archipelago of Reefs, trusting to their eyesight, seamanship skills and plain good luck to make a successful transit.

Inevitably some of these ships either ran upon or narrowly avoided some of the many reefs scattered throughout what we now call the Spratly Islands. In many cases when a vessel was wrecked on a reef her name was given to that feature which eventually found its way onto charts with a date, such as ‘Lizzie Webber (nearly awash) 1860’.

In the case of a ship that struck and was wrecked upon a reef there was a reasonable possibility that her Master and his officers might, by a combination of sun, moon and star sights and revised dead reckoning, be able to fix their stranded position with some degree of accuracy. However, this was not always possible, particularly in the north east monsoon, and in any case the position derived was dependent upon:
1. The accuracy of celestial observations obtained;

2. Possible cumulative and unaccounted errors in the chronometer;

3. Almost inevitable errors that arise in the process of dead reckoning.

Dead reckoning is a curious term derived from a more accurate, older phrase Deduced Reckoning. This process involves calculating the present position of a vessel by plotting the course and distance of the ship from the last known reliable position. Such calculations will usually be less accurate than the use of bearings to known terrestrial features or observations to stars and will not be able to eliminate variations caused by wind, currents and inaccurate steering.

A Master and his navigating officers, some of whom were probably rudely and unceremoniously awakened by the grinding
BACKGROUND TO MARINE SURVEYING AND CHART PRODUCTION OF THE SPRATLY ISLANDS

To understand why some features still appear on certain maps and charts of the Dangerous Ground it is essential to start with a basic outline of hydrographic surveying and chart reproduction arrangements as far as these are relevant to the Spratly Islands. For this purpose the classical Chinese historical records, and their accompanying maps produced in Ma Yuan-I's *Wu Pei Chin*, circa 1620 [5] are extremely difficult, if not impossible, for a western geographer or hydrographer to equate with conventional measures of latitude and longitude. Admirable and interesting as these Chinese historical atlases are, their descriptions of distances sailed, dependent as these are upon the vagaries of wind and current, do not readily lend themselves to transposition into geographical co-ordinates relevant to modern practice. Sailing by a compass course alone, with occasional meridian altitude checks of latitude, is not of itself any real measure of
geographical distance or position. In describing why certain features do not exist in the Spratly Islands a more reasonable starting point should be made in terms of charts that are graduated in acceptable geographical co-ordinates.

Some may argue that Alexander Dalrymple was one of the first European hydrographic specialists to survey in the South China Sea, but this is only true in respect of work around the Paracels and the Palawan Passage and Sulu Sea. Dalrymple vacated his post as Hydrographer to the Hon. East India Company in 1795 to become the first Royal Navy Hydrographer. Several commercial geographers had published charts and maps of the South China Sea some derived from information furnished by Dalrymple and others prior to 1800.

However the first officially commissioned survey of features and boundaries in the Archipelago of Reefs was ordered by Captain James Horsburgh, who was appointed
Dangerous Ground itself. The Directorate of Naval Intelligence in conjunction with the Hydrographer had taken note of Japan’s growing assertiveness in both China proper and the South China Sea. Japan’s considerable naval strength and Britain’s loss of its “two-power” fleet ratio standard meant renewed thought should be directed towards overall naval strategy in the South China Sea. Once again questions of strategic or secret routes through, and a possible fleet anchorage in, the Dangerous Ground, occupied naval minds in Whitehall. Japanese naval expansion was perceived as a serious threat to British interests. Captain Nares 1928 survey of “Uncharted Area off the West Coast of Palawan Island” was re-examined, as were his remarks about the time required to complete a detailed survey of the entire Dangerous Ground utilising one survey vessel.

By late 1930 a small, but highly influential and powerful group within the Admiralty decided to mount a major survey operation in the
Dangerous Ground during 1931. The plan, as it evolved towards the end of 1930, was to utilise two survey ships, a sloop and an RAF flying boat squadron. This was to be no half-hearted effort by a cash-strapped country at the height of a world-wide depression. In conception, planning and execution the Admiralty’s proposed 1931 survey was a unique hydrographic operation, conducted using the best resources available, without particular concern for expenses involved. In naval gunnery terms the ranging shots had been fired in IROQUOIS’ 1928 survey, the 1931 survey was to be a broadside, with every possible gun laid onto the target!

To lead this foray into the Dangerous Ground referred to as ‘Combined Survey of area West of Palawan’ the Hydrographer appointed Captain A.L. Jackson, as Commanding Officer of HM Surveying Ship IROQUOIS. Jackson, a professional hydrographic surveyor previously, commanded IROQUOIS for his 1926 survey of North Danger. Under Captain Jackson’s command were the survey ship HMS HERALD,
Lieutenant Commander N.A.C. Hardy, the sloop HMS BRIDGEWATER Commander G.W. Hoare-Smith and a squadron of flying boats from 205 Squadron RAF. As Captain Jackson had been in a shore-based posting in the Hydrographic Office as Superintendent of Charts from 1929 to 1931, he was closely involved in planning and organising the survey task with Admiral Douglas.

IROQUOIS and HERALD departed from Hong Kong on 31 March 1931; IROQUOIS arrived in the area on 4 April, followed by HERALD on 5 April. The survey commenced, with BRIDGEWATER lying at the southern edge of Dangerous Ground, and IROQUOIS and HERALD stationed at pre-determined points in the area. Over a period of several weeks, six days per week, two aircraft flew out of Borneo, simultaneously towards BRIDGEWATER, where they were then vectored north-westwards towards IROQUOIS and HERALD which acted as floating beacons and control points. Each aircraft’s position was checked by a specialist
Surveys of The Area by Japanese hydrographers, like those of their British counterparts were concerned with finding safe routes to strategic points outside Shinnan Gunto. Any special chart of Shinnan Gunto should ideally connect to Balabac and Mindoro Straits to the eastwards, Borneo to the south and the main or central route through the South China Sea. The latter point was achieved by dividing the South China Sea into four areas, somewhat on the British pattern, using different scales. Before the start of the Pacific War Japan produced charts IJN 1500 China Sea - North East Sector at 1:200,000 in April 1936 and IJN 1501 China Sea - North West Sector at 1:1,200,000 in February 1938. The remaining pair of charts at 1:1,200,000, IJN 1502 China Sea - South West Sector at 1:1,200,000 and Japanese Maritime Safety Organisation [JMSA] 1801 China Sea - South East Sector were not produced until September 1944 and October 1959 respectively. A chart of Palawan and Approaches on a 1:750,000 scale showing The Dangerous Ground east of meridian 117° to
Palawan was available to the Japanese Navy from 1971. The Maritime Safety Agency chart No. 752, *Palawan and Approaches* on scale 1:750,000 which commences at meridian 117° East was published on 5 August 1968. HERALD under command of Commander William Jenks from January 1938 made her last voyage into The Area in April 1938 to survey around the eastern approaches to Mischief Reef. After which Royal Navy surveying activities in the Dangerous Ground ceased for fifteen years. After eight years of almost annual work the Hydrographer was able to issue New Editions of chart Z.15 and Z.16 on 1 July 1938. The combination of charts Z.15, Z.16 and Z.19 provided the Royal Navy with the most accurate general chart coverage of the Dangerous Ground available to any nation. In 1938 to complement the new editions of Z.15 and Z.19 the Admiralty issued its secret publication HD 384 *Sailing Directions for the Dangerous Ground in the Southeastern Part of the China Sea*. This is an 11 page booklet of navigational and pilotage information.
Japanese surveys in The Area continued in 1938, and during that year the Japanese Hydrographic Department produced three secret charts; No. 521 *Hokuken Sho* [North Danger] 1:30,000 on 14 March, No. 522 *Nagashim Fukin* [Ilu Aba and vicinity] 1:30,000 on 27 April and No. 523 *Tizato Tai* [Tizard Bank & Reefs] 1:75,000 on 29 November. There are also indications that Japanese hydrographers had carried a working chart of the whole area aboard survey ships, this chart was more a hydrographic planning tool than a chart ready for publication.

The French chart No. 5834 of Amboyna Cay, Itu Aba and Spratly Island was also published in 1938. Chart 5834 did not prove or disprove existence of any features in The Area, but it did indicate that the position where HMS WANDERER was stated to have grounded off Amboyna Cay in 1889 was probably erroneous. The German motorship VOGTLAND had previously drawn attention to this anomaly in an hydrographic report of 1925 in German
Notice to Mariners No. 3795 of 1925. [46] The Admiralty Hydrographic Office had not reacted to the Berlin Notice, as Britain had never published Commander Ward's 1864 surveys of Amboyna Cay and Spratly island.

Japanese military forces took over control of Itu Aba, North Danger and Spratly Island in March 1939, a fact that was announced publicly on 9 April 1939. The entire region of Shinnan Gunto (New South Archipelago) came under the authority of the Governor General of Taiwan, Admiral Kobayashi Seizo as announced the Official Gazette of 18 April 1939 [47] although according to Lietzmann [48] the Japanese Foreign Ministry did not announce the southern expansion policy formally until June 1940. Be that as it may Royal Navy documentation [49] advised HM ships not to provoke unnecessary confrontation with Japan by entering The Area needlessly. In fact the Admiralty knew as much as it wanted to know geographically about the Dangerous Ground. Naval Intelligence would
probably have welcomed information about Japan’s development of Itu Aba as a seaplane and submarine base, but from an hydrographic point of view Britain possessed adequate information.

On 22 June 1939 the Japanese Hydrographic Dept published a chart containing nine plans of features in The Area; IJN 525 Islands and Reefs in Shinnan Gunto, based on KATSURIKI’s surveys of 1937. There is also a presumption, not yet proven beyond doubt, that a preliminary edition of a general chart of the Spratlys had been produced by late 1938 or early 1939, judging from chart numerical sequences in Kimitsu Kaizu catalogues. [50] Japan’s secret general chart of Shinnan Gunto No. 524 in its more frequently seen form was published 19 November 1941.

In March 1940 the French aviso MARNE visited Itu Aba, anchoring south of the landing ramps established by Japanese mining interests. The purpose of its visit has not been
established but SHOM confirm the ship was not engaged in SHOM survey work.[51] Admiralty Hydrographic Department’s Records indicate that a copy of the rough French plan of Itu Aba, showing MARNE’s anchorage came into their possession in 1941. [52]

On 15 April 1941 the Royal Navy issued further New Editions of secret charts Z.15, Z.16 and Z.19 incorporating data from HERALD’s final surveys and acknowledging ‘...a US Naval reconnaissance of 1935 ...’. Records indicate that RN Naval Intelligence had obtained a copy of Confidential USHO chart 5649 by 21 December 1940 and passed that chart to the Admiralty Hydrographic Department on 17 February 1941. [53] On 19 November 1941 the Japanese Navy secret chart No. 524 Shinnan Gunto [The Spratlys] was produced, in Tokyo, the first chart of any nation to show the Dangerous Ground on one sheet at a scale of 1:750,000.

Further data relating to surveys of KATSURIKI in the Dangerous Ground and work
by IJN survey ship KOMAHASHI in both the Paracels and Palawan Passage is contained in a biography of Captain (later Professor) Magohichi Sato published by Tokai University in 1992. Captain Sato was in the Dangerous Ground before 1941 prior to being assigned ashore into the Hydrographic Office. After 1945 he was in the Hydrographic Section of the Maritime Safety Board, before joining the academic staff of Tokai University. He is regarded by contacts in JMSA Hydrographic Office as having the best knowledge of IJN survey work in The Area.
The more or less unheralded publication of new material in The Dangerous Ground on the 1954 revision of BA 2660B and the lack of any explanation in Supplements to the 2nd, 1951 Edition of China Sea Pilot, Volume II has been noted. In fact little, if any descriptive writing about new reefs and features that appeared on BA 2660B was published until the 3rd Edition of China Sea Pilot, Volume II was produced on 10 March 1961. Even then pages 271 to 275 of those Sailing Directions are not exactly a mine of information, and carefully avoid any mention of which HM surveying ships or other authoritative navigators might have visited any of the newly described features.

Later Supplements to Volume II made occasional mention of such matters as 'The only anchorage found by HMS IROQUOIS was about
CONCLUSIONS

This study leads to five main conclusions. First the Dangerous Ground was identified by navigators from Europe during the second half of the 17th century and its eastern, southern and western limits were defined with reasonable accuracy by 1868 following surveys by RIFLEMAN and ROYALIST. The northern limit of the Dangerous Ground was skirted by RIFLEMAN in 1867 and partly resurveyed by IROQUOIS in 1928 when the Reed Bank extensions were found. Surveys on the northern limit must also have been made in 1905 by USNS NANSHAN when rescuing the crew of WEST YORK.

Second, the Dangerous Ground was effectively surveyed by Britain, France, Japan and the United States in the period from 1926 to 1938. British surveys had two main aims; to find safe routes for high speed transit through the Dangerous Ground from Brunei to Hong Kong and to locate a safe concealed fleet
anchorage. The safe route had been found by 1933 and in the process 20 of the 22 doubtful features had been proved not to exist. Sandy Shoal and Third Thomas Reef, the two remaining features, were proved not to exist in the period 1934-6 when the HERALD was in the area. The fleet anchorage was never found.

Japanese surveys were primarily concerned with the western area of the Dangerous Ground and aimed to strengthen Japan's commercial presence on Itu Aba, to find a submarine base that would permit submerged entry and identify safe passages to peripheral invasion targets. French surveyors made the smallest contribution because they seemed to be mainly concerned with establishing territorial claims to known features such as Spratly Island and Amboyna Cay in 1930 to warn Japan against further annexations in the Spratly Islands. While Japan ignored French claims and occupied Spratly Island in 1939 the British Admiralty raised serious objections to French claims with the British Foreign Office during the early 1930s. The United States carried out
secret surveys in 1935 and 1937 to establish a safe east-west route through the Dangerous Ground between Half-Moon Shoal and London Reefs. The mass of new information generated by these surveys was not exchanged by any of these countries and indeed the only public pronouncement about a new discovery related to Nares Bank in 1928.

Third the accumulated knowledge of the secret surveys became available to other countries during World War II when Britain, France and the United States exchanged charts after 1941 and when Japanese charts were captured during various naval actions.

Fourth British authorities considered publishing all the information gathered during the secret surveys and incorporating the secret sailing directions HD 384 for the Dangerous Ground during World War II in revised sailing directions in 1949. It stopped this project to preserve good relations with the United States Navy that wished to preserve the
Annex 262

ANALYSIS

Ecological goods and services of coral reef ecosystems

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Abstract

This article identifies ecological goods and services of coral reef ecosystems, with special emphasis on how they are generated. Goods are divided into renewable resources and reef mining. Ecological services are classified into physical structure services, biotic services, biogeochemical services, information services, and social/cultural services. A review of economic valuation studies reveals that only a few of the goods and services of reefs have been captured. We synthesize current understanding of the relationships between ecological services and functional groups of species and biological communities of coral reefs in different regions of the world. The consequences of human impacts on coral reefs are also discussed, including loss of resilience, or buffer capacity. Such loss may impair the capacity for recovery of coral reefs and as a consequence the quality and quantity of their delivery of ecological goods and services. Conserving the capacity of reefs to generate essential services requires that they are managed as components of a larger seascape-landscape of which human activities are seen as integrated parts. © 1999 Elsevier Science B.V. All rights reserved.

Keywords: Coral reefs; Ecological services; Management; Biodiversity; Resilience; Valuation

1. Introduction

Coral reefs are among the most productive and biologically diverse ecosystems on Earth (e.g. Odum and Odum, 1955; Connell, 1978). They supply vast numbers of people with goods and services such as seafood, recreational possibilities, coastal protection as well as aesthetic and cultural
collected and crushed to be used as fertilizer (Kühlmann, 1988).

Physicochemical processes acting over millions of years convert biomass of reef organisms into mineral oils and gas. These resources are thought to exist in large quantities below living reefs. Ancient reef structures in Siberia, Saudi Arabia, USA and Canada are potentially rich in oil, stored in the porous limestone (Sorokin, 1993; Hodgson, 1997). As a consequence, the petroleum industry is subsidizing more and more research in finding mineral oils (Kühlmann, 1988), and studies of the ecology and geomorphology of modern reefs help to locate oil deposits in ancient reef structures (Sorokin, 1993). Exploitation of these resources conflicts with all the other uses of reefs and can by no means be considered as sustainable (e.g. Hodgson, 1997).

4. Ecological services

4.1. Physical structure services

Without coral reefs protecting the shoreline from currents, waves, and storms there will be loss of land due to erosion. In Indonesia, Cesar (1996) estimated that between US$ 820–1 000 000 per km of coastline was lost due to decreased coastal protection as a consequence of coral destruction (based on 0.2 m year\(^{-1}\) of coast erosion, 10% discount rate and a 25-year period). In the Maldives an artificial substitute breakwater (a 1 km pier) cost around US$12 000 000 to construct (Weber, 1993).

Coral reefs build up land. Many tropical, nations in the Indian and Pacific oceans with large human populations are situated on islands built by coral reefs (e.g. Stoddart, 1973).

The capacity of coral reefs to dissipate wave energy creates lagoons and sedimentary environments. Coral reefs thus physically create favourable conditions for the growth of sea-grasses and mangrove ecosystems (Birkeland, 1985; Ogden, 1988).

Coral reefs generate the fine coral sand supplying shores with the white sand characteristic of tropical islands and one of the main attractions in beach tourism (e.g. Richmond, 1993). It is not only generated from physical forces but also by the biota. Bioeroders, such as algae, sponges, polychaetes, crustaceans, sea urchins, and fishes are important in producing the reef sediments (rubble, sand, silt, and clay) (Trudgill, 1983). For sea urchins, erosion rates have been reported to exceed 20 kg CaCO\(_3\) m\(^{-2}\) year\(^{-1}\) in some reefs, whereas the highest figure reported for fishes (parrotfish) is 9 kg CaCO\(_3\) m\(^{-2}\) year\(^{-1}\) (Glynn, 1997).

4.2. Biotic services

These are in essence the services listed by Holmlund and Hammer (this issue) under the subtitle ‘fundamental services’, and also very similar to what de Groot (1992) named ‘regulation functions’. These services are essentially the prerequisites for a functioning ecosystem. Here we also include the biotic services supporting the adjacent systems in the seascape.

4.2.1. Biotic services within the ecosystems

Coral reefs function as important spawning, nursery, breeding and feeding areas for a multitude of organisms. Being one of the most species-rich habitats of the world, coral reefs are important in maintaining a vast biological diversity and genetic library for future generations. The extremely high habitat heterogeneity of reef systems created by the complex three-dimensional structure facilitates niche diversification and thus also possibilities for evolution of new species (Birkeland, 1997a; Paulay, 1997). Up to 60 000 reef living animals and plants have been described to date (Reaka-Kudla, 1994).

Among these species are keystone process species that regulate ecosystem processes and functions, for example through grazing and predation (Hughes, 1994; McClanahan et al., 1994; Done et al., 1996). Others species and groups of species are important in maintaining resilience of coral reef ecosystems (McClanahan et al., in press). In most reefs there are many species within each functional group (cf. Choat and Bellwood, 1991; Roberts, 1995). Many of those species do not appear to perform key functions but may be able to take over such functions (Peterson and
Lubchenco, 1997) if the keystone process species within a functional group is lost (McClanahan et al., in press). This has been seen, for example, in East African reefs where overfishing has resulted in a loss of the dominant fish predator on sea urchin (red-line triggerfish). Its role in controlling grazing has been replaced by species of wrasses and scavengers (McClanahan, unpubl. data). However, these sea urchin predators did not fully substitute the control function of the red-line triggerfish, since they could not suppress the sea urchin population to levels of undisturbed reefs. Although the qualitative function was maintained, resilience may have been impaired.

4.2.2. Biotic services between ecosystems

Some coral reef organisms migrate back and forth between adjacent ecosystems. Examples of such ‘mobile links’, i.e. species that link one ecosystem to another, are fish that migrate to mangroves and sea-grass beds and use them as nursery grounds (Ogden and Gladfelter, 1983; Ogden, 1988; Parrish, 1989). Herbivorous fishes and sea urchins from the reefs move to sea-grasses for grazing and influence plant community structure there (e.g. Birkeland, 1985), and may serve as a food source for predators in other systems, as well as food for humans (Parrish, 1989; Spurgeon, 1992). The net result of migration is a transfer of energy from the system where feeding or development occurs to the system that shelters the adults (Ogden and Gladfelter, 1983). In addition the pelagic juvenile stages of many reef organisms that drift into these adjacent ecosystems serve as a food source for commercially important fishes, or they may settle and mature until harvested by fishermen (Spurgeon, 1992).

Herbivorous fishes and invertebrates from coral reefs can also indirectly control the productivity of benthic algae and sea-grass assemblages by reducing self-shading, weeding out large algae with low productivity, and enhancement of nutrient exchange with the water (Hatcher, 1983; McRoy, 1983). Moreover, fishes migrating from the coral reef ecosystem may also influence the nutrient cycles of the sea-grass beds and mangroves through their excretion and defecation (Ogden and Gladfelter, 1983). Coral reefs thus not only provide physical protection but also biological support to sea-grass beds, mangroves, and the open ocean. Another biological link is input to the reef of excretory and fecal products from migrating fish. This input of nutrients and organic matter from migrating white grunts, which feed in seagrass beds at night and rest over coral colonies during the day, may enhance the growth of reef corals (Meyer and Schultz, 1985).

Coral reefs appear to support the pelagic food web with export of excess of organic production such as mucus, wax esters, and dissolved organic matter as well as bacterioplankton, phyto- and zooplankton (Hatcher, 1988; Sorokin, 1990). This net flow to surrounding waters enhances the productivity of local planktonic communities and consequently also supports local fisheries (Sorokin, 1990).

4.3. Biogeochemical services

Coral reefs function as nitrogen fixers in nutrient poor environments (Sorokin, 1993). Reefs would probably not have been able to become so productive and diverse without the capacity of microbial and cyanobacterial associations in reef-bottom biotopes, and also cyanobacteria in the water column, to assimilate atmospheric nitrogen. Compared with other marine ecosystems, nitrogen fixation on coral reefs occurs at a considerably high rate. The nitrogen fixing ability is not only of local importance to the reef system itself but also to the productivity of the adjacent pelagic communities due to the release of excess nitrogen fixed in the reefs (D’Elia 1988; D’Elia and Wiebe, 1990; Sorokin, 1990). However, reefs near high islands may receive enough nutrients via run-off or groundwater inputs (D’Elia and Wiebe, 1990). Furthermore, because eutrophication is a major problem in many tropical coastal areas (e.g. Hunter and Evans, 1995; Goreau et al., 1997), the relative importance of nitrogen fixation, with regard to community requirements, may be larger in isolated reefs such as ocean atolls (Sorokin, 1993).

Reefs appear to act as sinks for carbon dioxide over geological time scales, but are net sources of carbon dioxide in time perspectives relevant for humans (Gattuso et al., 1996; Hallock, 1997).
This net source seems to be of minor significance in the current global carbon budget (Gattuso et al., 1996), as it has been estimated that the release of CO2 to the atmosphere from human activities the last 100 years is larger than release from reefs in 15,000 years (Hallock, 1997). Buddemeier (1996) claims that those reefs which are sinks for carbon dioxide are subject to human impact, and have an increased ratio of organic production to calcification compared with normal reefs.

Biochemical processes on coral reefs play a significant role in the world’s calcium balance (e.g. Kühlmann, 1988). Reefs precipitate approximately half of the $1.2 \times 10^{13}$ mol of calcium delivered to the sea each year (Smith, 1978). In addition to the reef building corals there are also algae and foraminifera on coral reefs that produce CaCO3 (Wiebe, 1988). This ability of reefs to bind calcium and construct massive calcium carbonate frameworks is the basis for reef development and makes reefs unique. It is essentially the prerequisite for the rest of the services.

Coral reefs can transform, detoxify, and sequester wastes released by humans, thus providing a cleansing service. For instance, petroleum products in the marine environment are detoxified by microbes, turning hydrocarbons into carbon dioxide and water (Peterson and Lubchenco, 1997). More persistent pollutants can be immobilised or sequestered. Such waste assimilation services of reefs are described in a Galapagos case study by de Groot (1992), and was estimated as having a value of US$ 58 per ha and year (replacement cost). However, the waste assimilation capacity of reefs seems limited to us. This is particularly true when there are persistent or chronic quality and quantity emissions of waste that reduce the window for recovery after disturbance.

4.4. Information services

Reef organisms are used in monitoring and as pollution records. Skeletons of reef building corals act as long-term chemical recorders of levels of metals in seawater (e.g. Dodge and Gilbert, 1984; Howard and Brown, 1984). Coral reefs are highly sensitive systems and extensively used in monitoring the recent changes in the marine environment and the effects of human disturbances (e.g. Wilkinson, 1993; Eakin et al., 1997).

Reef corals function as climate records. The chemical composition of coral skeletons can be used to reconstruct the sea surface temperature of the tropics and to track variations in salinity (de Villiers et al., 1995; Swart and Dodge, 1997; Gagan et al., 1998). Long-lived, massive corals deposit layers of skeleton which vary in width and density depending on the environmental conditions (season etc.) (e.g. Barnes and Lough, 1996). These bands can be counted like the growth rings of trees and as such give indications of past conditions. Moreover, it is possible to trace the periods of monsoonal floodings in the past by looking at fluorescent bands in nearshore corals (Isdale, 1984; Veron, 1993).

4.5. Social/cultural services

Coral reefs support recreation. The recreational value of reefs, as indicated by income from tourism is enormous (Dixon et al., 1993; Pendleton, 1995; Cesar, 1996). The financial value of tourism in the Great Barrier Reef World Heritage Area (WHA) was estimated by Driml (1994) to be AU$ 682,000,000 annually. In 1990 Caribbean tourism earned US$ 8,900,000,000 and employed over 350,000 people (Dixon et al., 1993).

Coral reefs hold aesthetic values (cf. de Groot, 1992). Countless films, photos, and paintings with reefs or reef organisms as motifs are produced every year. The monetary value of all books, films and paintings produced using coral reefs as inspiration is undoubtedly huge.

Coral reefs sustain the livelihood of many local communities. For example, it has been estimated that damages to reefs in Philippines caused by overfishing and pollution have led to the loss of at least 100,000 fishermen’s jobs (McAllister, 1988).

Another important and often forgotten service of reefs is their support of cultural and spiritual values. For instance religious rituals have developed around reefs in southern Kenya, where traditional management with the primary purpose to appease spirits has also served to regulate fish stocks (McClanahan et al., 1996). Similar systems of traditional management was developed by
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THE INDIA-CHINA OPIUM TRADE IN THE NINETEENTH CENTURY

by

Hunt Janin

McFarland & Company, Inc., Publishers
Jefferson, North Carolina, and London
better sailing directions for other mariners. Here is an example of his advice:

In beating against, or running with the strength of the Monsoon up or down the China Sea, ships should always pass to leeward of the Paracels [an island group 300 miles east of Vietnam], as well as of the Pratas [islands about 175 miles southeast of Hong Kong], should they be near them, on account of the invariable set of the current to leeward. An exception may be made in beating up against the N.E. Monsoon, after reaching near Lat. 14°N., as there is an extent of sea room, and a ship must get well eastward towards the coast of Luzon before she can fetch Macao.... On leaving Macao to proceed down the China Sea against the S.W. Monsoon, it is advisable to make the best of your way southward for the Macclesfield bank [a shallow area lying between Luzon and Vietnam], keeping in from 113°30' to 116°30' E., and taking every advantage of the least veering of the wind.  

Hazards to Navigation

When out of sight of land, officers could find their way from one port to another by using celestial navigation to fix their ship’s position on a chart, using a two-dimensional global grid system. This system was (and still is) based on two sets of imaginary lines. One set, running north-south, provides the longitude scale; the other set, running round the world from east to west, gives the latitude scale. Lines of longitude, also known as meridians, are measured east and west with reference to the Prime Meridian, which passes through Greenwich Observatory in the United Kingdom. Lines of latitude, also called parallels, are measured north and south of the equator. Both meridians and parallels are divided into 60 minutes, which are in turn subdivided into tenths of a minute. Only parallels, however, can be used to determine distance on a nautical chart, one minute of latitude being equal to one nautical mile, which is 6,080 feet or 1.852 statute miles in length.

A compass card showed the man at the helm in which direction his ship was headed. A measuring device trailed behind the ship, known as a log, would give an approximate indication of the distance run each day. The officers of an opium clipper could fix their latitude by using a sextant, which measured the vertical angles, relative to themselves, of certain celestial bodies (the sun, moon, observable planets or major
The India-China Opium Trade

stars). To determine his longitude, an officer used a chronometer (a marine clock that maintained its accuracy despite the motions and temperature variations encountered at sea) to keep track of Greenwich Mean Time. An example of a position fixed in the waters discussed in this book is lat. 17°50’N. and long. 118°0’E. This is about 75 nautical miles west of the northern portion of the Philippine island of Luzon and is where the Parsee ship Rustomjee Cowasjee, bound for Canton during the northeast monsoon, found herself at noon on 1 September 1844 when she ran into a typhoon.

Parts of Southeast Asian and Chinese waters were not well charted in the early decades of the nineteenth century. An Englishman familiar with the opium trade reported, “The Chinese seas have a very bad name among navigators, partly owning to the shores being but imperfectly laid down in charts; to the existence of numerous currents...; and the fact that some unfortunate vessel or other [is] constantly stumbling upon some unknown reef or shallow sounding.”

Some of the more reliable charts were those produced by James Horsburgh, the hydrographer of the East India Company, and a seaman today could still use Horsburg’s 1823 charts of the China Sea to navigate to and from the Canton estuary. The captains of East Indiamen and opium clippers helped to fill in the blanks on the charts, but some uncertainty persisted into the early years of the twentieth century. An Admiralty chart of 1882, updated to 1913, warned mariners who were navigating the Formosa Strait between the mainland of China and the island of Formosa that the shallow soundings and overfalls (i.e., breaking waves caused by wind or current over an irregular bottom or by currents meeting) there showed that “it appears probable that there may be less water on the Formosa Bank than the Chart shows. Vessels must therefore approach with caution.” This was good advice because one sounding on the Bank revealed a depth of only four fathoms (24 feet), but the exact location of this shallow was marked “position doubtful.”

Nineteenth-century nautical charts were big and showed so much water relative to landforms that the fine print on them identifying ports, estuaries and other features near the shore would be illegible if they were reduced in size to fit into a book like this. Ships’ officers, however, also used nautical handbooks, known as pilots, that contained smaller charts. One of these charts, taken from J. W. Norie’s Complete East India Pilot (1847) and showing the approaches to Canton in 1840, has been further reduced in size and is reproduced here.
8. Typhoons, Monsoons and Hazards to Navigation

In these tropical seas, a high degree of caution was essential. Even well-charted hazards could still kill ships. For example, one danger in the approaches to Canton itself was Four-feet Rock, a small, sharp, needle-shaped rock that had only four feet of water on it at low tide. Masters of ships in Far Eastern waters were counseled to leave nothing to chance. They were told to “get their Long-boats out as soon as the weather will admit, and keep the Lead constantly going ... as Coral Banks are generally of small extent, a Ship may have no warning from the deep-sea-lead.” Captains were also urged to keep a man at the masthead “to attend to the color of the water by which shoals or rocks will be distinguishable from an elevation.”

The Indian Ocean Pilot stressed that the observant seaman will keep his eyes open to every unusual appearance in the sea — such as partial ripplings, and, when out of reach of rivers, all discolored water, whether white, brown, or green, flocks of birds, or shoals of fish, as they may possibly be indications of some change in the nature or depth of the bottom; and in all such cases a deep-sea cast of the lead should be obtained.

Sailors also had to make sure they knew what it was they were seeing because it was easy to make mistakes. In the open sea, waves could
break against the hull of a capsized ship, a floating clump of trees or some man-made object that had gone adrift, such as an iron buoy. Any one of these might be reported erroneously as a rock, reef or shoal. Even the carcass of a whale, stripped of its blubber but still bobbing in the ocean, could cause a similar alarm. In such a case, as Herman Melville said in *Moby Dick*, "with trembling fingers is set down in the log—shoals, rocks and breakers hereabouts: beware! And for years afterwards, perhaps, ships shun the place." 2

The scattered islands and reefs of a vast area about 500 miles long and 200 miles wide (now known collectively as the Spratly Islands) lie roughly halfway between Palawan Island in the Philippines and the southern coast of Vietnam. These shallow waters were extremely hazardous to navigation in the days of the opium clippers and are still known as the Dangerous Ground. The British, however, did all they could to make navigation safer. From 1863 to 1867 the survey vessel HMS *Rifleman* charted many far-flung rocks, shoals and islands both along the main sailing routes between Singapore and China (these routes either hugged the coast of Vietnam or crossed the Macclesfield Bank) and the routes of the Palawan Passage, which followed the Palawan and Luzon coastlines of the Philippines.

Among the many hazards identified by *Rifleman* on the main routes was Julia Shoal, which the ship *Christopher Lawson* had struck with such great force that the stern-post was dragged entirely out of her. On the Palawan Passage routes, mariners were advised to steer well clear of the Central London Reef—"a coral patch awash ... in every respect a most dangerous reef [that] lies directly in the path of vessels working up or down the China sea." Northwest of Brunei, the Luconia Shoals also lay in wait for the unwary. These were "a mass of coral reefs and shoals, amongst which no vessel should venture.... No directions can be given that will enable vessels to pass safely through these reefs and shoals." 3

Other ship-killing reefs, such as Fiery Cross and Flora Temple, commemorated vessels of these names, which had been wrecked upon them. 4

Currents, eddies, tides, fog and the limits of nineteenth-century navigation itself posed still other dangers. The *China Pilot* warned that "The strength of the current on the eastern coast of China increases with the freshness and duration of the monsoon, varying from one to as much as 3 or even 4 knots per hour; and this requires to be especially guarded against when hove-to off a port or running for one in thick weather." 5

Commander P. J. Blake of HMS *Larne* reported that during the
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The Chinese Traditional Maritime Boundary Line in the South China Sea and Its Legal Consequences for the Resolution of the Dispute over the Spratly Islands

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ABSTRACT

China's traditional maritime boundary line, commonly known as the U-shaped line in the South China Sea, has been queried frequently in various circles, whether governmental or academic, on its real meaning. This article addresses the legal implications of this line for the Spratly Islands dispute, including, inter alia, the origin and evolution of the line, China's attitude towards and practice relating to the line, reactions from other South China Sea countries, the relevance of the line to the concept of historic waters and other law of the sea concepts, and the potential role to be played by the line in the future delimitation of maritime boundaries in the South China Sea.

Background

The South China Sea is categorised as a semi-enclosed sea under the general definition set down in the United Nations Convention on the Law of the Sea. Article 122 of the LOS Convention defines an "enclosed or semi-enclosed sea" as "a gulf, basin, or sea surrounded by two or more States and connected to another sea or the ocean by a narrow outlet or consisting entirely or primarily of

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and "the Chinese border". These different names are somewhat confusing. People may query what the line means and what is significant about it. Does China claim all within the line as its national territory, including the islands, underwater rocks, the sea-bed as well as the water columns?

Although there is a wealth of literature on the South China Sea and the Spratly Islands, the Chinese traditional boundary line has yet to be assessed in detail. The present article intends to make a relatively thorough assessment of this line in a legal perspective so as to contribute to the building-up of the South China Sea legal literature and to facilitate understanding of the significance of the line by the world community.

Origins and Evolution of the Chinese Traditional Maritime Boundary Line

The line first appeared in the map in December 1914, which was compiled, according to some known sources, by Hu Jinjie, a Chinese cartographer. The maps published during the 1920s and 1930s followed Hu’s drawings. The line at that time only included the Pratas and the Paracels. It began from the Sino-Vietnamese land boundary next to the Gulf of Tonkin, extended southeastwards offshore of the Vietnamese coast, then ran eastwards to the west side of the island of Luzon, then northeastwards along the east side of the Pratas, through the Taiwan Strait, and finally met the Chinese boundary line to the East China Sea and the Yellow Sea. The southernmost end of the demarcation was located at about 15° and 16° north latitude. However, no reasons were given why the line should have been drawn like this and for what purposes.

The year of 1933 seems to have been an important time for the modification and emphasis of the line on Chinese maps. In July that year, France, the then protector of Vietnam, occupied nine small islands of the Spratly Islands. This action was strongly protested by China, and afterwards the line in the maps relating to the South China Sea was extended further south to 7° to 9° north latitude. The intention behind this was clear: to indicate clearly that the Spratly

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23 For example, Chen Duo (ed.), *Newly-Made Chinese Atlas* (1934); Tan Lian and Chen Kaoji (eds.), *Civilised Geography of China* (1936); and Ge Shuichen (ed.), *Newly-Made Large Hanging Atlas* (1939). See Han, note 20 above at pp. 356-359.
Islands belonged to China. However, the James Shoal (Zengmu Ansha) was not included. While the line at that time on most of the maps was drawn between 7° and 9° north latitude, there was at least one atlas collection, the *New China's Construction Atlas*, edited by Bai Meichu and published in 1936, which included the James Shoal within the line, i.e. it further extended the line to 4° north latitude. In 1935, the Committee of Examining the Water and Land Maps of the Republic of China published the names of 132 islets and reefs of the four South China Sea archipelagos. The publication had an annexed map which marked the James Shoal at the location of about 4° north latitude, 112° east longitude, though there was no demarcation of the line on the map. It indicated that the then Chinese Government considered the southernmost territory of China to be at 4° north latitude. It is therefore clear that Bai took the Committee’s publication as the basis for the line in his compilation.

It should be noted that all the atlases including the line were compiled by individuals. They may, however, constitute indirect evidence to show the official position of the Chinese Government. It was not until 1947 that the line was officially confirmed by the Chinese Government. On 1 December 1947, the Chinese Ministry of Interior renamed the islands in the South China Sea and thus formally allocated them to the administration of the Chinese Hainan Special District. Meanwhile, the Ministry also prepared a location map of the islands in the South China Sea, which was released for internal use. In February 1948, the *Atlas of Administrative Areas of the Republic of China*, in which the above map was included, was officially published. This is the first official map to include the line for the South China Sea and it has had a substantial influence over the subsequent maps either published by the mainland or by Taiwan. It has two general characteristics: the southernmost end of the line was set at 4° north latitude including the James Shoal; and the 11-segment line was used instead of the previous continuing line. According to the then official explanation, the basis for drawing the line was that: “The southernmost limit of the South China Sea territory should be at the James Shoal. This limit was followed by [Chinese] governmental departments, schools and publishers before the anti-Japanese war, and it was also recorded on file in the Ministry of Interior. Accordingly it should remain unchanged.” It is unclear whether the explanation refers to the line or to the southernmost territory of China, and before the anti-Japanese war, there were a few atlases that marked the line at about 4° north latitude. The most notable compilation was Bai Meichu’s edition. It is thus hard to say that the southernmost limit was already consistently followed in practice. The situation

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24 See Zhang, note 22 above at p. 46.
25 See Ministry of Interior, *An Outline of the Geography of the South China Sea Islands* (National Territory Series, 1947), Figure 11, p. 861; as cited in J.K.T. Chao, “South China Sea: Boundary Problems Relating to the Nansha and Hsisha Islands”, in R.D. Hill et al., note 6 above at p. 88.
26 See Han, note 20 above at pp. 181-184.
remained unclear. On the other hand, the explanation did not give the reasons why the line was drawn this way. Despite all these doubts, however, the line on the map has been accepted ever since in Chinese practice. What then are the implications of the line?

We may assume that there must be some reasons behind the drawing of such a line, though we have no clear official explanation. We can see from history that each extension of the line from the north to the south was a reaction to the challenges or encroachments made by foreign intruders to the Chinese claims of sovereignty and jurisdiction of the islands in the South China Sea. Originally it would not have been necessary to draw such a line on the maps if there were no disputes over the ownership of the islands. The first time the line appeared on the map was in 1914, just after the recovery of the Pratas Islands from the Japanese. The second extension was triggered by the French occupation of some islets of the Spratly Islands. The final extension happened when China received the Paracels and Spratlys from the defeated Japan after World War II. Since sovereignty and jurisdiction over the offshore islands were relatively weak, to draw a line on the map was a means of consolidating China's sovereign control over these islands.

Since there is no official explanation for the line, commentators may explain it in their own way. Thus different views and opinions have arisen. The next section looks at evidence from China's recent practice which may be helpful for the explanation of the line.

China's Attitudes Towards and Practice Within the Line: The Mainland and Taiwan

Maps officially published both in the mainland and Taiwan take the same position regarding the line, since both China and Taiwan have succeeded to the official map published in 1947. In addition, the Chinese of both sides have military and economic activities within the line. There are also a number of relevant laws and official documents that have legal implications for the line.

After the Chinese Communist Party took over the mainland in 1949 and established the People's Republic of China, the map of the South China Sea was the same as before 1949. During the 1960s, there were a few small modifications: two segments in the Gulf of Tonkin were removed from the map and the line

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27 In 1907 a Japanese merchant named Nishizawa Yoshiji, accompanied by more than 100 compatriots, settled on Pratas. On hearing of this, the Foreign Ministry of Peking dispatched a military detachment, with orders to explore the island and enter into talks with the Japanese occupants. In addition, the governors of Kuangsi and Kuangtung negotiated with the Japanese consul in Canton. The outcome of these negotiations was that China paid Nishizawa an indemnity of 130,000 silver dollars and Japan, in turn, recognised the Pratas archipelago as Chinese territory. Dieter Heinzig, Disputed Islands in the South China Sea (Wiesbaden, Otto Harrassowitz, 1976), p. 26.
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Anthony Reid, *Charting the Shape of Early Modern Southeast Asia* (2000)
CHARTING THE SHAPE
OF EARLY MODERN
SOUTHEAST ASIA

ANTHONY REID
otherwise diverse culture. As well as carrying their own produce into world markets, Austronesians commanded all the sea routes between east Asia and the rest of Eurasia. Whether shipping passed through the Melaka or the Sunda or the Lombok and Makasar Straits; whether portages were made across the Malay Peninsula from Melaka, from Kedah or from Tenasserim; whether traffic to and from China took on water and supplies along the Cham coast of Indochina and the east coast of the Malay Peninsula, or in the Philippines and eastern Borneo, or along the west coast of Borneo and Java, Austronesians were directly involved. In the long and often intense commercial and diplomatic relationship between Southeast Asia and China, it was Austronesians who took most of the initiatives at least until the Southern Sung dynasty (1127–1279) stimulated the creation of a Chinese sea-going fleet (Wolters 1970, 19–42). The Malay culture hero, Hang Tuah, was appropriately depicted sailing, trading and fighting for his king in China, India and the Middle East as well as Java and Siam.

While the Malay and Javanese maritime tradition is well known, it is worth recalling Dampier’s praise also for some Hindu Chams, whose “very pretty, neat vessel” he encountered in the Gulf of Siam, carrying forty crew and a cargo of rice and lacquer to Dutch Melaka in 1687:

They were of the idolators, Natives of Champa, and some of the briskest, most sociable, without Fearfulness or Shyness, and the most neat and dextrous about their Shipping, of any such I have met with in all my Travels. (Dampier 1697, 272)

CHAM CONNECTIONS WITH ISLAND SOUTHEAST ASIA

This common commitment to maritime commerce helps explain why many Southeast Asian Austronesians retained greater similarities in culture than would be expected by their wide dispersion. Relatively close contacts at periods during the last thousand years have made possible some cultural borrowings which bulk larger than the shared linguistic heritage of the remote past in contemporary construction of identity. The ports of Champa had some particularly strong connections which are explicable in terms of the trading system in the South China Sea.

The first point to stress is that China was the greatest centre of population and manufacture in the world throughout the period of Champa’s prominence (roughly A.D. 300–1500). For Southeast Asian maritime states the exchange of their forest and sea products for Chinese metals and manufactures was always the readiest source of the material resources on
which to establish a kingdom. Tribute relations with the Chinese court were the safest and most profitable means for rulers to engage in that trade. Indeed it gave rulers endorsed by the imperial court an enormous advantage over their rivals. Champa enjoyed the most fortunate location in Southeast Asia for this commerce with China. All shipping between China and the rest of the world (except the Philippine archipelago and Japan) hugged the Champa coast at least for the five hundred kilometres between Cape Varella and Culau Cham (just south of modern Danang) and usually, for those travelling from the Melaka Straits (and hence usually India) or Siam, for an equal distance southward almost to the Mekong Delta (Mills 1979, 73–5).

As the last port of call before this stream of shipping sailed across the Gulf of Tonkin to South China, Champa had to be heavily involved in the trade, tribute, and voyages of pilgrimage moving to and from China. Even hostile ships would stop at one of its natural harbours for water, and friendly ones would take on cargo, people, and ideas. Most of this shipping was manned by Austronesian-speakers. Not until the twelfth century did Chinese take a significant role themselves in the trade, and only in the sixteenth did they become dominant in it at the expense of Malays and Javanese (Reid 1993a, 36–45). As would be expected from its geographical position, as well as the need of rulers for Chinese assistance against local rivals and the ever-threatening Vietnamese, Champa shows in Chinese records as the most faithful sender of tribute missions whenever the state was well enough organized to do so. The pattern began as early as 284 A.D., when the Lin-yi (Champa) king sent an official embassy of tribute to China. In this he was no doubt aided by his chief counsellor Wen, a Sino-Cham or acculturated Chinese, who later travelled to China in 313 and 316, gained much from the experience, and took over the Lin-yi polity himself in 336 (Coedes 1968, 44–5). About twenty missions were sent in the seventh century, and a similar number in the ninth—far more than other Southeast Asian states of much larger population. Apart from a few periods of disturbance between 1391 and 1403, Champa sent tribute virtually every year from the establishment of the Ming Dynasty in 1368 until 1446, when the Emperor ordered that envoys be sent no more than once every three years because of the excessive expense (Wade 1991; Reid 1993a, 15–16).

The connections of Champa with Java and the Malay world, apparently strong though poorly documented, are best understood as a product of this maritime route for traders and pilgrims between India and Southeast Asia on the one hand and China on the other. For long-distance travellers, the other major Southeast Asian stopover was usually Java or Srivijaya, depending which was the more orderly. As early as the fifth century, for example, a Kashmiri Buddhist teacher named Gunavarman made converts in both Java
Annex 265

CHAMS IN THE SOUTHEAST ASIAN MARITIME SYSTEM

and Champa as he travelled east by sea (Mabbett 1986, 295). During the substantial periods between the eighth and fourteenth centuries when Java was united and prosperous enough to send missions to China, it represented the strongest of Champa’s Austronesian connections. The first presumed mention of Javanese in Cham inscriptions is usually taken as the raids by “ferocious, pitiless, dark-skinned sea raiders” against Cham towns in 774 and 787, and against Tongking in 767 (Coedès 1968, 91, 95; Lafont 1987, 76–7), though Hall (1992, 259) believes these are just as likely to have been local boat people. Either way it is an early indication of the frequently disturbed nature of this coast, on which passing traders often either engaged in a little piracy or defended themselves against it. From the eighth to tenth centuries the Mataram kingdom in Java was a great centre of Mahayana Buddhist influence with Tantric elements. This influence appears to have spread along the route to China, to Cambodia as well as Champa. Some historians refer to a “Javanese” stylistic period in Champa, and similarities are noted between the Mi-son temples in Champa and the Borobodur in Java. An inscription of 911 at Dong Duong records two journeys of the Cham courtier Rajadvara to Java to study its Tantric secrets of royal power (Coedès 1968, 123; Hall 1992, 258; Mabbett 1986, 297).

In the fourteenth century the connection between Champa and Java (now flourishing under Majapahit) was again close, and associated in Javanese tradition with the first appearance of Islam. The two states exchanged royal princesses and diplomatic missions, and King Che Nang chose Java as his refuge from Vietnamese pressure on the Cham capital in 1318 (Robson 1981, 276; Hall 1992, 258). Perhaps it is to these connections that the annual new year feast of radja among Vietnamese Cham Muslims relates. As described by Aymonier a century ago, a female shaman was the principal celebrant, interceding with a variety of spirits from beyond the seas, during the three days of feasting, dancing and praying on an elevated and decorated platform. A boat-like piece of wood was introduced and an envoy from Java descended from it to demand tribute. After much hilarity over the failure of the locals to understand Javanese, a tribute of eggs, cakes and bananas was finally placed on the “boat”, along with a paper monkey (Aymonier 1891, 88–91).

Both Malay and Javanese traditions make much of the Champa-Java connection. The very pro-Javanese Banjarmasin chronicle, compiled long after these events, lists Champa (as well as, anachronistically, such seventeenth century kingdoms as Aceh, Patani and Makasar) as tributaries of Majapahit (Hikayat Banjar, 292, 416). Another key Malay text, the Sejarah Melayu (135), claims that a ruler of Champa journeyed to Majapahit to make his homage, fathering there a child by a Majapahit princess. This child grew up to become the penultimate ruler of Champa before the capital, Vijaya, fell to
the conquering Vietnamese. Majapahit itself, as reflected in the *Nagarakertagama*, was certainly aware of Champa along with Cambodia, Annam and China, but not necessarily as a tributary (Pigeaud 1960, 18, 98). Indeed many of the traditions of Java suggest that dependence was the other way around. At least one version of the legend of Aji Saka, the bringer of Hindu civilization to Java, has it that Aji Saka stopped in Champa on his way to Java, married a Cham princess there, and was later succeeded in his civilizing role in Java by a son of this marriage, Pangeran Prabakusuma (Lombard 1981, 286–7). More widespread traditions assert that it was through a Cham princess married to the king of Majapahit, and her brother Raden Rahmat, that Islam entered the Javanese court. To complete the Austronesian triangle, Rahmat took as his wife a lady of Tuban named Nyai Ageng Manila—perhaps evidence of Philippine birth (*Babad Tanah Jawi*, 20–1).

As Java fragmented and the Malayo-Muslim port-states became more important in the fifteenth century, Champa’s connections shifted to the Melaka Straits region. Chinese records show that in 1418 envoys came together to China from Champa, Melaka, Lamri (modern Banda Aceh) and Shi-la-bei (another Sumatran state, difficult to identify). In 1438 the King of Champa complained that the envoys he had sent to Samudra (or Pasai—modern Lhokseumawe in northern Sumatra), the principal Muslim state in Southeast Asia at that time, had been detained and prevented from reaching their destination by the Siamese (Wade 1991). These precious fragments of information help to sustain a presumption that the Malay (and in some periods Javanese) ships which traded frequently to China up until the sixteenth century (Reid 1993a, 38–40) called regularly at one or more Cham ports, and that their crews intermingled with Chams all along this trading route. Chams in this way became sufficiently familiar with Malay culture to have adapted two of the most famous Malay epics, the *Hikayat Indraputra* and the *Hikayat Dewa Madu*, into Cham, presumably between the fifteenth and seventeenth centuries (Chambert-Loir 1987, 98–101).

Although there were certainly Muslims in Champa in the fifteenth century and earlier, Islam was a consequence rather than a cause of the close relations between Malays and Chams. As Chambert-Loir has pointed out, the Malay texts were borrowed in pre-Islamic form without any of the later Muslim alterations. The Cham ruling class was still Hindu at the time of the Vietnamese conquest of Vijaya (Qui Nhon), which Vietnamese and Chinese sources date in 1471. It is striking that the Malay Muslim author of the Melaka royal chronicle identifies as Hindus the Champa nobles who took refuge in Muslim Melaka and Pasai after the loss of their capital (*Sejarah Melayu*, 136–7). There must have been a strong commercial and political
bond with the Malay world which overrode the difference in religion— though the Chams did eventually become Muslim in exile. The king of Champa, with his capital further south in Phanrang, remained a Hindu until at least 1607, when a visiting Dutch admiral was told that the king's younger brother and deputy "would like to become Moor but dares not for [fear of] his brother". Champa was nevertheless then closely allied with Malay Johor against Vietnamese, Khmer and Portuguese, and Islam was encouraged among the coastal population through the building of mosques (Matelief 1608, 120–1; also Manguin 1979, 269; Lafont 1987, 78).

The other important maritime connection of Champa was eastward, to the Philippines and Brunei. This requires some explanation. In early Ming times when Chinese interaction with Southeast Asia was relatively intense, Chinese shipping travelled to the south either by a western route via Champa or an eastern route via southern Taiwan and western Luzon. When these routes were both operating in the late fourteenth and early fifteenth century, and again after 1567, there would have been little contact between Champa and the Philippines. At an earlier period, however, before the eastern route was developed, the Philippine trade and tribute does appear to have reached China via Champa. The first tribute mission recorded from any Philippine island, from Butuan in eastern Mindanao in 1001 A.D., gave rise to the description of Butuan in the Sung Annals as "a small country in the sea to the east of Champa, further than Ma-i [Mindoro], with regular communications with Champa but rarely with China". In 1007 Butuan petitioned the Emperor to be given equal status with Champa, but was sternly told, "Butuan is beneath Champa" (cited Scott 1984, 66; also Wade 1993, 83–5). Scott believes that it was only about the thirteenth century that the direct route between Luzon and Fujian became common, and that all trade to China previously went by way of Champa along a route described much later in the Shun Feng Xiang Song (Scott 1984, 67, 72; Mills 1979, 81).

In my view the contacts of Luzon (particularly the Manila Bay area) with southern China became much more intense as a result of the numerous Chinese missions along the eastern route to the Philippines between 1372 and 1427, when frequent tribute missions from "Luzon" and other Philippine locations were recorded. While this period created a Chinese-influenced commercial culture in the Manila Bay area, linked to others in Brunei and Mindoro, its direct contact with China was lost in the mid-fifteenth century as the Ming Emperors lost interest in tribute and banned private trade from these regions. Trade was then redirected to Melaka, where the "Luxons" were prominent traders at the time of the Portuguese arrival in 1511, sending their ships on both the Manila-Brunei-Melaka and the Melaka-Champa-Canton runs (Reid 1996, 34–5). There was therefore some connection between these
“Luzons” (Muslim Tagalogs or Sino-Tagalogs) and Chams, though an indirect one. It became closer when the old route between Champa (or at least Indo-China) was revived around 1500. Pires’ statement (1515, 123) that “Chinese” had begun sailing direct to Brunei about this time should probably be interpreted to mean Chinese or Sino-Southeast Asians based in Champa or Siam. Neither the early Portuguese nor Magellan’s expedition mention Chinese from China trading to the Philippines or Brunei, but Pigafetta (1524, 33) did come across a ship from “Ciama” (Champa or Siam) in Cebu. A Spanish source of the 1590s suggestively identified the source of Champa’s Islamic influence as “Brunei and other Muslim countries” (Manguin 1979, 270). As late as the 1820s a knowledgeable British trader reported hundreds of vessels regularly sailing between the Cham coast and those of northern Borneo and the western Philippines (Dalton, cited Wade 1993, 85–6).

Though more complicated to explain, there were therefore close commercial connections between Philippine ports and those of the Cham coast in the eleventh to twelfth centuries, and again between about 1450 and 1567 (when the direct China-Philippines eastern route was permanently established). This may explain the connections with Champa which H. O. Beyer (1979, 11–12) found in Sulu sources, and which he attributed to the ninth to twelfth centuries. Still more interesting is the argument developed by Geoff Wade (1993) that the Indic scripts which were used by Filipinos at the time of the Spanish conquest are closer in form to Cham characters than to the Sumatran or Sulawesi alphabets with which they are usually compared. Wade argues that the failure of Filipino scripts to render consonantal endings of words could best be explained by the scripts having been brought from Champa by Chinese, who might have taught Filipinos to stress only the initial consonants when rendering their language into the script.

In the sixteenth and seventeenth centuries Champa continued to play a minor role in the affairs of Southeast Asia, but there was a more important element of Muslim Chams forming a kind of diaspora of traders, warriors and refugees. The group of “Malay” traders who were collectively given trading privileges and autonomies in Makasar in the mid-sixteenth century were reported to be from Johor, Patani, Pahang, Minangkabau and Champa (Sejarah Goa, 26–8; Reid 1993a, 126–8). Cham Muslims were among the multinational forces who were reported in the mid-sixteenth century battling the Portuguese in the South China Sea and aiding Demak’s holy wars in Java, and in the seventeenth century helping even distant Makasar against the Dutch (Pinto 1578, 107, 386; Skinner 1963, 146–7). Malays and Chams were so closely aligned during the conflicts of seventeenth-century Cambodia that their Iberian enemies thought they were one people (Reid 1993a, 187–90).
It appears, then, that commercial links and a common orientation towards maritime trade linked the Austronesians along the trade routes of eastern Asia in advance of Islam. The spread of Islam to most of these areas can be seen as a consequence of this common involvement in maritime commerce, but it also served to strengthen a sense of common identity among them.

THE MANY-CENTRED POLITIES OF AUSTRONESIA

Reflecting on the ease with which authors like Heine-Geldern, Coedès, Majumdar and L. P. Briggs interpreted Southeast Asian inscriptions in terms of modern centralized states or empires, Herman Kulke has recently suggested that modern historians fell victim to a rather “sinister conspiracy” of ancient Indian and Chinese philosophers, historians and official scribes to conceal the historical truth, because it is well known that ancient Indian thinkers and their Southeast Asian contemporaries described the sastric theory of the state, whereas the court poets and authors of the inscriptions primarily aimed at a mastery of the highly-sophisticated art of poetry. None of them therefore cared for a (detailed) description of, for example, the actual structures of a state and its real borders. On the other hand, Chinese official scribes of the Hung lu su, the office which was responsible for “the reception arrangements for foreign envoys and also the recording of details about their countries,” were certainly deeply interested in the actual situation among the “barbarians of the south”. But in their reports, which they prepared for their emperor and which later on became available to historians, they “translated” the information not only into their own language but into their own officialese. Its idiom was deeply pervaded by the Chinese conception of their own centralized state. (Kulke 1986, 2)

Recent work has taken more serious account of the archaeological record, which shows a very different pattern of multiple settlements and shifting centres. Even such apparently impressive Southeast Asian capitals as Angkor, Funan and Majapahit have been looked at afresh as polycentric societies in fragile and temporary coalitions. Still more have the Austronesian societies scattered around island Southeast Asia shown a positive genius for resisting the claims of a centralized state. This recent reinterpretation of Southeast Asian history appears particularly helpful in attempting to understand Champa.

Let us examine briefly the other Austronesian systems of kingship in Southeast Asia, which ought to have had particular similarities with Champa.
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Transboundary Diagnostic Analysis for the South China Sea

Compiled by:

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University of the Philippines
Diliman, Quezon City,
Philippines
Table 3.10  Estimates of reef area and level of vulnerability to three risk levels
(after Bryant et al., 1998)

<table>
<thead>
<tr>
<th>Region</th>
<th>Coastal Population Density within 60 km from coast/km²</th>
<th>Total estimated reef area (km²)</th>
<th>Level of Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Low (18%)</td>
</tr>
<tr>
<td>Southeast Asia</td>
<td>128</td>
<td>68,100</td>
<td>12,300</td>
</tr>
<tr>
<td>Indian Ocean</td>
<td>135</td>
<td>36,100</td>
<td>16,600 (46%)</td>
</tr>
<tr>
<td>Pacific</td>
<td>98</td>
<td>108,000</td>
<td>63,500 (59%)</td>
</tr>
<tr>
<td>Global Total</td>
<td>255,300</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Philippines</td>
<td>174</td>
<td>13,000</td>
<td>50</td>
</tr>
<tr>
<td>Indonesia</td>
<td>93</td>
<td>42,000</td>
<td>7,000 (17%)</td>
</tr>
</tbody>
</table>

Table 3.11  Immediate causes of coral reef degradation (obtained from national reports).

<table>
<thead>
<tr>
<th>Country</th>
<th>Immediate Causes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Over-exploitation</td>
</tr>
<tr>
<td>Cambodia</td>
<td>✔</td>
</tr>
<tr>
<td>China</td>
<td>✔</td>
</tr>
<tr>
<td>Malaysia</td>
<td>✔</td>
</tr>
<tr>
<td>Indonesia</td>
<td>✔</td>
</tr>
<tr>
<td>Philippines</td>
<td>✔</td>
</tr>
<tr>
<td>Thailand</td>
<td>✔</td>
</tr>
<tr>
<td>Viet Nam</td>
<td>✔</td>
</tr>
</tbody>
</table>

Transboundary issues. The transboundary issues associated with reef degradation include loss of biodiversity, reduction in reef fisheries, coastal tourism, threatened or endangered migratory species like marine turtles, the coral trade, and the trade of associated biota (Table 3.12). The quality of information to document or support the transboundary nature of these issues is generally fair.

Loss of biodiversity. Coral reefs are the most diverse of marine ecosystems. Table C5 summarizes salient taxonomic data for the region. Data is most dense in countries that were involved in the ASEAN-Australia LCR Project (Indonesia, Philippines, Thailand, Malaysia, and Singapore), and comparative data using similar methods for Viet Nam and Cambodia are needed. However, there is sufficient information to suggest that degraded reefs in studied areas have incurred reductions in biodiversity, and at worse, species extinctions. In Bolinao, northern Philippines, McManus et al., (1992), have shown the reduction in species diversity of reef fishes together with a decline in fish abundance as a consequence of overexploitation. In the same reefs, the sea urchin Tripneustes gratilla decreased dramatically in abundance from 210 per 100 m² in December 1987 to less than 1 per 100 m² March 1993. Consequently, there was a failure in recruitment, triggering the collapse of the sea urchin industry in 1992 (Talaue-McManus and Kesner 1995). It remains to be assessed how extinctions which are evident at local levels can impact biodiversity at larger scales.
3.2.3 Status of the capture fisheries potential in the South China Sea

Maximum sustainable yield (MSY) estimates are difficult to determine and there are inherent limitations in estimating them (Hillborn and Walters, 1992). Country-based MSYs are even less credible in that the range of fish stocks is never coincident with territorial boundaries. To constrain these uncertainties, estimations at basin level are made to better approximate production potentials. Table 3.33 indicates the habitat and bathymetric subdivisions of the South China Sea that were used by Pauly and Christensen, (1993) to estimate the potential catch from the South China Sea basin. At the level of subdivisions, they showed that coral reefs 10 to 50 m are fully exploited. Shallow waters with some scope for increased production are those located along the Viet Nam/Chinese and Bornean shelves. They may have actually been realized by now. The MSYs for the rest of the shallow habitats could not be estimated, but other indicators show they are fully or over-exploited. On the whole, an additional 841,000 t/yr can be had from the South China Sea if it is possible to tap the production of the deep shelf and the open ocean by exploiting large pelagics and cephalods (Pauly and Christensen, 1993).

Yanagawa, (1997) presents another South China Sea basin-wide estimate, this time with a focus on small pelagics, which can comprise shared and straddling stocks among the littoral states (Table 3.34). His study covers the period from 1978 to 1993, during which peak years are identified. He notes that after 1987, most of the 12 small pelagic fisheries reached full levels of exploitation. Furthermore, the rapid increase from 1976 to 1983 was accompanied by alternation of major species, again indicative of massive fishing selection pressure.

Thus, at the basin level, these two studies indicate that most of the conventional small pelagic species comprising the South China Sea capture fisheries, are already fully exploited. On a habitat division basis, only a few sections of the shelf can sustain further expansion. The deepwater catch may have greater scope to sustain higher fishing pressures, but economics and technology may prove to be the major constraints in catching at great depths.

<table>
<thead>
<tr>
<th>Subdivision</th>
<th>Area (10^3 km^2)</th>
<th>Primary Production (t km^-2 yr^-1)</th>
<th>Potential catch 10^3 t yr^-1</th>
<th>Actual catch 10^3 t yr^-1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shallow areas to 10 m</td>
<td>172</td>
<td>3,650</td>
<td>No estimate but fully exploited 1,046</td>
<td></td>
</tr>
<tr>
<td>Reef flats and seagrasses to 10 m</td>
<td>21</td>
<td>4,023</td>
<td>No estimate but fully exploited 275</td>
<td></td>
</tr>
<tr>
<td>Gulf of Thailand to 50 m</td>
<td>133</td>
<td>3,650</td>
<td>No estimate but fully exploited 1,242</td>
<td></td>
</tr>
<tr>
<td>Viet Nam and China shelf to 50 m</td>
<td>280</td>
<td>3,003</td>
<td>1,860</td>
<td>453</td>
</tr>
<tr>
<td>Northwest Phil to 10 m</td>
<td>28</td>
<td>913</td>
<td>No estimate</td>
<td>315</td>
</tr>
<tr>
<td>Bornean shelf to 10 m</td>
<td>144</td>
<td>913</td>
<td>257</td>
<td>105</td>
</tr>
<tr>
<td>Southwest shelf to 10 m</td>
<td>112</td>
<td>2,433</td>
<td>No estimate but fully exploited 962</td>
<td></td>
</tr>
<tr>
<td>Coral reefs, 10-50 m</td>
<td>77</td>
<td>2,766</td>
<td>295</td>
<td>291</td>
</tr>
<tr>
<td>Deep shelf 50-200m</td>
<td>928</td>
<td>730</td>
<td>1,688</td>
<td>176</td>
</tr>
<tr>
<td>Open ocean 200-4000 m</td>
<td>1,605</td>
<td>400</td>
<td>1,686</td>
<td>80</td>
</tr>
<tr>
<td><strong>Total South China Sea</strong></td>
<td><strong>3,500</strong></td>
<td><strong>Mean = 1,143</strong></td>
<td><strong>4,945</strong></td>
<td></td>
</tr>
</tbody>
</table>
Annex 267

Monique Chemillier-Gendreau, *Sovereignty over the Paracel and Spratly Islands* (2000)
Sovereignty over the Paracel and Spratly Islands

by

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sailors or explorers, sometimes simply because he has run into them in the harbour.

Most of these accounts refer to the islands using widely varying names, which makes any identification uncertain. Sometimes there are a few details of the distance from the coast. They do not always confirm that it is indeed the Paracels which are being referred to, still less the Spratlys, which are much further from the Chinese coasts.

For example, in Dong Xi Yang kao referred to supra, islands are mentioned which are situated 100 li (50 kilometres) from Wenchang, which cannot correspond geographically to the Paracels, lying as they do over 200 kilometres south-east of Hainan. The names of the islands vary in the most whimsical fashion: Jiurulozhou, Wanlizhitang, Wanlichengsha, Qianlishitang, Qizhouyang, Qizhousan. So it is difficult to follow the Chinese authors when they assert that all of these denote the Paracels or sometimes the Spratlys (however, they themselves sometimes agree that the word Wanlishitang denotes the four archipelagos, in other words, all the islands in the South China Sea) or when they infer from them a Chinese title, whereas the texts in question, such as Hai Yu by Huang Zhung, of the Ming dynasty (1536), refer to sandbanks in the barbarian countries of the south-west, which strongly indicates how foreign these territories are to China. Sometimes the assertion that a particular account mentioned the Spratlys cannot help but surprise the reader when the remark is illustrated in a note by a quotation mentioning the Paracels and clearly identifying them as situated at latitude 17°10' north. This is a serious confusion.26

**Uncertainty as to China’s intentions**

The Chinese documents or the works of certain authors on this subject include a number of more precise references.27

This applies to the examples adduced by the Chinese as proof of an act of sovereignty when they state that, under the Northern Song dynasty (10th to 12th centuries), military patrols were organized from Kwangtung and sailed to the Paracels. *Wu Jing Zong Yao* (General Programme of Military Affairs

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26 Jian Zhou, *Les frontières maritimes de la Chine* (University thesis, Paris X, 1991), p. 330. The author states: ‘In 1878, Guo Songtao, first ambassador of China sent to the West, in the account of his voyage, also mentioned the Nansha Islands (Spratlys) as belonging to China.’ There follows a footnote 18, in which the quotation produced speaks of the Paracels and indicates their latitude, which avoids any possible confusion with the Spratlys, but ruins the argument.

27 See, for example, Tao Cheng, ‘The Dispute over the South China Sea Islands’ (1975) *Texas International Law Journal*, at p. 273.
prefaced by Emperor Renzong himself) reports patrols going right to the islands. However, the quotation used is less demonstrative when it is put back in its context, which appears to be a geographical reconnaissance expedition to the Indian Ocean rather than patrols allegedly policing Chinese lands.

So although this confirms China's knowledge of the Paracels, it does not show that China took possession of them.

Similarly, the fact that, in the 13th century, a Yuan emperor, himself a passionate astronomer, ordered a renowned astronomer by the name of Guo Shoujing to take readings, some of which were carried out in the Paracels, does not prove anything either. Since readings were taken partly on Chinese territory and partly outside it, the fact that some of them were made on the islands is not sufficient to furnish proof of the Chinese territoriality of these islands.

In their reasoning, the Chinese authors rely on a further event which occurred in the 13th century (1293), and which is related in Yuan Shi. According to this, an expedition led by Shi Bi embarked to attack Java. Travelling by junk, an army of around 5,000 men sailed south, camping on certain islands. However, the itinerary described does not allow the route, and therefore the islands, to be clearly identified. Nor is the text relevant to territorial control of these spaces, and provides no proof of this. And some authors have speculated that the islands mentioned might rather be those of Macclesfield Bank.

The hesitations on this point can be better understood if they are seen in the context of the maritime history of this region of the world. The preferred shipping routes hugged the coast, allowing for stopovers, trade and contacts, all the more so in that navigation was for a long time not reliable enough to avoid shipwreck in the dangerous ground of the archipelagos.

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28 An example is the view taken by Groeneveldt, the translator of Shi Bi Zhuan (History of Shi Bi), for whom Qizhou (the Seven Islands) refers to the Paracels and Wanlishitang to Macclesfield Bank. However, Pierre Yves Manguin, in a work published by the Ecole Française d'Extrême Orient (Les Portugais sur les côtes du Vietnam et du Champa, Paris, 1972) does not share Groeneveldt's view and believes that Qizhou refers to the Tayas and Wanlishitang to the Paracels. On the lack of identification of islands mentioned in these accounts of episodes dating back to the 13th century, see M.S. Samuels, op. cit., pp. 18–19, and his conclusions: 'Despite greatly increased contact with the seas during the fourteenth century and despite the power of the Yuan navy, the islands of the South China Sea were apparently not absorbed into the empire or colonized.' (p. 20).

29 This incontrovertible fact is disregarded by some authors, for example, Jianming Shen, 'International Law Rule and Historical Evidence Supporting China's Title to the South China Sea Islands' (1997) Hastings International and Comparative Law Review, vol. 21, number 1, at pp. 17 and 26.
The Chinese use certain archaeologists’ reports to support their claim that Pattie Island once harboured a pagoda, now destroyed, which they did not actually see, but which is said to have been a Chinese remain. Scientific verification of this claim is not possible.

Lastly, the Chinese documents refer to patrols at a later date, since it is asserted that between 1710 and 1712 under the Qing dynasty, Wu Sheng himself, Vice-Admiral of the naval forces of Kwangtung, led a patrol at sea. The itinerary is given, together with a commentary that Qizhouyang (Sea of the Seven Islands), which the patrol traversed, corresponded to the outer reaches of the Paracels. However, following the itinerary claimed on the map, it is impossible not to notice that it corresponds to a journey around Hainan Island, not a voyage to more distant seas. The text reads: ‘Departing from Qiongya, he passed by Tong Gu and traversed Qizhouyang and Sigengsha, thus covering 3,000 li.’ Qiongya is the chief town in the north of Hainan Island, not a voyage to more distant seas. The signs required by the international law of the time are missing. As far back as the 16th and 17th centuries, a distinction was made between discovery during reconnaissance (discovery) and discovery with appropriation (finding). On 18 December 1523, the Holy Roman Emperor Charles V used this distinction in his instructions to Ambassador Juan de Zuniga, recalling that a territory merely encountered en route by the King of Portugal’s ships could not be regarded as having conferred on him title to that territory, since there was no taking of possession.

The Chinese claims are contradicted by other sources within China itself. There are many old geographical documents describing and delimiting the territory of the Chinese Empire. With a fair degree of concordance, they describe Chinese lands as ending at Hainan Island in the south. Writings of the 12th century, then the 17th and 18th centuries appear to confirm this, including a geographical description of the prefecture of Quiongzhou and a geographical description of Kwangtung dated 1731, a work submitted to the Emperor of the Qing in year 9 of the reign of the Wengzheng (1731). The map of Kwangtung Province does not mention the archipelagos.

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Close scrutiny of the references produced by the Chinese certainly reveals an awareness, far back in time, of the existence of many islands scattered throughout the South China Sea. However, such references do not take us any further and are not enough to substantiate the claim that China was the first to discover, exploit, develop and administer the archipelagos.

The old tale that in 1754 some Vietnamese sailors, who had lost their course near the Paracels and drifted as far as the Chinese coast, were escorted home without further protest, following an investigation by the Chinese authorities, leads us to believe that there are no grounds for this claim.

It is true that, desirous to expand its trade, China pursued a relatively active maritime policy until the 15th century, through its various ruling dynasties. Chinese works of the time may indeed mention the islands, although they do not provide any convincing arguments supporting the assertion of a Chinese title to sovereignty.

On the other hand, from the 15th century onwards, 'the Chinese presence in and control over the shipping lanes of the South China Sea lapsed into memory'. It is therefore surprising that many authors, in various publications, have often concluded that China's ancient historical title is a solid one. However, as has been remarked elsewhere:

The majority of these studies have been undertaken by overseas Chinese, who were not necessarily free from bias when selecting information for examination; the arguments of the South Vietnamese Government have often been rejected without close scrutiny.

In some slightly more guarded documents the idea is put forward that, over the course of these historical periods, China acquired merely an 'inchoate' or incipient title. This concept is accepted in international law. However it must be based on adequate factual grounds.

When Mexico, opposing France's claim, contended in the 19th century that Clipperton Island had belonged to it before the expression of French rights, the arbitrator appointed to settle the case sought in vain any right to the island which might have been formed by Spanish navigators:

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32 Le Qui Don, Miscellany on the Government of the Marches, Book 2.
That they [Spanish navigators] might have known it before the log-books of the French vessels La Princesse and La Découverte, dated in 1711, had identified and described it is a conjecture more or less probable, but from which one cannot draw any decisive argument.

The arbitrator continued:

The proof of an historic right of Mexico’s is not supported by any manifestation of her sovereignty over the island. 34

This is also the logical conclusion when, disregarding the verbose assertions in many works or articles, we examine the elements put forward in support of an ancient title with respect to China.

During that first period (which we have identified as being before the 18th century), were there any other displays of interest in the archipelagos by other peoples?

The documents produced by the Vietnamese

These documents also confirm that the archipelagos were known far back in time. From the 18th century onwards, this knowledge was transformed into an actual taking of possession.

The paucity of official Vietnamese documents springs from the fact that many were looted, burned or destroyed in the course of past wars, so that it is barely possible to go further back.

From what is available (in references at least) it is clear that, as in the Chinese literature, mention was made long ago of islands and archipelagos. Maps which mention the Paracels, probably dating from the end of the 15th century (Emperor Le Thanh Tong), are reproduced in a publication of the Historical Research Institute (Hong Duc Ban Đô, Saigon, 1962, p. 218); they are also mentioned in the Hong Duc atlas, a work dating from the 17th century conserved in Japan.

The first traces of the assertion of a right appear in 1776 in Phu Biên tap luc (Miscellany on the Government of the Marches), by Le Qui Don. This dates satisfactorily the first legal certainties of the 18th century. This work, written by an encyclopaedist who held the post of Vice-Governor, described the archipelagos (as lying 3 days’ and 3 nights’ journey away, which locates them quite accurately) and refers to their exploitation for economic gain,

34 Arbitral Award, Clipperton Island (1932) American Journal of International Law, at p. 390.
already well organized by the rulers of Annam. The work contains a dated list, established after perusal of the registers kept by the rulers, of the wealth yielded:

I have myself examined the registers of Cai doi thuyen, and found the following:
- year Nham Ngo (1702), the Hoang Sa Company found 30 ingots of silver
- year Giap Than (1704), 5–100 measures of pewter
- year At Dan (1705), 126 ingots of silver. Between the year Ky Sun (1709) and the year Quy Ty (1713), over a five-year period, the Company collected several measures of tortoiseshell and sea cucumber. Sometimes it found only a few china bowls and two bronze cannons.35

The same author refers to known events, i.e. naval battles between the Dutch fleet and the Nguyen navy (1643-1644). These events confirm that the rulers of Annam had an effective navy and sought to control the seas. Can we therefore conclude that such organized exploitation was even older than the precise mention in the registers? It is impossible to maintain this contention, owing to the absence of earlier evidence.

On the other hand, from the early 18th century onwards, the evidence of Annamese administration is well established. Mr Le Fol, Chief Resident of France in Annam, wrote to the Governor General of Indochina, on 22 January 1929, stating, 'The archipelago (Paracels) seems to have remained res nullius until the beginning of the last century'. In the same correspondence he provided information on the administration of the islands by former dynasties from the early years of the 19th century onwards. Doubtless his words, the words of a man carrying out his duties in the region of Vietnam most closely concerned by the historical aspect of these issues, were based on some knowledge of the archives. However, he did not know them sufficiently well to date the Annamese administration with accuracy, which a thorough examination of the archives would have allowed.36

Thus, in the context of the 18th century, it may be said that: at the time the existence of the Paracels was generally known; China has been unable to invoke any act of taking possession corresponding to the criteria described above; Vietnam possesses, in the work of Le Qui Don, the first document

35 Le Qui Don, Phu-bien tap-luc, Miscellany on the Government of the Marches.
36 Annex 8.
mentioning acts corresponding to a certain administration of the archipelago, dating from the early years of the 18th century.

In the case of the Spratlys, their existence was probably known, although the distinction between the Spratlys and the Paracels (in the available documents) was ill-established. There is nothing which allows us to say that China took possession of them. The administration by the Nguyen rulers of the Spratlys at the same time as the Paracels, from the 18th century onwards, is a plausible hypothesis. There is no documentary evidence in this case of any interest in the islands at that time on the part of Indonesia, Malaysia or the Philippines.

**THE AFFIRMATION OF SOVEREIGNTY (18TH TO 19TH CENTURIES)**

The preceding section drew attention to the presence of a first element. It derives from a document of 1776 (*Miscellany on the Government of the Marches*) in which the author, who was then carrying out the duties of mandarin as deputy governor of two provinces, relates, drawing on reports from the early 18th century, that the rulers of Annam had founded the Hoang Sa Company sailing to the islands in the second lunar month and returning in the eighth in order to harvest the produce of the sea and gather booty from shipwrecks.

It needs to be seen whether this indication was subsequently confirmed, whether consequently a right opposable to other States was created in the islands, what the scope of this right was and lastly whether competing rights were expressed.

*The Vietnamese documents of the 18th and 19th centuries*

There are many of these documents, which on the whole concur, are supported by authoritative foreign accounts and which point towards the affirmation of a title of sovereignty.

Numerous Vietnamese maps, atlases or geographical works designate the archipelagos as part of Vietnam, such as:

- *Giap Ngo Binh Nam Do* of 1774
- *Dai Nam Nhat Thong Toan Do* of 1838
- *Dai Nam Nhat Thong Chi* of 1882.  

These works, indicated in the document produced in 1981 by the Ministry of Foreign Affairs of Vietnam, may be consulted in Hanoi, at the Institut d’Histoire Nationale for instance.
The effective administration of the archipelagos appears in various documents available in Vietnam. The most important of these are:

- *The Authentic Writings on Dai Nam* compiled between 1821 and 1844, *Dai Nam Thuc Luc Tien Bien* concerning the period 1600–1775 and *Dai Nam Thuc Luc Chinh Bien* relating to the subsequent period;
- the geography of unified Vietnam edited from 1865 to 1882, *Dai Nam Nhat Thong Chi*;
- the Dai Nam administrative repertory: *Kham Dinh Dai Nam Hoi Dien Su Le*, 1843–1851;
- certain reports filed in the Ho Chi Minh City archives.

Some of these documents bear the seal of the King or comments in red ink, a sure sign of the King's handwriting. They make it abundantly clear that the Vietnamese emperors pursued the task of organizing (as mentioned in an account of 1776) a maritime company whose purpose was the economic exploitation and maritime exploration of the archipelagos. These measures formed part of national policy with a concern for maritime interests.

Owing to the rigours of the tropical climate, the small islands were not suitable for farming. Some of them were covered in guano, though the use of this fertilizer did not begin until the 20th century. Chroniclers in the 19th century report that the resources consisted of tortoiseshell, mother of pearl, sea cucumbers and turtles, as well as articles from shipwrecks (*Dai Nam Nhat thong chi*).

Early in the 18th century, the rulers of Nguyen set up government-sponsored maritime companies. How they functioned and were organized is described in detail in the above-mentioned work by Le Qui Don (1776). Some of these companies specialized in harvesting produce from the sea on islands near the coast, while for others it was collecting articles or merchandise from wrecks on islands out to sea.

Le Qui Don describes these articles as muskets, swords, cannons, gold, silver, lead, pewter, ivory, porcelain, woollen cloth, fabric, wax etc. He says that these companies were supposed to make out itineraries or draw up maps for the rulers of Nguyen and precisely indicates that there were 70 men to a company, that they were recruited in the district of Binh Son, that volunteers were exempt from personal taxes, from fatigues and from tolls. There was a system of punishments for professional misconduct. On the other hand, such service could provide entitlement to a commission or to material rewards. The tours of duty lasted from the 2nd to the 8th month of
the year, those concerned sailing in flotillas of five junks carrying six months’ supplies.\textsuperscript{38}

From 1771 to 1802 the history of Vietnam was marked by dynastic conflict.\textsuperscript{39} When the Nguyen dynasty was restored, Emperor Gia Long made an inventory of all the lands in the kingdom. The maritime companies, then presided over by four mandarins, were to play an important role in compiling a register of the archipelagos. In 1815, the Emperor appointed Pham Quang Anh commander of the brigade given the task of exploring the archipelagos and of drawing up a map of sea routes there.

In 1816, according to certain accounts,\textsuperscript{40} Emperor Gia Long wished to travel to the islands in person in order to take possession of them and add ‘\textit{this flower to his crown}’, yet this information is not confirmed, perhaps because the Emperor did not travel without a retinue consisting of thousands of people, thus making such a journey to the islands problematic. What is more likely is that he dispatched an official, Pham Quang Anh, in his place. The Authentic Writings on Dai Nam (Dai Nam Thuc Luc Chinh Bien) relate that, in 1815, and again in 1816, the King ordered the Hoang Sa Company to travel to the islands in order to make surveys, inform him about maritime routes and draw up maps.

In 1833, his successor, Minh Mang, gave the competent Ministry instructions for the erection of a temple and monument and for the planting of a great many trees:

The trees will grow and provide greenery. Easily visible to navigators, they will prevent many a ship from running aground.

These instructions were reiterated in 1835, the project having been postponed owing to the violent wind and heavy seas. The work was duly carried out and orders were given by the King for those responsible to be recompensed.

\textsuperscript{38} See Luu Van Loi’s analysis of Miscellany on the Government of the Marches, (Phu-Bién tap-luc by Le Qui Don) (Hanoi, 1994, mimeographed).

\textsuperscript{39} See Nguyen Khac Vien, Vietnam une longue histoire (Hanoi, Editions en langue étrangère, 1987).

\textsuperscript{40} This is the account by Monsignor Taberd in The Journal of the Asiatic Society of Bengal (September 1837) and that by Jean-Baptiste Chaigneau, Counsellor to Emperor Gia Long under the Vietnamese name of Nguyen van Thang, author of a Memoir on Cochin China in 1820.
In 1836, Emperor Minh Mang carried on his predecessor’s plan to survey the entire territory. More detailed instructions were given in the matter of cartography.

Everything shall be noted and described in detail for submission to the supreme attention of His Majesty The Emperor. As soon as the junks reach any island or sandbank, regardless of what kind, they shall from that point measure the length, breadth, height, surface area and circumference of that island or sandbank, the depth of the surrounding waters, identify any submerged sandbanks or reefs, record whether access is dangerous or poses no problem, undertake a careful examination of the terrain, take measurements and make a sketch.

The same year (1836), the King ordered the Commander of the Navy, Pham Huu Nhat, to lead the fleet himself and to prepare large wooden posts to mark the places inspected. The following inscription was to be engraved on each post:

17th year of the reign of Minh Mang by imperial order Commander of the Navy Pham Huu Nhat came here to Hoang Sa for reconnaissance and to make topographical measurements and leaves this post as record thereof.

In 1837, the Minister for the Interior prepared a report for the King on the Company’s expenditure. In 1838, the Mandarin of Quang Ha Province requested the King to abolish the tax levied on the Company’s ships. The King assented. The same year, the Minister for Public Works prepared a report for the King on the Company’s activities. The Paracels are described in it.

In 1847, under Emperor Thieu Tri, the competent Minister prepared a report for the King on the need to postpone the Company’s voyages for lack of funds.

In 1867, 20th year of the reign of Tu Duc, a number of sailors having lost their lives during the voyage to the archipelagos, the King conferred upon them the title of hero.

These details are taken from Vietnamese historical documents, whose authenticity has been acknowledged by various foreign authors. Two cases in point are Chaigneau (Memoir on Cochin China) and Gutzlaff (1849, Journal of the Royal Geographical Society. On the Cochin Chinese Empire). It can therefore be argued that the Empire of Annam, as a pre-colonial State, displayed specific interest in the archipelagos and performed acts of admin-
Chapter II

Administration there at a time when no other State had shown any interest in them as sovereign.41

The formation of a right to the islands and the scope of this right

The documents produced reveal governmental activity by Vietnam in the archipelagos, a historically established fact. What now needs to be done is carefully to define the boundaries of such activity, its date, intensity and geographical spread.

The first authoritative text is that of Le Qui Don in 1776. He describes in detail the exploitation of the archipelagos from 1702 onwards. Thus the intention of sovereignty on the part of the State was certain from the early 18th century onwards.

The Vietnamese authorities state that the Hoang Sa maritime brigades operated continuously from the first Nguyen dynasty onwards (1558–1786).42

The Hoang Sa Maritime Company may well have been in existence before 1702, indeed this is quite plausible. Nevertheless, information based on verifiable historical documents goes back no earlier than the early 18th century, and it is impossible to extrapolate with certainty.

Be this as it may, from that date onwards, there was a real intention to assert sovereignty over the islands, since it was expressed by the type of acts singled out in legal precedents.43

We shall not dwell on expeditions whose purpose was to compile maps and to discover shipping routes. Such ventures are initiated by geographers and navigators and help to promote a general, universal knowledge of a land or maritime region (even though China claims that it ended the reconnaissance surveys carried out by the Germans in the islands in 1883, on the grounds that it wished to terminate such activities, and by so doing stamp its authority).44

Many other activities which might be characterized as conduct of a State – forming a special maritime company, financing, profiting from, managing and recompensing that company, deciding to erect constructions on the

41 See Dieter Heinzig, Disputed Islands in the South China Sea (Wiesbaden, Hamburg Institute of Asian Affairs, 1976).
43 See pp. 55–56 supra the examples taken from the Minquiers and Ecrehos case.
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Arun Das Gupta, “The Maritime Trade of Indonesia: 1500-1800” in *South East Asia: Colonial History* Vol. 1
(Paul H. Kratoska, ed. 2001)
3

THE MARITIME TRADE OF INDONESIA: 1500–1800

_Arun Das Gupta_


The Malay-Indonesian archipelago is a geographically fragmented area open to outside contact. In the period under study its maritime trade formed part of the Indian Ocean trading world having vital linkages with south China. Historians of Asia’s sea trade have generally looked upon Indonesia as a transit area, a passage to be crossed to reach south China from the west. This was a place where long-distance voyages were broken and ships were changed. Yet looked at from within, Indonesia was a trading world in its own right. Wolters has shown that long before the all-sea route to China came into its own around fifth century AD, traders from India and Sri Lanka used to visit Indonesia to look for local products like gold and medicinal herbs and not to catch up with the China trade. They were in turn followed by Arabs and Persians. It is true that when the Chinese began to turn to the trade of the southern seas they were more interested in west Asian products coming through southeast Asia than in goods produced in the region itself. Eventually China too began to import Indonesian products like camphor and sandalwood, pepper and spices. Thus apart from being a link in the trans-Asian trade Indonesia had a foreign trade of her own. Together with this international trade there was a thriving inter-island trade within the archipelago. To study the development of the maritime trade of Indonesia one has to bear in mind the three levels of Indonesian trading activity and try to grasp the connection between them.

From the earliest times, Indonesia’s sea trade was under the control of its coastal kingdoms. Under normal circumstances one would presume that traders would prefer to carry on business on their own without any interference from state powers. But the growth and expansion of trade lead to competition and conflict inviting political interference. The need for protection
relied on Gujaratis for money and service. Similarly the investigations of M. A. P. Meilink-Roelofsz have proved beyond doubt that the Portuguese trade within the archipelago was often in co-operation with the Malays, the Javanese and the Chinese.

One effect of Portuguese trade along the coastal littoral of Asia was that different zones of Asian sea trade became interconnected. Thus before the coming of the Portuguese the Gujaratis travelled as far east as Malacca and usually did not sail beyond that point. After the Portuguese settled in Indonesia, Gujaratis re-entered the archipelago and freely visited the major port-towns. In fact by boarding Portuguese ships the Gujaratis went as far as Japan. Just as the Goa-Japan voyage initiated by the Portuguese connected the Arabian Sea with the Far East, similarly the Macao-Timor trade also opened by the Portuguese established a north-south trading line across Indonesia.

Compared to the company trade of the English and the Dutch in the seventeenth century, the Portuguese Asian trade in the sixteenth century was less centralized. The government in Goa could hardly exercise any effective check on the far flung trade of the Portuguese in Asia. The Portuguese captains and the freedom-loving fidalgos carried on almost unrestrained private trade in different parts of Asia. The trade of the vast body of Luso-Indonesians and their Eurasian counterparts in Indonesia was perceived as 'Portuguese trade' although it was not a unified network controlled by a central authority. The dispersed and decentralized character of Portuguese trade accounts for the ubiquity of the Portuguese in maritime Asia. The Portuguese seemed to be present everywhere in coastal Asia not because they had more resources of their own but because they could freely intermingle with the Asians. The freedom of the private Portuguese person to engage in trade in a manner he liked best was unrestrained by any board of directors in Europe.

The looseness of the trading structure of the Portuguese in Asia turned out to be a source of strength rather than of weakness. It left them greater room for accommodation with Asian trade. In the process the Portuguese became more Asianized than the other European groups which followed them. C. R. Boxer is right in concluding that the Portuguese impact on trade and society in Asia was far out of proportion to their actual military strength. For over two centuries Portuguese remained the lingua franca of maritime Asia.

Portuguese impact on Indonesian society is best seen in a crystallized form in Malacca which was the first typical European-style port-town grafted on the soil of Malaya. In the wooded suburbs of Malacca a number of Christian churches were built with a fairly large Christian population to support them. Between 1613 and 1641, the Christian population of Malacca rose from 7,400 to 20,000. In the enclosed part of the city had sprung up the new administrative buildings, five churches, two hospitals and one Jesuit
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EARLY PENANG AND THE RISE OF SINGAPORE, 1805–1832

C. D. Cowan


**Introduction**

Penang was occupied by Captain Light, acting as the agent of the East India Company, in 1786, and named by him Prince of Wales Island. The motives which prompted the Company to sanction this step were almost entirely political. The successful defence of the English possessions on the East coast of India demanded that a harbour of some kind should be permanently available to the English fleet, where it could refit and take in fresh provisions and water during the North East monsoon, and yet be within striking distance of the Coromandel coast. Penang was not the only place which fulfilled these requirements. Achin Roads, Junk Ceylon (Ujong Salang), the Nicobars and the Andamans were all investigated and recommended as alternatives in the period following 1763, when the Court of Directors first gave orders to search for a suitable base to the Eastwards. Penang seems to have been chosen because in addition to being suitable it had the merit of an owner who was willing to make it over to the Company, in return for the security which he hoped the Company would give him against the threats of his suzerain, Siam, and because Light pressed this fact upon the Company at a time when they were ready to act.

There were other considerations advanced by the protagonists of Penang which probably influenced the decision of the Supreme Government in India and the Directors in London. The possession of the Island would provide a refitting station for East Indiamen on the voyage to China, and make them independent of the Dutch-held ports to the Eastwards. It would put a stop to the growing Dutch power in the Malayan Peninsula, which if unchecked would place them in control of the sea routes to China and of the commerce...
of the area. Through Penang the Company might obtain a supply of the spices of the Archipelago, which were in theory a Dutch monopoly, except for a brief period after 1784. The Island would eventually become a trading centre which would pay its own way, and might even contribute to the revenues of the Company.

Whilst it was certainly not deaf to these arguments, especially that which affected the safety of the China trade, the Company was primarily concerned during this period with securing its Indian possessions from the danger of French irruption into the Indian Ocean, and with isolating and destroying French influence in India. To keep Penang permanently available as a base it was willing to pay, although of course it would not be averse to possessing a new commercial centre which might cover part of the expenses. The indecision of the Indian and home authorities between 1786 and the turn of the Century, as to whether or not Penang was worth keeping, arose, not from doubts as to the commercial or financial benefits which would ensue, but from a conflict of professional opinion with regard to the Island’s strategic superiority over the alternative sites. Only when the rival settlement in the Andamans had been abandoned in 1796 because of the climate, and the use of Penang as a rendezvous for the Manila expedition of 1797 had proved its strategic importance, was the retention of the Island certain.

The same factors may be said to have held good in 1805, when Penang was raised to the status of a Presidency. The eulogies of Popham, Macalister and Leith all contended that Penang was an ideal naval base, and could be a very prosperous trading centre. It was hoped that by developing its own resources, especially the growth of pepper and spices, and attracting to itself much of the trade of the area, Penang would cease to be a drain on the finances of the government of India, and become self-supporting. This however could have been achieved without a great increase in its administrative establishment. The vital motive was the creation at Penang of a naval base which should act as a centre of operations against a French or Dutch force based on Ile de France and Bourbon (Mauritius and Reunion in modern nomenclature), and on the Dutch bases at the Cape, Trincomali and Java. This was before the victory of Trafalgar broke French sea-power and freed British ships for service outside European waters; it was a period when privateers from the French colonies in the Indian Ocean were inflicting heavy losses on British shipping, and when French influence in Holland was on the increase. Operations to the Eastward of the Straits of Malacca, against which the China trade must be secured, were becoming more probable.

The role which it was intended Penang should play was made clear by the division of the Eastern Fleet into two parts, one to be based on Bombay, the other on Penang, and by the choice of Philip Dundas as the first Governor of the new Presidency; his last post had been on the naval establishment at Bombay, and his family connections linked him with the Government in England.
"In 1805 the Court of Directors having taken into their consideration the position of the island, its fertility, its harbour, its produce of large timber, its contiguity to Pegu, which contains the most abundant teak forests in Asia, and which had long pointed it out as an acquisition of very great importance in a commercial and political view, being placed in a most favourable situation for an emporium of commerce in the Eastern Seas, and for becoming a commanding station for the rendezvous, refitting and supply of that portion of His Majesty’s Navy required for the protection of the Company’s possessions and affairs in the Eastern parts of Asia, had resolved to new model the Government, and to place the island under the same form of government as the Company’s other settlements in India enjoyed; when the Board of Admiralty laid before them a plan for the building and repairing His Majesty’s ships, which gave a new and high degree of importance to the subject, and rendered the projected reform of government absolutely indispensable. Accordingly the Island was formed into a regular government . . ."

That Government, Philip Dundas, his Council, and subordinate officials, arrived at Penang to organise the new naval arsenal and trade centre on the 24th September 1805.

In the period from 1805 to 1810 the main theme in the history of Penang was the attempt of the government of the island to implement the scheme to make Penang a naval arsenal and a centre of shipbuilding, until the final decision of the Admiralty to abandon all idea of building ships at the island, and to transfer the naval stores there to Trincomali, led to the erst retrenchment in the government establishment.

Great trouble was experienced in obtaining supplies of suitable timber, most of which was finally imported from Rangoon, so that the frigate which was eventually completed in 1809 was very expensive compared with building costs in India. The Penang government did not possess an engineer capable of constructing docks and large slipways, skilled artisans were unobtainable, funds were short, and the execution of the project appears to have been regarded with indifference in London. The reasons for this fiasco seem to have sprung largely from home policy, and not local obstacles. The victory of Trafalgar removed any real danger of a large enemy fleet appearing in Eastern waters, and made any building programme outside English dockyards seem unnecessary. The Directors, faced with a large deficit in their Indian budget resulting from Wellesley’s administration, and under pressure from the East India shipping interest at home, were not in a position to continue the scheme without Admiralty backing. Any hope there might have been of financing the project from the revenues of Penang itself had disappeared before 1810.
The trade of the island increased steadily during this period, and several private fortunes were made, but the pepper and spice cultivation, which was to have provided the profits for the Company, and paid for the shipbuilding and docks, met with as bad fortune as they did, and again not for local reasons. The Decrees of Berlin (1806) and of Milan (1807) had the effect of shutting the Company off from its Continental markets, and stocks of pepper, spices and coffee piled up in the London warehouses. The prices of these commodities fell so far that they no longer covered the freight from the East, and the pepper planters of Penang, unable to dispose of their crops at a price which covered their costs, were faced with ruin.

The prime purpose of the settlement at Penang, its naval base, had disappeared. The cost of its upkeep was no longer the necessary price for the security of India’s East coast, but an outlay which provided private merchants with the facilities for their trade, but brought the Company no visible return. The Directors therefore began to think of cutting down their commitments there. The establishment was reduced from a Governor and three Councillors to a Governor and two Councillors, salaries were cut, and retrenchments ordered in the administrative departments.

From 1810 to 1816 the Dutch possessions in the East were in British hands, and from 1812 Britain was at war with America as well as Napoleon. The general features which run through this period as far as Penang is concerned were largely the consequences of this; firstly the end of the steady increase in the general trade of the island, and secondly a series of mercantilist experiments in the growth of an export staple. Pepper having failed, coffee, cotton and hemp were tried, one after the other, in response to directions from London which fluctuated with the changing face of European politics. None brought great success.

Another factor, which was to become more serious after the foundation of Singapore, appeared at this time; the want of ships to take the export crops not wanted on the London market, pepper, cotton, and also tin, to China, where there was a market for them. The Company’s ships carried goods to China as the captains’ personal speculation, in his privilege tonnage, that is to say, the portion of the cargo space which the Company allowed him for his own use. But these ships were insufficient for the trade, both in point of numbers and in cargo space available. The Company’s ships stationed to the Bay and China were fully laden with pepper or raw cotton. The Portuguese ships, which carried many of the exports of the local Chinese traders to Macao were few, and as foreign bottoms were charged double export duties. There were country ships, but not enough of them. Mostly they found it more profitable to dispose of their opium and specie in the Dutch Islands to the Eastwards, or to load to capacity direct for Canton. The pepper of Penang, therefore, except when there was a year of exceptional demand, continued on the unwanted list, the planters remained depressed, and not unnaturally the revenue of the island did not increase.
The recession in the trade of the island (imports and exports sank from £1,106,924 in 1810/11 to their lowest point, £759,643 in 1814) seems to have been the direct result of the British occupation of Java, and the disturbed state of Achin, in the North of Sumatra. As soon as the administration of Java and the other Dutch Islands passed into British hands the merchants of Penang were placed at a disadvantage in their trade with these places. Trade which used to go to Penang to escape the high duties of the Dutch authorities was now drawn back to Batavia. The merchants of Calcutta and Madras could supply the Batavian market with much more profit than those of Penang. They paid the Company’s duties in India, and at Batavia. The Penang merchants paid three times; in India, at Penang, and at Batavia. The customs regulations were modified in favour of Penang in 1812, but her position on the fringe of the Archipelago, which was the real trouble, told against her trade when duties at other ports were not unreasonable. With the spices of Amboina in British hands there was little demand for those from Penang. The British market was in any case over stocked. The tin trade of the island also suffered a severe setback after the British took over Banka. What had been a Dutch monopoly became a British monopoly, and there was now no incentive to smuggle contraband tin to Penang. All went to the government in Java.

From the coast of Achin came the bulk of Penang’s pepper and betel-nut imports, and it offered a market for large quantities of opium and Indian piece goods. It occupied an important position in the Straits of Malacca. The Sultans had long been weak and dominated by the territorial chiefs, but the reigning monarch, Johor Allum Shah\(^1\) failed to maintain his hold even of the usual revenues. Contemporary opinion held that he was a waster and a drunkard, and his policy was notoriously controlled by his European advisers, time-servers out for their own ends. Failing to exact the usual contributions from the chiefs in control of the coastal areas he banned foreign trade to ports not under his control, and enforced the ban by a system of piracy, or blockade, depending from which viewpoint the situation was regarded. The trade suffered severely; not only were the native craft scared off, but country ship under British colours were also attacked, which, as in the case of the Annapoorney, illustrated by extracts from the documents, brought the government of Penang on the scene. The legal problem involved was solved by the King being driven from Achin altogether in 1815. It is not certain how far the government of Penang supported and encouraged his rival, Saif Allum,\(^1\) in his bid for the throne. Their official attitude was one of neutrality. The old King, Johor Allum, returned to the Achinese coast in 1816, and the civil war which followed further depressed trade. Official relations with Achin were not settled until 1819, and the unsettled state of the country continued long afterwards.

In 1816 came the first great retrenchment, far more severe than that of 1809/10. In a review of the situation the Directors noted that since the
pepper and spices which were to have paid for the administration of the island had failed, the naval arsenal been given up, and the yearly deficit averaged £81,448, there was no alternative but for a large-scale pruning of the establishment lists. In many cases, however, their orders seem to have been treated merely as recommendations or statements of policy, and did not produce an appreciable reduction in expenditure.

The government of Java was handed back to the Dutch in August 1816, and from then until the foundation of Singapore in 1819 Penang passed through what in retrospect seems to have been the most critical period in its history. The government of the island was faced with a multiplicity of serious problems. There was an urgent need to increase the revenues and cut down expenditure in order to avoid further unpleasant reductions in the establishment. The Achinese civil war threatened, if it continued, to put a complete stop to trade with that coast, whilst the return of the Dutch to power in the Eastern Islands and in Malacca, threatened to cut off the trade from the Eastward and even from the Southern states of the Peninsula, which had been, nominally at least, dependencies of Malacca. In the Northern states the aggressive behaviour of the Siamese threatened to plunge the whole of the Western coast into chaos, and to put a stop to trade, especially the important tin trade.

A reduction of the gap between income and expenditure never seems to have meant more to the officials at Penang than the practicability of increasing the taxes on trade and on land and property. Real economy was impossible where all thought in terms of retaining their posts and privileges intact. Although Bannerman, the Governor during this period, did put up several suggestions for increasing the receipts as well as for effecting reductions in expenditure, the main development was an attempt to introduce the Directors and the Supreme Government in India to a new view of the value of the island. Whilst admitting that revenue was not in proportion to expenditure, it was pointed out that this was chiefly because the duties on trade were so light. The importance of the settlement should be judged, not by the size of the local revenues, but by the additional wealth and revenues its trade brought to the other Presidencies of India. All this was quite apart from its great political importance as a safeguard against Dutch attempts to gain control of the route to China.

Bannerman’s policy, although he had been specially sent out from a seat on the Court of Directors to implement drastic economies, was based on the principle that Penang could be made so important both as a trading centre and a political outpost, that the advantages it brought to India would more than compensate for the Indian subsidies necessary to maintain its existing system of government. This argument Bannerman had more difficulty carrying in Penang than in India. The Penang officials did not want to lose what revenues they had, and Phillips, the Collector, and Bannerman’s eventual successor, was frightened that whilst the Indian revenues might be augmented
Penang would get no credit for the increase, and the subsidies would still be
given grudgingly. 1816 had been a good year for trade, largely owing to the
demand for pepper in China and the effect of the transition period in Java,
where the return of the Dutch scared many native traders to Penang. But the
improvement was not maintained. There continued to be no demand for pep­
per in London, and the cotton plants failed. Moreover trade was severely
retarded by the state of affairs in Achin. There were now two claimants for the
throne in that country, each in control of separate portions of the coast. Both
were attempting to prevent each other from collecting revenue by banning
trade with the other's ports, and enforcing the ban by a system of licensed
piracy. The government of Penang favoured intervention in favour of the
stronger candidate, Saif Allum, whose father was under their control, and
who appeared to command the support of most of the important chiefs.
Raffles from Bencoolen supported recognition of Johor Allum, the former
King, the man with the best legal claim but the least chance of enforcing it.
Penang hoped that a British Resident, backed by an armed force and a docile
King, would result in security for trade under the provisions of a formal treaty.
What Raffles hoped would be the outcome of his policy is not clear. The Treaty
of 1819, made after Raffles had carried his point with the Governor-General
and the Agent of the Penang Government, Major Coombs, committed the
Company to the recognition of Johor Allum, and obtained a promise from
that individual to exclude the Dutch from residence though not from trade,
and to admit a British Resident. But it made no provisions for armed inter­
vention on behalf of the King beyond calling upon the Penang government
to exert its influence to secure the withdrawal of Saiful Allum, and seems to
have had no ameliorating effect on conditions in the country.

The return to the Dutch of their former possessions in the Archipelago,
including Malacca, which despite protest from Penang was handed over in
1818, left Bannerman in Penang in a very awkward position. The restored
Dutch government in the East was characterised by an energetic attempt to
regain commercial and political domination throughout the Archipelago and
the Malayan Peninsula. It was the policy of the British government, voiced
by the Board of Control, to keep Holland as strong as possible, and on no
account to risk war by coming into collision with the Dutch in the East. The
Directors of the Company on the other hand, were acutely conscious of the
danger that Dutch control in the Straits of Malacca and surrounding waters
would constitute to their lucrative China trade. It was essential both to the
interests of the Company and their private patronage that this trade should
be maintained intact. Bannerman was afraid that unless Dutch influence was
restricted any chance there might be of recovering the position in Penang by
extending its commercial importance would be lost.

His policy therefore consisted of an attempt to forestall the Dutch both by
concluding Commercial Treaties with those Native States over which Dutch
control had not yet been reasserted, and by securing as much of the trade of
those states as was possible before the Dutch appeared on the scene. This was one of the ideas behind his Achinese policy, and behind the Penang government’s decision to take over the tin trade of the Peninsula. He hoped to establish such a strong position that the Dutch would hesitate to challenge it. If they did challenge it, however, he saw from the first that he would have no alternative but to retreat, unless the home government changed its policy, or some sort of Anglo-Dutch demarcation line in the East was negotiated in Europe.

Unfortunately both the speed with which the Dutch acted, and the delays resulting from frequent references to the Supreme Government in India, meant that too little time was available for success. He was forestalled in Pontianak, and though treaties were actually signed with Rhio, Selangor and Perak, the Company’s position there had not been consolidated enough to deter the Dutch from action. This action Bannerman lacked the force to challenge, even if he had been willing to risk a collision or defy his instructions. The postscript to this failure was the foundation of Singapore by Raffles, who was not hampered by any scruples over the danger of a collision with the Dutch, and who possessed a knowledge of the private opinions of the Governor-General to which Bannerman had not had access. The occupation of Singapore precipitated the general settlement of Anglo-Dutch interests in the treaty of 1824, which Bannerman had urged earlier.

This period was also decisive in that the nature of Penang’s commercial relations with the Peninsula states for the next fifty years was determined by developments between 1818 and 1821. The Island’s Malayan trade was hindered by the chronic state of unrest prevailing in the Peninsula. Kedah was engaged in a war with Perak, instigated by Siam, whose attempts to assert her influence over the Malay States made it impossible for the Penang merchants to risk their capital in any large scale attempt to develop the trade of the states to the North, and greatly curtailed their value as a market. Bannerman attempted to arbitrate in the Kedah-Perak conflict and tried to smooth the way for private capital, and to restore confidence by undertaking a trade in tin on behalf of the Company. This he hoped would eventually make Penang the centre of the tin trade, and offset the Dutch monopoly of the Banka mines. At the same time he tried to persuade the Supreme Government to send a diplomatic mission to Bangkok to come to some understanding on the subject of Siamese ambitions in the Peninsula, and to create conditions for opening up a direct trade with Siam. The arbitration failed; the Siamese had overrun all the Northern states by the time Crawfurd’s mission was sent to Bangkok in 1822, so that these states relapsed into anarchy; the difficulties in the way of the tin trade proved almost insurmountable, so that after Bannerman’s death in August 1819 it was abandoned.

The future of Penang at the end of 1819 was not bright. The annual deficit remained as high as ever. Trade, whilst a slight improvement was noticeable, was not good. Achin was as unsettled as it had been for the last ten years,
and there seemed no prospect of improvement. The Dutch had secured a hold in Selangor and the Islands in the East, and even if the threat which their presence in Malacca constituted did not prove as serious as it seemed, the trade of that quarter would probably be engrossed by the new settlement of Singapore. By 1821 the Siamese were in control of the Malay states as far South as Perak, and their bellicose attitude made large-scale trade with that quarter impossible. There was still no demand for pepper on the London market.

The story of the foundation of Singapore is too well known to need comment here. The events of the period between 1820 and 1826, when Singapore was brought under the Government of Penang, are dominated by the phenomenal rise of Singapore as a commercial entrepot, and the reactions of this on the trade of Penang. Already by November 1819 Singapore was trading with all the important native ports East of the Straits. Nos. 89–91 in the text illustrate the nature and extent of this trade during 1820 and 1821. The fact that Singapore was for legal purposes an Indian port gave it a great importance for the China trade. It was possible, by transhipping exports from China at Singapore for private merchants to evade the Company’s monopoly of the direct trade between Europe and China, for the Indian trade had been open since 1813. Thus by 1822 the value of the trade of Singapore exceeded that of Penang, and it went on increasing at the same unprecedented rate, with occasional small recessions usually, it appears, due to the conditions of the China trade, which made up more than a third of the total trade of the port.

The development of Singapore did not at first result in the decline in the trade of Penang which contemporaries had expected. The trade with the native ports to the Eastward seems to have been lost almost at once. In this the geographical advantages of Singapore were reinforced by the piracy notoriously prevalent in the Straits. The native trade of Penang had always suffered from this scourge, and so did that of Singapore, but whereas the Bugis prows had been willing to run the gauntlet of the pirate infested Straits in order to reach the one free (or almost free) market in the Archipelago, they had now no need. Free-trade Singapore was available at the Southern entrance of the Straits. Whilst trade with the Eastward was lost, however, trade with Achin took a turn for the better. The unsuccessful claimant to the throne left the country and became a British pensioner, and although (or perhaps because) Johor Allum, who had been recognised by Raffles’ Treaty, did not succeed in reasserting his control over the country, trade improved. In effect, especially after the death of Johor Allum in 1823, the control of the country was in the hands of the Sagis, and the King had not the power to prevent the chiefs in control of the ports trading with whom they wished. The years of difficulty in the trade of Achin, from which the major part of Penang’s imported pepper had always come, had also had the effect of stimulating the pepper trade with the ports on the East coast of Sumatra, which
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Few works on modern imperialism (1880–1914) include Dutch political and military behaviour in the Indonesian archipelago. Theories concerning colonial expansion in this period have been based almost exclusively on the activities of the big powers, scrambling for new territories in Africa. The small country of the Netherlands, expanding its colonial frontiers within its nominal sphere of interest, did not arouse much interest, the less so as its history and sources are not easily accessible due to an internationally little known language.

Even Dutch historians did not show a burning interest in acquiring a place under the imperialist sun. For nearly three quarters of a century, until about 1970, the Dutch public and Dutch historiography considered Dutch expansion to be different from that of other colonial powers, because this expansion under the so-called Ethical Policy had the high minded goals of “pacifying” and developing the indigenous population. The close connections between this policy and the expansion of Dutch administrative power into the Outer Regions of the archipelago were rarely recognized. The Dutch self-image as a peaceful, neutrality-loving nation did not allow for imperialism, which was identified with greed and power games. In the following pages, however, I want to argue that there are a number of reasons to include Dutch policy with regard to the Outer Regions of the East Indies around 1900 as a case of modern imperialism. Analysis of the official correspondence between the Indies government in Batavia (now Jakarta) and the Ministry of Colonies in The Hague on the decision-making preceding military expeditions brings to light an array of
motives behind Dutch expansion in the Indies that fits in with theories of modern imperialism.

The debate on modern imperialism

Whether or not one wishes to include Dutch expansion in Indonesia around the turn of the century in the debate on modern imperialism depends largely on how this term is defined. Imperialism has been called a “masked word”, an ambivalent and emotional notion with a large range of uses: some 17 definitions of the word imperialism have been noted. The term can be used in a historical or a political sense. In the former, more appropriate to a historical analysis, modern imperialism serves as a label for the historical process of the apportioning of the non-western world by the western powers between 1870 and 1914, and the motives and preconditions associated with this process.

It is only since the 1970s, after a conference of the Dutch Historical Association, that Dutch historians have started to discuss the question whether or not Dutch colonial policy in the Outer Regions can be regarded as modern imperialism. The debate has raised new interest in this aspect of colonial history; it has led to new archival research and started a lively polemic among Dutch scholars.

Following in the footsteps of American scholar R. F. Betts, Utrecht historian M. Kuitenbrouwer identifies two general characteristics of modern imperialism as relevant for the Indies: “contiguity”, the outward extension of authority from older settlements, and “preemption”, preventive occupation motivated by economic and nationalist rivalries with other countries. Rejecting his stance, Leiden historian H. L. Wesseling contends that “preemption” should be interpreted as “pegging out claims for the future”, or as a paper partition, and should not be applied to the process of realizing old claims as the Dutch did around the turn of the century. Moreover, contrary to the views of Betts and Kuitenbrouwer, Wesseling considers “contiguity” an invalid criterion, since modern imperialism was a historically new phenomenon that reached out for completely new areas of the world. Dutch expansion, on the contrary, was “more of the same”: it continued existing colonial policies and was precipitated by international processes instead of by its own motives. Reinforcing Wesseling’s argument for continuity in Dutch colonial expansion, Fasseur had argued earlier that expansion continued in spite of the official policy of “abstention”. As a true mediator, economic historian J. T. Lindblad (Leiden University) has recently attempted to close the gap between the two viewpoints. Incorporating in the definition of imperialism “an intensification of actual control”, while retaining “the emphasis on formal political domination”, he recognizes renewal within continuity. His views are supported by an excellent study on the role of the Koninklijke Paketvaart Maatschappij (KPM, Royal
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Packet Company) in the formation of the Dutch colonial state in Indonesia around 1900.10

Modern imperialism, indeed, seems not to have been a completely new phenomenon after all, but part of an older tradition of colonialism, even when it reached out for new territories. These new regions were subjugated because of existing colonial or national interests, often starting from established bases of formal or informal power. Without a preceding tradition of colonialism, there could have been no modern imperialism. Therefore, along with Lindblad, I prefer a broad definition of modern imperialism as “the process of acceleration of colonial expansion between 1870 and 1914, in which the division of nearly the whole non-western world resulted in the political domination of western states over these non-western regions”.

Such an acceleration of expansion undeniably took place in the Indonesian archipelago around 1900, and it indeed resulted in political domination. However, when one compares Dutch expansion with that of other countries, three differences are immediately evident. First, the heyday of Dutch expansion started a little later than international imperialism—not until 1900; second, the Netherlands extended its power largely within already nominally fixed and recognized boundaries; and, finally, the expansion was “ethically” motivated. The question remains whether these differences are really significant enough to exclude Dutch expansion in the Indies from the phenomenon of modern imperialism.

In older Eurocentric theories of modern imperialism, three causes are considered central: economic interests of the metropolis (the colonial power); international competition; and diversion of attention from internal problems.12 As preconditions, technical and military ascendancy, improved communications, social-Darwinist feelings of superiority and growing scientific interest in the non-western world are often mentioned. By the 1960s, however, these theories started to be “decolonized”. The focus shifted to preconditions in the colonies themselves, with their sub-imperialisms and their cooperating or non-cooperating indigenous elites. Moreover, emphasis has been placed on the continuity of western interests in the non-western world as well as on the complex pluriformity of motives and causes.

In his survey of western imperialism, British historian D. K. Fieldhouse recapitulates these new lines of thought. With British historians J. Gallagher and R. Robinson he proposes viewing continuity as a characteristic of imperialism: European expansionism at the end of the nineteenth century was “the end of an old story, not the start of a new one”.13 Moreover, he confers paramount importance upon impulses coming from the periphery (the colony): “Europe was pulled into imperialism by the magnetic force of the periphery.”14 In the 1890s, all problems in the periphery were answered according to a single international model: military expansion and a more direct form of colonial rule. In the third place, Fieldhouse draws attention to
the complexity of the various motives for expansion, especially to the politi-
cization of the economic factor:

The vital link between economics and formal empire was . . . neither
the economic need of the metropolis for colonies nor the requirements
of private economic interests, but the secondary consequences of
problems created on the periphery by economic and other European
enterprises for which there was no simple economic solution.\textsuperscript{15}

Fieldhouse's model has broadened the framework of modern imperialism
and opened avenues to the study of imperialism of others besides the great
powers, and outside Africa. For researchers on Dutch expansion the model
provides the heuristic tools to investigate whether or not Dutch expansion is
similar to that of other countries. To what extent was this process in the
Indies influenced by international competition or fear of other powers? How
strong were economic demands? What role did ethical considerations play in
bureaucratic decision-making? What were the decisive factors in this process?
What continuity and discontinuity can one discern? How strong was the
periphery: was Dutch expansion decided on in Batavia or was it “made in
Holland”? And what technical and military preconditions were required for
this expansion? Analysis of the decision-making process in the Dutch col-
onial government culminating in the most important military expeditions
and establishments – such as those in North Sulawesi, Irian Jaya, Jambi,
Kerinci, Southeast Kalimantan, South and Central Sulawesi and Bali – may
offer some clues to what went on in the official colonial mind. Let us turn
first to some facts and figures about Dutch expansion in the archipelago.

\textbf{Dutch expansion}

Focused on trade, seventeenth- and eighteenth-century Dutch colonialism
had not been interested in expensive territorial gains. The Dutch East India
Company, the official representative of the Dutch government in Asia,
preferred an extensive network of diplomatic and trade relations with
indigenous rulers to direct colonial rule. At the end of the eighteenth cen-
tury, outside Java, the Moluccas and the Minahasa (North Sulawesi), the
East India Company controlled only a few settlements along the coasts of
several islands. During the nineteenth century, the influence of the Dutch
government gradually increased in the islands outside Java, the so-called
Outer Regions. By the 1840s, however, the first financial surpluses of the
Java-based Cultivation System were received in the Netherlands. Worries
about expensive expeditions in the Outer Regions that would drain these
profits prompted the Dutch government to dictate a policy of “abstention”
from expansion of colonial rule. In 1841, Dutch Minister of Colonies J. C.
Baud even ordered a withdrawal from recently occupied posts in Sumatra
and forbade any further expansion in the Outer Regions. His orders however, were not without ambivalence, for at the same time he advocated the (cheap) extension of political contracts with indigenous rulers, requiring them to recognize on paper the sovereignty of the Indies government. The “colonial imagination” considered the Indonesian archipelago, with its five main islands (Java, Sumatra, Sulawesi, Kalimantan, Irian Jaya) and thousands of smaller ones, to be Dutch “possessions”, or at least to fall within the Dutch sphere of influence. Contrary to instructions from The Hague, however, the Indies government became increasingly embroiled in military operations, sometimes after overcoming the objections of the Dutch government, other times presenting it with a fait accompli. As a result, by the 1860s large parts of the archipelago had relations of some kind with Batavia, varying from direct rule to control through contracts. Nevertheless, the policy of “abstention” officially prevailed throughout the nineteenth century, continuing long after the outbreak of the difficult and costly Aceh War in 1873.

The Aceh War marked the beginning of a new era of expansion: in this first phase of “reluctant imperialism” (1873–1894/96), a “transitory stage”, the fear of a “second Aceh” inhibited moves to expand elsewhere in the archipelago. Only after the victory in Lombok (1894) and the successful changes in military strategy in Aceh (1896/98), which again imbued the Dutch nation with a long-lost sense of colonial self-assurance, was there a shift in policy regarding the Outer Regions. A flood of military expeditions, leading to a significant extension of administrative control, swept over the archipelago: Jambi (1901–1907) and Kerinci (1902–1903) on Sumatra, Ceram in the Moluccas (1904), Banjermasin in Southeast Kalimantan (Borneo) (1904–1906), Bone and other regions in South and Central Sulawesi (Celebes) (1905–1907), Bali (1906) and Flores (1909), both part of the Sunda Islands.

This second phase in the expansion of colonial authority was carried out not only by military means, but also by the peaceful renewal of existing contracts and the establishment of government posts. In the 1890s, for instance, North Sulawesi (Tomini Gulf) was brought under tighter control by creating new government posts there. Similarly, in 1897 the Dutch government decided to station two civil servants on hitherto only nominally occupied Irian Jaya, a decision which was carried out one year later. Colonial authority in Batavia now wanted to achieve effective rule over the distant regions instead of only nominal power.

Governor-General J. B. van Heutsz (1904–1909), who had been a general during the Aceh War, personifies this high tide of Dutch expansion (1896–1909). He was responsible for an intensification of military measures, ending long-standing regional conflicts by guns and machete (klewang). Under Van Heutsz’s leadership, the Dutch empire was “rounded off”: the colonial state – with its defined boundaries, more uniform administration, a beginning of political participation and welfare policies – dates from this period.
Indonesian legal historian G. J. Resink contends, the so-called “three hundred and fifty years of Dutch colonial rule” is a myth— or, at best, a Javacentric reality, for only in Java was the Dutch colonial presence felt that long.²¹ Van Heutsz’s departure to the Netherlands opened a third and final phase in the history of Dutch expansion: the aftermath (1909–1915), in which only a few incidental actions were undertaken.

The periphery: initiative and continuity

Moving militarily from west to east as it did, the Dutch government could easily be suspected of a large-scale plan of action for the whole of the archipelago. However, there is no evidence of such a master “conspiracy”. Even after 1890, as The Hague loosened the strict rules concerning the policy of abstention,²² the initiatives for expansion of colonial rule came from the periphery. Decisions to act were always taken in reaction to local incidents. If one defines policy as an overall project, designed in the metropolis for execution in the colony, the word “policy” seems inappropriate to the Dutch situation. The brains behind these expeditions were not in The Hague but in the Indies. The initiatives came from local colonial administrators who no longer wished to accept the existing situation. Their requests for more administrative power, approved by the Indies government in Batavia, often led to complications in the region that in the end could only be resolved by military means.

Events in Jambi, Kerinci, Banjermasin and Bone illustrate this. In 1898, the Resident of Palembang had taken the initiative to depose the raja (sultan) of Jambi because of his unwillingness to comply with Dutch demands. One year later the Indies government gave its approval for this decision. However, the solution did not turn out to be a lasting one. Failing to find a successor due to the opposition of the influential ex-raja Taha, deposed in 1858 but continuing as Jambi’s indigenous leader behind the scenes, the Indies government decided in 1901 to usurp the raja’s authority; it moved a police force into the interior. This was done with ministerial consent.²³ The reason for the expedition to Jambi’s neighbour, independent Kerinci, was closely related to these troubles in Jambi. By 1901, Kerinci was serving as a refuge for Jambi warriors, giving rise to complaints by civil servants in the area. Government attempts at peaceful contact were halted after the murder of two emissaries, at which point the Indies government entered into war. By the time The Hague was informed of the decision, the army was already on its way. Governor-General W Rooseboom had to work hard to convince his superior, Minister of Colonies A. W. F. Idenburg, of the justifiability of the decision.²⁴

In the Banjermasin region of Southeast Kalimantan, opposition to the extension of Dutch administration into the interior by the former raja’s family, the Pegustian, deposed in the 1860s, precipitated suggestions by the
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Resident for a more active policy. In the opinion of the Indies government (1905), the resulting escalation could only be resolved by military means. The Hague was informed and remained silent, thus tacitly giving its approval. 25

Complaints by the Governor of Celebes in 1903 about the unwillingness of the raja of Bone to cede his tariff rights to the Indies government caused rumours of bellicose Dutch preparations, and similar bellicose reactions in Bone. It did not take long for the Indies government to decide on a military expedition, authorized by the Minister of Colonies. 26

In each case, we see the same pattern of local requests for action being granted by the Indies government and – sometimes beforehand, sometimes afterwards – gaining the authorization of the Dutch government. It was an old pattern, familiar from the nineteenth century 27, except that local civil servants now needed to do less urging, Batavia took quicker decisions for action, and The Hague no longer ever let the Indies government down. The year 1890 had seen the last decisive veto from The Hague, when, after the military failure in Flores, the Minister of Colonies was directed by the Dutch parliament to recall the expeditionary forces. 28

It is clear that the periphery provided strong impulses to Dutch expansion in the Indies. Another characteristic of modern imperialism, namely “continuity”, applies to the Dutch case as well. Continuity can be noted in political relations within the Indies. In all the above cases, except for Kerinci, some ties already existed between the Indies government and the indigenous rulers or populations through contracts. The contract with Jambi dated from 1833, the raja (sultan) of Banjermasin had been ousted from his position in the 1860s and his realm had come under direct control, while Bone had had two centuries of contracts. Only in the case of Kerinci was a colonial relationship imposed where there had been none before. Kerinci, however, bordering on Jambi, is a clear example of “contiguity”.

So empire was forged in the periphery, or even in the periphery of the periphery. The process of extending frontiers (contiguity and continuity) was recognized by the participants: member of Dutch parliament (and later Minister of Colonies) Idenburg stated in 1901, in remarkably modern language, “that the legal order, introduced and assured in our territory, has been repeatedly threatened and attacked at the borders and hence must be defended” (my italics). Or, as the Governor of Celebes, responsible for the expedition to Bone, plaintively wrote in 1903: “It is the curse of each colonial power, that it is forced by circumstances to enlarge the frontiers of its direct administration”. 30 Modern historians thus affirm what contemporaries already knew, the importance of contiguity (Betts, Kuitenbrouwer) and continuity (Fieldhouse, Wesseling) in maintaining colonial control. Or, to quote Fieldhouse again: it was “the end of an old story”, resulting however in new forms of administration.

What the participants did not seem to recognize was that the colonial power itself was responsible for “the circumstances” that “forced” them to
extend their territory. In most cases, the refusal of non-cooperating rulers (Jambi 1901, Bone 1905, Bali 1906) to accede to Dutch demand of more “modern” rule served as a reason for Dutch intervention. This pattern is similar to that found elsewhere in the world. The Dutch were indeed “pulled into the periphery”, although they did not seem to realize the extent to which they themselves initiated the local troubles that pulled them. It was increasing Dutch demands and pressure that brought about the growing Indonesian opposition. We will return to the reasons behind these increasing Dutch demands later.

For the moment, suffice it to say that, after 1900, the Indies government had only one answer to these cases of non-cooperation by indigenous rulers: military pressure or intervention. Military intervention could succeed owing to technological and tactical developments in the Indies army, improved communications such as telegraph and shipping lines, and political support from the so-called Short Declarations. Especially after the coming of Governor-General Van Heutsz, the “Aceh strategy” was followed: the use of a mobile military police force, trained in guerrilla warfare, and the temporary concentration of military and civil authority in the hands of a single military officer, one with experience in Aceh. The patterns of decision-making observed in the four cases above show obvious parallels with the general phenomenon of modern imperialism (focus on the periphery and continuity/contiguity): the local colonial government took the initiative and had the greatest say in the matter, while the lack of indigenous cooperation with their demands triggered off a military reaction, which continued (or intensified) an existing relationship. Variation in the local conditions of these incidents explains the great variety of motives in the decision-making process.

International competition

Because the Dutch embarked on military expansion later than their colonial colleagues, the motive of international competition, of great importance in the general debate on modern imperialism (cf. preemption), has drawn considerable attention in the Dutch imperialism debate (Kuitenbrouwer, Wesseling). However, close reading of the Dutch colonial sources shows that competition figured only incidentally in the decision-making process. True enough, the Aceh War (1873) had been precipitated partly by a hasty reaction to rumours about American and Italian support for the Acehnese in their opposition to Dutch encroachment. That these rumours later proved to be false did not diminish the weight of the “preemption” motive in this affair.

Fear of British influence stimulated government activity in only a few other examples: in North Kalimantan, in North Sulawesi and in Irian Jaya. In 1877 a British private company had received from the sultan of Brunei (in
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Kalimantan/Borneo) sovereign rights over territory where the Dutch claimed authority. Two years later, when this cession became known in Holland, the Dutch government decided to send a man-of-war to hoist and protect the Dutch flag at Batu Tinagat, the “official” border. However, neither this action nor diplomatic protest had any result. The British company received a Royal Charter and Holland did no more than complain, until 1888, when the British government proclaimed a protectorate over North Borneo. Then the Dutch government, the weaker party, recognized political reality and accepted a commission of inquiry. In 1891, both parties signed a British-Dutch convention, under which Batu Tinagat became English.36

Fear of private foreign adventurers looking for gold and other minerals also influenced the peaceful extension of the civil administration over Central Sulawesi (Tomini Gulf) in the 1890s.37 Further to the east, Irian Jaya is the clearest example of fear of foreign intruders playing a role.38 This island had seen a Dutch civil servant only briefly, from 1828 until 1836. At that point the region had been relinquished because of unhealthy and unsafe conditions. In the 1860s, Protestant missionaries had started to work in northern Irian Jaya. Discussion within the government on what to do there had been taken up again in the 1880s, but all officials agreed that a government post was useless in view of the nomadic and sparse population, the large territory and the unhealthiness of the region. Even the coming of foreign neighbours – the Germans in the north (1883) and the Australians in the south (1884) – did not immediately stimulate renewed interest: in 1885 a British-German settlement recognized the northern boundary with the Dutch. So there seemed no reason to worry.

At the end of the 1880s, however, opinions changed. A private Australian request for a large grant of land (one million acres) made the Indies government realize its weakness and lack of “effective control”, agreed upon at the international Conference of Berlin in 1884–85.39 The placement of national scutcheons, Dutch stone lions, in the aerial roots of the coastal rhizomes40 and the yearly visits of the navy were not really effective means of controlling the Papuan population. This idea of more control won ministerial approval in Holland, but it took nearly another decade to make more concrete plans. Fear of international complications was indeed a stimulus to do so. Troubles about “Dutch” Papuans raiding British territory had been settled in 1896 by a border treaty.41 But Papuans did not stick to fictive western boundary lines, so this was no guarantee of peace in the future.

Fear of foreign competition, however, was only one motive among many in this case. In 1891 the Dutch steamer line KPM had opened a monthly boat service to Irian Jaya, which brought it within closer reach of Batavia and caused a rise in the export of bird plumage and wood products.42 This in turn resulted in growing unrest among the indigenous population, as well as in a new Dutch awareness of the Papuans’ “lack of civilization” and in repeated requests from missionaries for government protection. Fear of
international competition thus figured alongside “ethical” concern for the people and bureaucratic concerns about Dutch prestige and law and order.

Only in a few cases of expansion and only between 1873 and 1898, then, did fear of international competition play a visible role. In other cases, no such motive is mentioned in the official discourse. “Preemption” was therefore not a factor of importance in Dutch expansion, as Kuitenbrouwer assumes, nor was the international “example” of imperialism the explicit stimulus to various actions, as Wesseling suggests. At most, we can concede that the international agenda of modern imperialism provided Dutch expansion with a context which was so well known that it needed neither description nor explicit reference.

This lack of the “foreign factor” is not really surprising. Fear of other countries had been reduced by formal or informal international recognition of the Indies boundaries. During the nineteenth century, Dutch relations with the chief colonial power in the area, Great Britain, had been satisfactory. As a European “dwarf” but a colonial “giant”, the Dutch had always been dependent on the protection and cooperation of the British. In contracts (Treaty of London 1824) and diplomatic contacts these “exclusive lords of the East” had divided up their sphere of influence. Points of tension at common borders had troubled relations incidentally (for instance in Sumatra and Kalimantan in the 1840s), but on the whole the relationship had been an advantageous one, resulting in a free hand for the Dutch in Sumatra in exchange for much-coveted free trade in the archipelago for the British in 1871/73. The treaties of 1891 and 1896, moreover, settled the last border questions in Kalimantan and Irian Jaya. Fear of private adventurers, a continuing worry ever since James Brooke’s success in Kalimantan, remained a cause for alertness. But the Indies government had handled several of these cases successfully in the mid-nineteenth century in Kutai, Palembang and Siak.

Other nationalities (from the USA, Germany, Italy), active in the area as traders, did not threaten the Dutch presence either. Portugal, with colonies neighbouring the Indies, recognized the borders of Timor in 1893 and 1897 on paper, and in 1904 and 1913 in the field. Another neighbour, the USA, had shown no interest in territorial gains in the archipelago in the nineteenth century; it was satisfied with its opportunities for trade. The American presence in the Philippines, after 1898, did not cause Dutch reactions either. One may conclude that before the boom of Dutch imperialism, the frontiers of Dutch control had already been secured. Hence, expeditions on the three main islands (Sumatra, Kalimantan, Sulawesi) and on smaller ones like Bali took place within an internationally recognized territorial context. In the discourse of government decision-making the expeditions were presented as purely local or internal affairs without any reference to foreign powers.

This does not mean that colonial politics took place in an international vacuum. Dutch colonial and foreign policies were closely intertwined.
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Because of its colonies, the Netherlands could play an international role; 30 per cent of its foreign policy issues in those years were connected with colonial matters. Officials manifested a clear awareness of the fragility of colonial possessions, especially in view of the rise of Japan after 1900. After 1900 an expanded territory reinforced this sense of military weakness and prompted Dutch officials to look for international protection against new powers in the region. However, attempts in 1909 to start a defensive cooperation with the USA in a South Sea Convention failed. Plans for large-scale fleet construction came to nothing because of Dutch parsimony and because of the outbreak of World War I. International affairs did not, however, directly influence the decision-making process related to Dutch expansion.

Economics and Dutch expansion

Economic motives, too, are either lacking in the official discourse, or appear in "mutilated" form. Almost never were economic reasons cited as the main justification for military actions. Only the 1890 expedition to Flores, still during the first phase of "reluctant imperialism", was organized clearly with a view to an expected availability of tin; but after a series of military failures this venture was stopped by The Hague.

In view of the strong influence of economic interests in colonialism in general and in modern imperialism especially, this absence of economic motives in Dutch expansion may occasion surprise. Even more so, since the period of Dutch imperialism was certainly one of economic growth: by the 1890s industrialization in the Netherlands was proceeding at a faster pace than ever before, and the years around the turn of the century brought rapid expansion of private enterprise in the Indies.

Lindblad has argued that non-Marxist economic factors (needs of private industry and fiscal requirements of the Indies government) indeed played a role in Dutch expansion in the Indies. In the process of extending colonial power, economics often triggered new interests. Private capitalists, investing for instance in mineral exploration and exploitation, indirectly pressured the government for cession of exploitation rights from indigenous rulers, as happened in North Borneo and North Sulawesi in the 1890s. Consequently, civil servants were stationed in the region, as government policy did not allow private entrepreneurs to enter areas where their safety could not be guaranteed. However, even Lindblad states: "This is not to say that Dutch rule was extended or consolidated with overall economic expansion in mind." According to the documents on expeditions the economic motive was not the main concern of the colonial bureaucracy, although there are some beautiful examples of apparent economic and capitalist influences in the decision-making (Jambi and Bone).

Jambi (South Sumatra) seems a clear case of economic interests playing a role in government actions. Oil was discovered in neighbouring Palembang in
the 1880s. The government refused to grant exploitation concessions in Jambi to private companies as long as the sultanate had not yielded its exploitation rights to the Indies government. The sultan refused indirectly but effectively. This lack of cooperation led to pressure being brought to bear upon the sultan to abdicate, which he did in 1899. A sultanate without a sultan, however, proved to be even more difficult for the colonial government to manage and after two years the Indies government usurped the sultan’s authority and moved a police force into Jambi. Jambi’s response was a guerrilla war lasting until 1907.

Oil had been the trigger for change in the relationship, but it was not the only reason. The sultanate had also refused to deliver criminals and to cooperate in other respects with the colonial government. It had always been slow in fulfilling its contractual obligations. Moreover, the Jambi people had suffered hardship under the sultan’s rule. So power and ethical considerations coincided with the economic motive, which was “politicized” during the process and became overshadowed by bureaucratic needs. When in 1903 the Resident of the region had made a bureaucratic mess of the exploration concessions and came into conflict with the government bureau for mining affairs in Batavia, the new governor-general, Van Heutsz, closed Jambi to private oil companies as of November 1904, decreeing that more knowledge should first be obtained about the feasibility of extraction. His personal preference for state exploration and state exploitation coincided with the fiscal need of the Indies government to curtail expenditure. Ending a bureaucratic mess, however, was the primary concern. It was not until 1921 that a mixed company, partly state and partly private, would begin to exploit oil in Jambi. In Jambi, economic and bureaucratic motives were closely intertwined.54

The same held true for the decision that led to the Bone expedition (South Sulawesi) in 1905. Here the raja, La Pawawooi, had refused to cede import and export duties to the Indies government, as required in vague and general terms in his earlier contract. Since Makassar/Ujung Pandang would lose its status as free port in 1905 and be included in a customs/tariff union in the eastern part of the archipelago, this refusal directly influenced the state treasury. The more so, since the prince of Bone led other Sulawesi rulers in opposing the colonial request for cession. But here again, economic concerns coincided with other Dutch complaints about the political behaviour of the raja: he had extended his power beyond the legal limits of the contract, oppressed his people and assumed supremacy in the region. Here again, we find an economic trigger for a broader pattern of complaints of a bureaucratic and “ethical” nature.55

In the military expeditions to Jambi and Bone, economic interests clearly played a role. In other cases, no economic motives were mentioned. Irian Jaya had little to offer, as civil servants frankly admitted; neither did Kerinci, Ceram, Southeast Kalimantan or Bali, to cite just a few examples. Here,
other motives for military intervention prevailed: in Kerinci its function as refuge for Jambi guerrillas, in Ceram the internal strife of the Alfurese population, in Banjermasin the opposition of the former raja’s family, in Bali (the princely state of Tambanan) the non-cooperation of one of the last independent rajas. 56

The cases of Jambi and Bone, the only cases where economic interests of the colonial state were an important reason for military intervention, illustrate to what extent these issues were “politicized”, developing into problems of administration and control. Private entrepreneurs interested in Jambi could not manipulate the colonial government effectively or directly, because the government carefully guarded its autonomy. Only when problems of state authority and state finances were involved did the government decide to take action.

Financial concerns tended less to stimulate than to curb expansion, just as had been the case under the official abstention policy of the nineteenth century. Balancing the colonial budget was still the main worry of Minister of Colonies A. W. F. Idenburg (1902–1905) and this made him frown upon too much military activity, such as in Kerinci. He approved only those expeditions which seemed absolutely unavoidable. 57 When he appointed Van Heutsz as governor-general, they both agreed on a colonial programme in which a healthy budget was the key element. Ironically, in view of Van Heutsz’s later operations, they stated that to keep down costs in the Indies, military expeditions should be avoided as much as possible. Van Heutsz was not allowed any expeditions without ministerial consent, and he had to give evidence that new taxes and other arrangements would make the administrative structure in the newly won regions pay for itself. 58 In practice, however, neither Minister Idenburg nor his successor D. Fock ever let down their governors-general, although they sometimes asked for more information or complained about the consequences of military actions.

It was Van Heutsz’s good fortune that he could profit form rising tin prices on the world market starting in 1905, which provided him with some economic support for his policies. Moreover, the Outer Regions’ exports exhibited exceptionally rapid growth, quadrupling in value between the late 1890s and the first half of the 1910s due to increased production. Even if not caused by it, economic expansion did take place after more direct colonial control had been introduced, connecting the Outer Regions to the world market for new products like oil, copra and rubber. 59 However, the extension of Dutch rule did not have overall economic expansion as a first priority; no grand design of Dutch colonialism was being followed. Such an aim would not have been reconcilable with the “liberal” preference of the Indies government for abstention from economic affairs nor with economic thinking in general in that period. Large-scale economic planning dates only from after World War II. The economic growth of the Outer Regions was a result of the incidental and individual actions of private pioneers and local
administrators, backed by a government striving for standardization and state formation.

We may conclude that economic interests were part of the general context within which Dutch imperialism took place. However, in the official discourse economic motives were generally not cited; economic motives were politicized and “translated” into bureaucratic problems. Meeting the costs of empire, moreover, was unexpectedly made possible by growing expansion of the exports of the Outer Regions.

**Ethical imperialism?**

It is not only antipathy to imperialism – with its unfavourable implications of capitalism and militarism, already evident around 1900 – that has prevented Dutch administrators, politicians and later historians from characterizing their actions as imperialistic; ethical notions have clouded Dutch views as well. Dutch expansion was viewed as a means of attaining the high-minded goal of “civilizing” the indigenous peoples. “Here, we are only going to do simple civilizing work”, the Minister of Colonies declared in 1897 in the Dutch parliament in defence of his plans for Irian Jaya. Expansion was defined in these terms with renewed vigour with the adoption of the Ethical Policy (1901), when the interests of the indigenous population began to receive more attention. Local colonial administrators, requesting stronger measures from Batavia, never forgot to inform their superiors of the misdeeds of indigenous rulers towards the local population or of the hopeless situation of the latter (for instance in Irian Jaya in the 1890s, in Jambi at the end of that decade and in Bone a few years later).

At the Ministry of Colonies in The Hague, these issues received ample attention and were used by the minister to defend military policies in the Dutch parliament. The short-lived and little-known Minister T. A. J. van Asch van Wijck, who died in office (1901–1902), may have been the most forceful speaker on behalf of these ethical motives. During his ministership the Ethical Policy was officially proclaimed. In 1902 he wrote a short memorandum in which he collected remarks from the official Indies correspondence concerning Jambinese misfortunes through indigenous rule. This memorandum would serve him in the parliamentary debate and can still be found in the Colonial Archives. In a report on Bone a few years later, ministerial civil servants at the ministry changed the sequence of the complaints against the raja, putting his exploitative history first. Ethical considerations justified military expansion, especially in the eyes of the public in the Netherlands.

The long-lasting influence of these ethical considerations was due to various reasons. First, they followed a long tradition of animosity and distrust towards indigenous rulers. Western observers of indigenous states did not have much respect for rajas who typically left their “work” to crown princes.
and went out fishing or hunting (a Malayan royal prerogative), who had enormous harems of wives and co-wives (e.g. the princes of Central Java), and who possessed only weak power over their restive subjects. The Calvinist mentality of the Dutch did not approve of these “excesses”, which, moreover, made these rajas most unreliable as co-agents of Dutch rule. Their disdain was reinforced during the nineteenth century as a result of the process of state formation in Europe and the extension of social consciousness in the European political field. Hence, the ethical declaration of “peace to the huts, war to the palaces”.

Second, ethical notions of a historical mission expressed a Dutch version of nationalism and superiority. Consciousness of belonging to a small nation with a large responsibility was widespread among the country’s elite and permeated colonial as well as foreign policy. It was seen as the historical mission of the Dutch to put indigenous peoples in contact with western civilization. Or, as Idenburg stated in a report to Queen Wilhelmina in 1904:

the best way to assure a lasting and undisturbed possession of our colonies is the establishment of a peaceful, righteous and enlightened administration, which makes the blessings of our domination best known and valued to the millions of subjects of Y. M. [Your Majesty] there, and only in this way are we able to fulfil the high mission, that is put on our shoulders by the possession of these extended regions. That ... rigorous measures, admittedly in combination with humanitarian concerns, may be the obvious road ... , has been proven by experience in many parts of the archipelago; moreover it is revealed clearly by the policy pursued in Aceh and Dependencies as of 1896 (my italics).

Between the many political parties there was no disagreement about this task and responsibility, which continued a long tradition of Calvinist morality in Dutch foreign policy. Even the socialists agreed on the Dutch ethical mission in the Indies. Moreover, for the general public in the Netherlands, ethical perspectives were the easiest to understand. Gradually involved in the political process through the extension of the vote between 1870 and 1918, the voting public was not acquainted with the intricacies of colonial policies and reacted emotionally on moral grounds. Besides, ethical convictions were strong and seriously believed at a time when “ethical” and “moral” were often-used adjectives. They fitted in with the emotional and “emotionological” climate of the day.

A combination of historical mission, righteous government and vigorous authority characterized the strongly paternalistic Ethical Policy. To the advocates of this policy, expansion did not necessarily conflict with “ethical” policies designed to promote the welfare of the indigenous population. None of the strong proponents of the Ethical Policy (member of parliament C. T. van
Deventer, journalist P. Brooshooft, scholars C. van Vollenhoven and C. Snouck Hurgronje) ever attacked the Dutch government for its imperialist stance. They regretted the need of expansion by military means, but regarded the expeditions more or less as “an imperative”. Expansion might even be a prerequisite of welfare policies: “Without a vigorous state, without order and safety, no Ethical Policy”. Ethical or welfare policies in the Indies, a variant of the social policies introduced in European states around the turn of the century, required a strong government. Like the economic motive, the ethical motive was “politicized”.

Whether or not this ethical imperialism was a Dutch prerogative is debatable. The Americans had no other motive when attacking the Spanish in 1898. The French awareness of “une mission civilisatrice” has a strong tradition, while the years around 1900 saw new notions of colonial administration on behalf of indigenous populations developing in other colonial countries as well. It thus seems a little presumptuous to claim ethical imperialism exclusively for the Dutch. At most, we may conclude that the Dutch, belonging to a small nation with a strong Calvinist tradition, felt more at ease with ethics and ethical motives than with the international discourse of power and economics.

**Bureaucratic concerns**

If economic reasons were not paramount in the discourse, if international fears were only partly relevant, and ethical notions used mainly to justify colonial behaviour in The Hague, what then were the most important motives of officials behind the military expeditions of the early twentieth century in the Indies? In each case, one common denominator can be found: the fear of diminishing the prestige of the colonial government, and the need to maintain vigorous Dutch authority. In the beginning of the 1890s some questions were still raised about the legitimacy of this power: in 1893 governor-general Pijnacker Hordijk was reluctant to side with the Muslim Sasaks on Lombok in their revolt against their Balinese Hindu ruler, because, in his opinion, the contract of 1843 did not allow for such a move. He was overruled by the Minister of Colonies. To his successors and their advisers, the legitimacy of colonial authority was beyond doubt and any impediments to this authority were seen as a direct threat of colonial rule. This self-assurance was reinforced by the ethical notion of a “civilizing” mission and the widespread Dutch contempt for indigenous rulers. Bureaucratic concerns with power and prestige were paramount, and more important than economic and ethical considerations. Or they reinforced each other, as was stated in 1892 by the head of the civil administration department in Batavia, with respect to Irian Jaya: “the prestige of our nation among foreigners does not allow us to leave the population of Irian Jaya in their miserable and depraved condition” (my italics).
No one formulated this concern more sharply than the famous Arabist Christiaan Snouck Hurgronje, who had put his scholarly knowledge at the command of the colonial government. As adviser in the Indies from 1889 to 1906, he can be considered the brains behind Dutch imperialism. His analysis of the power of the ulama (Islamic leaders), the real opponents of the Dutch in Aceh, brought about a change in military tactics. Together with Van Heutsz, he created the blueprint for a new military strategy of active guerrilla warfare and drafted the Short Declaration. His reports on Jambi, Kerinci, Banjermasin and Bone, submitted between 1900 and the end of 1904, contain clear examples of bureaucratic considerations. Adopted by the government, they acquired the status of policy statements.

Extremely critical of the policy of abstention, Snouck was a strong advocate of vigorous but righteous colonial government. In all cases, he defended administrative action, and, if this failed, military action. In his 1902 recommendations on Kerinci he stated the “truth that who is not for us is against us.” Or, as he wrote in his recommendations on Jambi: “Steadily we have to work at the reform of indigenous misgovernment along our administrative principles; we will not bring any indigenous state one step further, nor will we win one inch of influence, if we leave the practices of extortion and tyranny of the indigenous rulers intact.” In 1904 he considered it “redundant to prove that strong action against the vassal state Bone is urgent and could only be postponed for very pressing reasons more important than the maintenance of Dutch authority in the government of Celebes.” Maintenance (and extension) of Dutch authority was clearly Snouck’s primary concern.

The central role of bureaucratic concerns can be illustrated by the way the Jambi dilemma was handled. In 1898 Batavia ordered that, as a preliminary step towards resolving the oil question, all matters concerning the raja’s position should first be settled. And, as mentioned above, mismanagement by the Resident of exploration permits led to Batavia’s decision to close Jambi to the oil industry. A desire for bureaucratic clarity thus prevailed over other motives. The same held true for the expeditions to Ceram in 1904 and to Bali in 1906: in the former, intertribal Alfurese wars had been met with desultory military and administrative measures, until Van Heutsz decided upon definite military action for prestige reasons. In Bali, royal contempt for official damage claims in connection with the looting of a ship in 1905 escalated into military action, with no other reason than worn-out patience and injured prestige.

The centrality of prestige need not surprise us. Official discourse of the period, analysed here as far as motives for expansion are concerned, betrays the main preoccupations of the colonial administration. Whether the writers were military men, scholars or civil servants, they spoke the language of governance. Maintenance of Dutch authority was their first professional aim. They did not look very far ahead, but restricted themselves to issues of
immediate relevance. Hence, expansion was motivated by their institutional interests: a desire for systematic maintenance and extension of administrative power. This professional aim runs through all their recommendations, reports and decisions.

This focus of the official mind on bureaucratic concerns does not mean that Dutch expansionism in general can be explained by the sole factor of the desire to acquire and consolidate power, in other words that economics, ethics and international politics played no role at all in Dutch modern imperialism. In this article attention is focused more on the “subjective views” of the participants, than on the “objective factors”. Although not unrelated, they are not identical. The “subjective views” represent the priorities of the participants, actively involved in the process of colonial state formation; they spoke a language with its own emphases, accents and silences, when translating their duties and professional convictions into official discourse.

The Dutch East Indies had been geographically “imagined” as early as the beginning of the nineteenth century, both in the Netherlands and in the Indies. By the end of the century, this imagination had come to focus not only on the region, but on the way that region should be administered and put under Dutch control. Just as nationalism has been defined as “le désir de vivre ensemble”, the desire to live together, so the Dutch official mind became more strongly imbued with a similar psychological notion, “le désir du pouvoir”, the desire for power, and by a fear that indigenous rulers would impinge upon this desire.

This “désir du pouvoir”, or “colonial imagination”, was strongly reinforced by the new national self-assurance derived from the Dutch victory in Lombok in 1894, following many military failures (Aceh, Flores). The victory was made possible by technological developments. According to the Dutch military historian Petra Groen, the nineteenth-century policy of abstention had been dictated by the technical limitations of the military apparatus. A simple profit-and-loss analysis showed that military expeditions in impenetrable jungles would not pay off; this had reduced the possibilities for expansion. The desire for effective power was now stimulated by technical improvements resulting in new and better-trained military police and a new national shipping transport system in the archipelago, the KPM. These developments made possible a “systematic expansion of the administration” (Kuitenbrouwer) or “intensification of formal control” (Lindblad), the Dutch variant of modern imperialism.

A last question concerns the reasons behind Dutch officialdom’s need for prestige and authority. Why these growing demands of the Indies government for exploitation rights, tariffs and security? These demands should be seen as an extension of nineteenth-century state formation in the west, which involved the extension of state authority over the lives of the population and the growing claims of the society upon the state. State formation did not stop
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at the borders of western countries but was exported to their colonies and adjacent territories as well. Colonial state formation was an extension of western state formation. The tariff union law in the eastern part of the archipelago, that led to the subjugation of the prince of Bone, and the law on mineral exploitation rights were both approved by the Dutch parliament in 1899. This growing government authority called for increasing standardization of prescriptions and regulations; hence indigenous rulers had to comply voluntarily or elsewhere forced to do so.87

At the root of the troubles in the periphery lay the growing discrepancy between the western state and the colonies (as Fieldhouse has argued for other parts of the world) as well as a decreasing distance between the two through better communications. Steam power and the telegraph had made the globe smaller. In this respect, modern imperialism in general, and Dutch imperialism in particular, originated in Europe, even though it may seem to have started in the periphery: it was carried out by Europeans, expressing European national "imaginations".

Concluding remarks

Having analysed the official discourse on the expansion of Dutch authority in the Indies by military and administrative means around the turn of this century, we may conclude that there are many reasons to include this expansion in the general historical phenomenon of "modern imperialism". A broadening of the theoretical framework of modern imperialism has opened the way to new views on Dutch imperialism as well.

Although it happened during the period and in the context of worldwide imperialism, Dutch expansion was motivated only incidentally by foreign pressure (e.g. Irian Jaya 1898). Betts's characterization of imperialism as containing an element of "preemption" does not generally hold for the Dutch case. International competition was part of the context, but did not lead to a general fear causing expansion. Dutch imperialism was imperialism-in-depth, more than in-breadth, that is, within existing geographical borders instead of extending into new regions of the globe. And it contained strong elements of continuity and contiguity, as pointed out by Fasseur and Wesseling. This, however, is no reason to deny the existence of Dutch imperialism, since in recent theories "continuity" (Fieldhouse) and "contiguity" (Betts) have been included as elements of imperialism.

Only in a few cases did economic motives lead to Dutch action. And, as in other cases of modern imperialism, these economic motives were first "politicized" (Fieldhouse). The same holds true for ethical motives, which were never the decisive factor but were subordinated to bureaucratic concerns. Moreover, these ethical motives were voiced more powerfully in The Hague than in the Indies, and were used to justify military expeditions to the Dutch public. They accorded with the traditional "civilizing" mission of the Dutch
in the Indies and with long-standing assumptions about misgovernment by indigenous rulers.

Just as elsewhere in the world, the local (Batavian) government played an important part in the process and provided a beautiful example of sub-imperialism. The Netherlands was “pulled into the periphery” (Fieldhouse). The source of all the problems, however, was not the periphery, that is, the indigenous rulers themselves, but was Eurocentric: the expanding demands of economic privileges (tariffs and mineral exploitation) and the task of the modern western state to provide for the safety of European entrepreneurs, missionaries and civil servants.

Dutch imperialism was indeed “the end of an old story” (Fieldhouse), but at the same time the start of a new one, that of twentieth-century colonial state formation – a process of integration, centralization and standardization. It brought about the linking of the Indonesian economy to the world market. It resulted in foreign domination in many details of personal life, a process of westernization which in turn led to the forceful reaction of nationalism and at last to Indonesian national independence.

Notes

1 An earlier version of this article was published as a working paper of the Woodrow Wilson Center, Washington, E. Locher-Scholten, “National Boundaries as Colonial Legacy: Dutch Ethical Imperialism in the Indonesian Archipelago around 1900”, in F. Gouda and E. Locher-Scholten, Indonesia and the Dutch Colonial Legacy (The Woodrow Wilson Center, Asia Program, Occasional Paper, no. 44, 2 September 1991), pp. 10–23, 31–35. Similar ideas are developed more extensively in my recent study on Jambi, E. Locher-Scholten, Sumatraans sultanaat en koloniale staat. De relatie Djambi-Batavia (1830–1907) en het Nederlands imperialisme (Leiden: KITLV Press, 1994). I want to thank my colleagues Dr. Maarten Kuitenbrouwer and Dr. Jur van Goor and various of my students, as well as the anonymous reviewer of this journal for the clarifying discussions on this subject and critical comments on a former text. I am grateful to Rita de Courcy, who corrected my “Dutch” English.


4 The results were published in ibid., pp. 1–89.

5 This article is based on publications of this new research, mentioned below, as
DUTCH EXPANSION IN THE INDONESIAN ARCHIPELAGO


11 Even this definition has its problems. By opposing western and non-western countries, it tends to exclude Japan as a colonizing power; hence, western is meant here to include Russia and Japan.


14 Ibid., p. 463.

15 Ibid., p. 476.


17 Fasseur, “Koloniale paradox”.


24 H. J. van der Tholen, “De expeditie naar Korintji in 1902–1903: imperialisme of
25 E. van Breukelen, "De Nederlandse gezagsuitbreiding in de Zuider- en Ooster-afdeling van Borneo 1900-1906" (seminar paper Utrecht University, Utrecht, 1991).
26 Locher-Scholten, "Een gebiedende noodzakelijkheid".
27 Fasseur, "Koloniale paradox".
30 Governor of Celebes to the Governor-General, 21-3-1903, in General State Archives, The Hague (ARA), Ministry of Colonies (Col.), verbaal (vb.) 16-7-1904 X 15.
32 In the 1890s the mobile forces of the military police were organized, and improved armaments for the Indies army were introduced. The telegraph started in the seventies and was gradually extended, while shipping communications made a jump forward when the Koninklijke Paketvaart Maatschappij (Royal Packet Company) began its services in 1891. The Short Declaration was a three-point contract, drafted by Snouck Hurgronje (see below) in 1898. It stipulated the sovereignty of the Indies government, forbade indigenous rulers from having international contracts and required strict obedience of Indies government regulations. It held indigenous rulers on a long leash which could be shortened at will by the colonial government.
33 Contrary to French colonialism, this militarization of the colonial administration was only a temporary affair – even under Governor-General Van Heutsz, himself an army general – and was never extended beyond the length of the military expeditions. The explanation for this temporary character of army influence in the Indies government is to be found in the weak military tradition of the Netherlands.
38 The expansion was a limited one: one civil servant in Fak-Fak in the western part of the island, and one in Manokwari in the north. In 1901 a civil servant was posted in Merauke (southeastern Irian Jaya).
39 See Historische Nota, ARA, Col., vb. 18–12–1897, no. 32. At his conference, convened by Bismarck, the European powers agreed upon rules and restrictions of their expansion in Africa. Among these the requirement of “effective occupation”, instead of authority on paper, was of prime importance. In the following years these rules were tacitly extended to other non-Western regions, see H. L. Wesseling, “Nederland en de Conferentie van Berlijn, 1884–1885”, Tijdschrift voor Geschiedenis 93 (1980): 559–77.
DUTCH EXPANSION IN THE INDONESIAN ARCHIPELAGO

40 *Handelingen Tweede Kamer* 1897–1898, p. 172.
43 Wesseling, *Indië verloren*, p. 66. In economics, fear of foreign influences played a certain role. The KPM was set up in order to exclude a too strong influence of British shipping in the archipelago (ibid., pp. 40–74). American oil companies were only restrictively allowed. With regard to the military expeditions, however, the role of “preemption” was restricted.
46 This view was to characterize Dutch colonialism until far into the twentieth century. In the period 1945–49, it dawned only slowly in Dutch political consciousness that the “Indonesian Question” could not be resolved by such a parochial stance and that one had to bow to international pressure by the US and the UN.
48 Cf. a quote from the progressive liberal, “ethical” member of parliament C. T. van Deventer in 1902, noting the “voracious gazes” of the big powers on the Dutch Indies: “What is it we have to do and are able to do, we with our weak forces, against so overwhelming a superior power? My response is: first of all we have to be righteous”. See *Leven en arbeid van mr. C.Th. van Deventer*, ed. H. T. Colenbrander and J. E. Stokvis (3 vol.; Amsterdam: Van Kampen, s.a.) III, p. 84.

Jobse, “De tinexpedities”.
50 Griffiths has shown that this industrialization was more an industrialization-in-depth than in-breadth, a renewal and modernization more than an increase in labourers involved. The number of persons employed in industry remained the same from 1889 to 1909. See R. Th. Griffith, “The Creation of a National Dutch Economy: 1795–1909”, *Tijdschrift voor Geschiedenis* 95 (1982): 513–38.
52 Ibid., p. 18.
53 Ibid., p. 18.
55 Locher-Scholten, “‘Een gebiedende noodzakelijkheid’”.
57 Locher-Scholten, “‘Een gebiedende noodzakelijkheid’”, p. 155.
58 Schriftelijke gedachtenwisseling omtrent punten regeringsbeleid, Free University Amsterdam, Collection Idenburg, 20–7–1904.
SOUTH EAST ASIA: COLONIAL HISTORY


60 *Handelingen Tweede Kamer* 1897–1898, p. 175.

61 Although many earlier illustrations of a new colonial consciousness can be noted, the year 1901 is generally taken as the start of this policy because of the formulation of a Dutch “moral calling” with regard to the Indonesian population in the government’s annual statement. See on the Ethical Policy E. Locher-Scholteten, *Ethiek in fragmenten. Vif studies over koloniaal denken en doen van Nederlanders in de Indonevische Archipel 1877. 1942* (Utrecht: Hes, 1981), pp. 176–208. Also J. de Jong, *Van bättig slot tot erschuld. De discussie over de financierlijke verhouding tussen Nederland en Indië en de hervorming van de Nederlandse koloniale politiek* (Groningen: Eigen Beheer, 1989).

62 ARA, Col., vb. 12–3–1902, no. 41.

63 Locher-Scholteten, “‘Een gebiedende noodzakelijkheid’”, p. 154.


65 ARA, Col., vb. 16–7–10–4, it. X 15, report to the Queen.


70 Bootsma, *Buren*.


73 Director Binnenlandsch Bestuur to the Governor-General 6–2–1892, Historische nota in ARA, Col., vb. 8–12–1897, no. 33.

74 Snouck had been a close companion of Van Heutsz in Aceh in the nineties, but their relationship was strained after 1903 due to a difference of opinion about government policy in that region. After 1904, Snouck’s influence waned: Van Heutsz took to his adjutant H. Colijn as his adviser on the Outer Regions. Snouck Hurgronje left the Indies in 1906 and got a professorship in the Arabic languages in Leiden.


77 Ibid., p. 2034.

78 Ibid., p. 2106.

79 However, direct rule was not his favourite method of administration. Quoting the Arab proverb “Kind over kind is grace”, he defended indirect rule by indigenous rulers. These should be western educated; disliking Islam Snouck preferred westernization. Moreover, in his opinion, the colonial government should base its administration on as much information about their subjects as they could possibly collect, an endeavour in which he actively participated. His emphasis on western education for the indigenous elite, his later understanding of Indonesian
nationalism and his sharp criticism of the Dutch civil service in the Indies made him a relative progressive in the 1910s and 1920s, sharply attacked by colonial conservatives. See Locher-Scholten, *Sumatraans sultanaat*, pp. 210–14.

80 Groen, “‘Soldaat’”.

81 Schulte Nordholt, *Balische dynastie*.

82 H. L. Wesseling, *Verdeel en heers. De deling van Afrika 1818–1914* (Amsterdam: Bert Bakker, 1991), p. 455. In this most recent work Wesseling argues – in line with Fieldhouse – that as far as the causes of a modern imperialism are concerned a strict separation between economics and bureaucratic/administrative interests of the modern state is not really relevant, because this distinction gradually diminished in the nineteenth century development of the western state (Wesseling, *Verdeel*, pp. 455–59).


86 Groen, “‘Soldaat’”, p. 208.

Annex 271

Con​vention Between the United States and Great Britain, Boundaries: Philippines and North Borneo (2 Jan. 1930), entered into force 13 December 1932
BOUNDARIES: PHILIPPINES AND NORTH BORNEO

Convention signed at Washington January 2, 1930; exchanges of notes at Washington January 2, 1930, and July 6, 1932
Senate advice and consent to ratification February 11, 1930
Ratified by the President of the United States February 21, 1930
Ratified by the United Kingdom November 2, 1932
Ratifications exchanged at Washington December 13, 1932
Entered into force December 13, 1932
Proclaimed by the President of the United States December 15, 1932

47 Stat. 2198; Treaty Series 856

CONVENTION

The President of the United States of America and His Majesty the King of Great Britain, Ireland and the British Dominions beyond the Seas, Emperor of India,

Being desirous of delimiting definitely the boundary between the Philippine Archipelago (the territory acquired by the United States of America by virtue of the Treaties of December 10, 1898,1 and November 7, 1900,2 with Her Majesty the Queen Regent of Spain) and the State of North Borneo which is under British protection,

Have resolved to conclude a Convention for that purpose and have appointed as their plenipotentiaries:

The President of the United States of America,
Henry L. Stimson, Secretary of State of the United States; and

His Majesty the King of Great Britain, Ireland and the British Dominions beyond the Seas, Emperor of India,

For Great Britain and Northern Ireland:
The Right Honorable Sir Esme Howard, G.C.B., G.C.M.G., C.V.O., His Majesty’s Ambassador Extraordinary and Plenipotentiary at Washington;

Who, having communicated to each other their respective full powers found in good and due form have agreed upon and concluded the following Articles:

1 TS 343, ante, vol. 11, p. 615, SPAIN.
2 TS 345, ante, vol. 11, p. 623, SPAIN.
UNITED KINGDOM

ARTICLE I

It is hereby agreed and declared that the line separating the islands belonging to the Philippine Archipelago on the one hand and the islands belonging to the State of North Borneo which is under British protection on the other hand shall be and is hereby established as follows:

From the point of intersection of the parallel of four degrees forty-five minutes (4° 45') north latitude and the meridian of longitude one hundred twenty degrees (120° 0') east of Greenwich, (being a point on the boundary defined by the Treaty between the United States of America and Spain signed at Paris, December 10, 1898), a line due south along the meridian of longitude one hundred twenty degrees (120° 0') east of Greenwich to its point of intersection with the parallel of four degrees twenty-three minutes (4° 23') north latitude;

thence due west along the parallel of four degrees twenty-three minutes (4° 23') north latitude to its intersection with the meridian of longitude one hundred nineteen degrees (119° 0') east of Greenwich;

thence due north along the meridian of longitude one hundred nineteen degrees (119° 0') east of Greenwich to its intersection with the parallel of four degrees forty-two minutes (4° 42') north latitude;

thence in a straight line approximately 45° 54' true (N 45° 54' E) to the intersection of the parallel of five degrees sixteen minutes (5° 16') north latitude and the meridian of longitude one hundred nineteen degrees thirty-five minutes (119° 35') east of Greenwich;

thence in a straight line approximately 314° 19' true (N 45° 41' W) to the intersection of the parallel of six degrees (6° 0') north latitude and the meridian of longitude one hundred eighteen degrees fifty minutes (118° 50') east of Greenwich;

thence due west along the parallel of six degrees (6° 0') north latitude to its intersection with the meridian of longitude one hundred eighteen degrees twenty minutes (118° 20') east of Greenwich;

thence in a straight line approximately 307° 40' true (N 52° 20' W) passing between Little Bakkungaan Island and Great Bakkungaan Island to the intersection of the parallel of six degrees seventeen minutes (6° 17') north latitude and the meridian of longitude one hundred seventeen degrees fifty-eight minutes (117° 58') east of Greenwich;

thence due north along the meridian of longitude one hundred seventeen degrees fifty-eight minutes (117° 58') east of Greenwich to its intersection with the parallel of six degrees fifty-two minutes (6° 52') north latitude;

thence in a straight line approximately 315° 16' true (N 44° 44' W) to the intersection of the parallel of seven degrees twenty-four minutes forty-five seconds (7° 24' 45") north latitude with the meridian of longitude one hundred seventeen degrees twenty-five minutes thirty seconds (117° 25' 30'') east of Greenwich;
thence in a straight line approximately 300° 56' true (N 59° 4' W) through the Mangsee Channel between Mangsee Great Reef and Mangsee Islands to the intersection of the parallel of seven degrees forty minutes (7° 40') north latitude and the meridian of longitude one hundred seventeen degrees (117° 0') east of Greenwich, the latter point being on the boundary defined by the Treaty between the United States of America and Spain signed at Paris, December 10, 1898.

**ARTICLE II**

The line described above has been indicated on Charts Nos. 4707 and 4720, published by the United States Coast and Geodetic Survey, corrected to July 24, 1929, portions of both charts so marked being attached to this treaty and made a part thereof. It is agreed that if more accurate surveying and mapping of North Borneo, the Philippine Islands, and intervening islands shall in the future show that the line described above does not pass between Little Bakkungaan and Great Bakkungaan Islands, substantially as indicated on Chart No. 4720, the boundary line shall be understood to be defined in that area as a line passing between Little Bakkungaan and Great Bakkungaan Islands as indicated on the chart, said portion of the line being a straight line approximately 307° 40' true drawn from a point on the parallel of 6° 0' north latitude to a point on the meridian of longitude of 117° 58' east of Greenwich.

It is likewise agreed that if more accurate surveying and mapping shall show that the line described above does not pass between the Mangsee Islands and Mangsee Great Reef as indicated on Chart No. 4720, the boundary shall be understood to be defined in that area as a straight line drawn from the intersection of the parallel of 7° 24' 45'' north latitude and the meridian of longitude of 117° 25' 30'' east of Greenwich, passing through Mangsee Channel as indicated on attached Chart No. 4720 to a point on the parallel of 7° 40' north latitude.

**ARTICLE III**

All islands to the north and east of the said line and all islands and rocks traversed by the said line, should there be any such, shall belong to the Philippine Archipelago and all islands to the south and west of the said line shall belong to the State of North Borneo.

**ARTICLE IV**

The provisions of Article 19 of the Treaty between the United States of America, the British Empire, France, Italy, and Japan limiting naval armament, signed at Washington on February 6, 1922, shall, so long as that

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*Not printed here.*

*TS 671, ante, vol. 2, p. 351.*
Treaty remains in force, apply in respect of all islands in the Turtle and Mangsee Groups which are or may be deemed to be comprised within the territories of the Philippine Archipelago on the one hand and of the State of North Borneo on the other hand in consequence of the establishment of the line fixed by the preceding articles of the present Convention. In the event of either High Contracting Party ceding, selling, leasing or transferring any of the islands in question to a third party provision shall be made for the continued application to such island of the aforementioned Article 19 of the Treaty between the United States of America, the British Empire, France, Italy and Japan limiting naval armament, signed at Washington on February 6, 1922, provided that Treaty is still in force at the time of such cession, sale, lease or transfer.

**ARTICLE V**

The present Convention shall be ratified by the President of the United States of America, by and with the advice and consent of the Senate thereof, and by His Britannic Majesty, and shall come into force on the exchange of the acts of ratification which shall take place at Washington as soon as possible.

In witness whereof the respective Plenipotentiaries have signed the same and have affixed thereto their respective seals.

Done in duplicate at Washington the second day of January in the year of our Lord one thousand nine hundred and thirty.

HENRY L. STIMSON [SEAL]

ESME HOWARD [SEAL]

**EXCHANGES OF NOTES**

*The British Ambassador to the Secretary of State*

**BRITISH EMBASSY,**

*Washington, D.C., 2nd January, 1930*

Sir,

By the convention concluded between the President of the United States of America and His Britannic Majesty for the purpose of delimiting the boundary between the Philippine archipelago on the one hand and the State of North Borneo which is under British protection on the other hand, the sovereignty over certain islands which have for many years past been administered by the British North Borneo Company has been definitely recognized as pertaining to the United States of America. These islands which formed the subject of the arrangement effected by an exchange of notes between His Majesty's Government and the United States Government on July 3rd and July 10th, 1907, above mentioned, are:

*TS 856, ante, p. 287.*
1. Sibaung, Boaan, Lihiman, Langaan, Great Bakkungaan, Taganak, and Baguan in the group of islands known as the Turtle Islands.

2. The Mangsee Islands.

His Majesty’s Government in the United Kingdom understand that the Government of the United States of America are prepared to conclude an arrangement in regard to these islands, supplementary to the above-mentioned convention, in the following terms:

Firstly. That the said company be left undisturbed in the administration of the islands in question unless or until the United States Government give notice to His Majesty’s Government of their desire that the administration of the islands should be transferred to them. The transfer of administration shall be effected within one year after such notice is given on a day and in a manner to be mutually arranged.

Secondly. That when the administration of any island is transferred in accordance with the foregoing the said Company will deliver to the United States Government all records relating to administration prior to the date of transfer.

Thirdly. The United States of America shall not be responsible for the value of any buildings which have been or may be erected or other permanent improvements which have been or may be made in any island the administration of which is subject to transfer but any buildings or improvements erected or made by the administrative authorities prior to the transfer of administration may be removed provided the interests of the United States of America are not thereby injured. In the event, however, of the Island of Taganak being so transferred, the United States Government will give favourable consideration to the question of the compensation to be paid to the said company in respect of the capital expenditure incurred by the company in connection with the lighthouse situated on the island, and the United States Government will provide for the future maintenance of the lighthouse.

Fourthly. That such privilege of administration shall not carry with it territorial rights, such as those of making grants or concessions in the islands in question to extend beyond the temporary occupation of the company; and any grant, concession, or license made by the company shall cease upon the termination of the company’s occupation.

The United States Government, however, take note of the desire of His Majesty’s Government that the following titles to land in certain of the islands which were in good faith granted by the Government of North Borneo prior to the arrangement of 1907, be allowed to stand on the terms on which they were issued by that Government.
FIFTHLY. It is agreed that the United States Government shall be exempt from responsibility in respect of acts done in or from any of the islands in question the administration of which has not been transferred to the United States.

SIXTHLY. The stipulations of the extradition treaties between the United States Government and His Majesty's Government shall be applicable within the limits provided for in the exchange of notes which took place in Washington on September 1st/23rd, 1913, to the islands in question and the United States Government take note of the importance which, in view of the proximity of the islands to North Borneo, the said company attach to the establishment and maintenance of an adequate police post thereon, in the event of the administration being transferred to the United States Government.

SEVENTHLY. In the event of the cession, sale, lease or transfer of the islands in question to any third party, the United States Government undertake to use their good offices in commending to the favourable consideration of such third party the desires expressed by His Majesty's Government in the United Kingdom and the British North Borneo Company, as set out in the preceding articles of the present arrangement.

I have the honour under instructions from His Majesty's Principal Secretary of State for Foreign Affairs to request you to be so good as to inform me whether the United States adhere to the terms of the arrangement above described and I shall be glad to receive an assurance from you at the time that this note will be considered by the United States Government as sufficient acceptance of the above arrangement on the part of His Majesty's Government in the United Kingdom.

I have the honour to be, with the highest consideration, Sir,
Your most obedient, humble servant,

Esme Howard

The Honourable
Henry L. Stimson,
Secretary of State of the United States,
Washington, D.C.

*TS 582, ante, p. 364.
Annex 271

PHILIPPINES—NORTH BORNEO BOUNDARIES—JAN. 2, 1930

The Secretary of State to the British Ambassador

DEPARTMENT OF STATE, Washington, January 2, 1930

Excellency:

In Your Excellency's note of today's date you stated that His Majesty's Government in the United Kingdom understands that the Government of the United States of America is prepared to conclude an arrangement in the following terms regarding certain islands off the coast of Borneo which have been administered by the British North Borneo Company in accordance with the arrangement effected by an exchange of notes between His Majesty's Government and the Government of the United States of America on July 3 and July 10, 1907:

[For terms of arrangement, see numbered paragraphs of U.K. note, above.]

In reply to the inquiry made on behalf of Your Excellency's Government in the last paragraph of your note of today's date, I take pleasure in informing you that the Government of the United States of America adheres to the terms of the arrangement above described, and in assuring you that your note under acknowledgment is considered by the Government of the United States of America as sufficient acceptance of the arrangement on the part of His Majesty's Government in the United Kingdom.

Accept, Excellency, the renewed assurances of my highest consideration.

HENRY L. STIMSON

His Excellency
The Right Honorable
Sir Esme Howard, G.C.B., G.C.M.G., C.V.O.,
Ambassador of Great Britain.

The British Ambassador to the Secretary of State

No. 221

BRITISH EMBASSY, Washington, D.C., July 6th, 1932

Sir,

In the notes exchanged between the United States Government and His Majesty's Government in the United Kingdom on January 2nd, 1930, constituting an arrangement regarding certain islands off the coast of Borneo which have been administered by the British North Borneo Company in accordance with the arrangement effected by an exchange of notes between His Majesty's Government and the Government of the United States of America on July 3 and July 10, 1907, the United States Government took
note of the desire of His Majesty's Government that certain titles to land in certain of the islands which were in good faith granted by the Government of North Borneo prior to the arrangement of 1907, be allowed to stand on the terms on which they were issued by that Government.

2. His Majesty's Government regret that the following title was inadvertently omitted from those included in the above arrangement:

<table>
<thead>
<tr>
<th>Likham Island</th>
<th>Date of Allination</th>
<th>Period</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provisional Lease No. 2417</td>
<td>1.6.1907</td>
<td>999 yrs.</td>
<td>13 acres 0 roods 24 perches.</td>
</tr>
</tbody>
</table>

3. I have the honour under instructions from His Majesty's Principal Secretary of State for Foreign Affairs to request you to be so good as to inform me whether the United States Government will agree to regard this title as included in those mentioned in the arrangement concluded on January 2nd, 1930.

4. Should your Government agree to this extension of the above-mentioned arrangement, I should be glad to receive from you an assurance that this note will be considered by the United States Government as a sufficient confirmation thereof on the part of His Majesty's Government in the United Kingdom.

I have the honour to be, with the highest consideration, Sir,

Your most obedient, humble servant,

R. C. Lindsay

The Honourable
HENRY L. STIMSON,
Secretary of State of the United States,
Washington, D.C.

The Secretary of State to the British Ambassador

DEPARTMENT OF STATE,
Washington, July 6, 1932

EXCELLENCY:

I have the honor to acknowledge the receipt of Your Excellency's note of this day's date in which Your Excellency refers to the fact that in the notes exchanged between the Government of the United States of America and His Majesty's Government in the United Kingdom on January 2nd, 1930, constituting an arrangement regarding certain islands off the coast of Borneo which have been administered by the British North Borneo Company in accordance with the arrangement effected by an exchange of notes between His Majesty's Government and the Government of the United States on July 3 and July 10, 1907, the Government of the United States took note of the
desire of His Majesty's Government that certain titles to land in certain of the islands which were in good faith granted by the Government of North Borneo prior to the arrangement of 1907, be allowed to stand on the terms on which they were issued by that Government. In relation to this matter Your Excellency states that His Majesty's Government regrets that the following title was inadvertently omitted from the list of land titles included in the above arrangement:

<table>
<thead>
<tr>
<th>Lekman Island</th>
<th>Date of Alienation</th>
<th>Period</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provisional Lease No. 2417</td>
<td>1.6.1907</td>
<td>999 years</td>
<td>13 acres</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0 roods</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>24 perches</td>
<td></td>
</tr>
</tbody>
</table>

Under instructions from His Majesty's Principal Secretary of State for Foreign Affairs Your Excellency requests that I be so good as to inform you whether the Government of the United States will agree to regard this title as included in those mentioned in the arrangement concluded on January 2, 1930.

In reply I am pleased to inform Your Excellency that the Government of the United States agrees to the extension of the arrangement of January 2, 1930, to include the above-mentioned title, and I take pleasure also in assuring Your Excellency that your note under acknowledgement is considered by the Government of the United States as a sufficient confirmation on the part of His Majesty's Government in the United Kingdom of the aforesaid extension.

Accept, Excellency, the renewed assurances of my highest consideration.

For the Secretary of State:

W. R. CASTLE, Jr.

His Excellency

The Honorable Sir RONALD LINDSAY,

P.C., G.C.M.G., K.C.B., C.V.O.,

British Ambassador.
Annex 272

THE ESTADO DA INDIA IN SOUTH EAST ASIA

John Villiers


The Organisation of the Estado Da India

Before any real understanding can be gained of the administrative and judicial systems and practices adopted by the Portuguese at different times in their Asian empire, some definition needs to be attempted of the term Estado da India or State of India, which the Portuguese used as a collective name for all their possessions in Asia from the Persian Gulf to the sea of Japan. However, it is difficult to give such a definition, because at no time in its history was a unified mode of government or system of law and administration established for all the Estado da India’s constituent parts. Nor was any authoritative formulation ever issued of a political or moral order which could have provided a conceptual basis and theoretical justification for the Estado da India’s claims to sovereignty or hegemony over the different oceans, territories and peoples of which it was formed. At no time was any single guiding principle laid down either in a papal bull from Rome, a royal decree from Lisbon, or a viceregal edict from Goa, which could in some manner be applied to all the different forms of political relationship that the crown of Portugal, through its servants, established with local rulers during the course of the Portuguese imperial adventure in Asia. The gradations of vassalage and suzerainty, the obligations incurred by treaty, the degrees of legitimacy claimed or established by military conquest, the commercial agreements and defensive alliances are as bewildering in their variety as the enormous geographical extent and diversity of the Estado da India itself.

The jurisdiction of the Estado da India extended at one time or another from Sofala and Hormuz in the west to Ternate and Macao in the east. But within this vast maritime area it never succeeded in acquiring any political
homogeneity, and it remained little more than a scattered and often inchoate confederation of territories, military and commercial establishments, individuals, goods and interests, administered, controlled or protected, directly or indirectly with varying degrees of completeness by the Portuguese crown or by others on behalf of the crown. Indeed, there were some places in the area that, in spite of being in practice under Portuguese jurisdiction, were not formally considered to belong to the Estado da Índia at all. A notable example of this is afforded by the several fortified settlements maintained by the Dominicans in Solor and elsewhere in the Lesser Sunda Islands, which were not listed as possessions of the Portuguese crown until 1681, almost a century after the appointment by the viceroy of the first captain of Solor.1

The identity of the Estado da Índia did not therefore depend ultimately on any definition of its territorial limits, because it began as a maritime enterprise and remained so, never exercising direct control over more than a few small enclaves of territory. Its claims to sovereignty were based not upon any hegemony it might gain over areas of land and their populations, but upon its mastery of the open sea and dominance of the shipping lanes that linked those lands together. Indeed, it is perhaps better defined not as an empire at all in the sense that the contemporary Spanish empire was or the Dutch and British empires later became, but rather as an enormous commercial network connecting various points at which trading posts (feitorias), fortified strongholds (fortalezas) or, more rarely, fully fledged urban settlements with their own institutions of municipal government (cidades) had been established. In this respect, the organisation of the Estado da Índia owed much to the model of the earliest feitorias set up by the Portuguese abroad in the late Middle Ages. Since from the outset the whole of Portugal’s trading enterprise overseas was based, unlike the Spanish, on state capitalism, that is to say on the government not merely licensing and regulating the trade but actually conducting it, the feitor acted as the commercial agent of the crown and so in practice also as the king’s ambassador, and the feitoria of which he was in charge was in a real sense identical with the Portuguese community in the place. The early feitorias, which were established in those places in Europe, notably Bruges and Antwerp, where the Portuguese had important trading interests, were later founded at several points on the coast of Africa as the Portuguese gradually worked their way southwards to the Cape of Good Hope and into the Indian Ocean. The first feitoria to be set up in India was at Calicut in 1500. In Lisbon the Casa da Guine, Mina e Índia acted as a clearing and accounting house for goods received from overseas, and its feitor (later known as provedor) was an important crown official and adviser on the affairs of the empire.2

The Estado da Índia may also have owed some of its characteristics as a commercial network, at least in South East Asia, to the earlier trading empires of an only quasi-territorial nature that had preceded it in the region. Still evident to the first Portuguese to venture into South East Asian waters
Map 1 South East Asia.
was the precedent of the Javanese empire of Mojopahit, which in the four-
teenth century had attained power and prosperity, both by developing its
capacity as a major producer and exporter of rice and by gaining control of
most of the important trade routes in the Indonesian archipelago, and which
yet had only exercised a very tenuous suzerainty over the more distant parts
of its island realm. The last recorded ruler of Mojopahit, Pati Udara, sent
envoys to Afonso de Albuquerque in Malacca in 1512 to enlist his support
against the Muslim port sultanates on the north coast of Java. An even more
immediate example was afforded by Malacca itself, which the Portuguese
captured in 1511 in order to gain control of the valuable international trade
of which it was then the leading entrepôt and emporium in South East Asia
and to which it owed its wealth and importance. It is, however, unlikely that
the Portuguese adopted the practice of commercial expansion, without
territorial conquest or subjugation of indigenous populations and without
attempting to take control of the means of production, in conscious imitation
of these earlier states. They seem rather to have striven to follow the
example of their contemporary trading rivals in the area. The only essential
differences, indeed, between the Portuguese and the Malays, Javanese and
other peoples who participated in this South East Asian trading network at
the time the Portuguese arrived was that they were not Asians and that they
were concerned solely with the circulation and exchange of goods and not at
all with their production.

In the Atlantic Ocean the Portuguese were voyaging in ‘seas never previ-
ously navigated’ (mares nunca doutrum navigados), where they had no com-
mercial rivals and could create their own trading network without damaging
anyone else’s interests. Not so in the Indian Ocean and the Indonesian archi-
pelago, where they at once encountered both the commercial rivalry and the
religious antagonism of the numerous Muslim peoples with whom they had
perforce to deal. It was this that gave the Portuguese trading empire in Asia
its essentially military character, and paradoxically made the fortaleza an
institution more characteristic of it than the feitoria.

However, initially there were no plans for founding a territorial empire by
force of arms. Profitable trade was the first aim and to achieve this the Portu-
guese depended upon the goodwill and cooperation of local rulers. It was
thus an essential element of Portuguese policy to establish friendly relations
with these rulers and to win the obedience of their subjects, as far as possi-
bile by peaceful means. The instructions given in 1506 to D. Francisco de
Almeida, first governor and viceroy of India, make this point very clearly.
Almeida was told to set up a fortress in Malacca but to avoid conflict with
the local people and to explain to them that the fortress was solely for the
protection of the Portuguese and their merchandise and not built with any
warlike intent. He was instructed to send ships thence to Sumatra, ‘which is
near Malacca and said to be a very rich island’, and to ‘the island of cloves
and other important islands adjacent to it, which we are informed are very
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rich and from which much profit can be derived’. He was to sound out the position of these islands and do whatever he deemed necessary as a mark of possession (that is, set up a padrão or commemorative pillar with the royal arms and a cross on top) and to try to ‘subjugate and bring to our obedience the kings and lords of the islands, make them our tributaries, and agree with them on how this can best be done for our service’. Three years later, when Afonso de Albuquerque was planning to attack Malacca, he proposed an alliance with the king of Ayuthya, to whom he offered sovereignty over the territories ruled by the sultan of Malacca if the attack was successful, since the Portuguese themselves only wished to utilise it as a commercial centre and military and naval base. Ayuthya showed no interest in this offer, so Albuquerque went ahead alone and took Malacca unaided. Nevertheless, after the conquest of the city he did nothing to subdue the rest of the sultanate or to dispossess its ruler.4

This apparent absence of any intention by the Portuguese to achieve territorial dominance, in spite of a lingering desire still cherished by many fidalgos to perform heroic deeds of knightly valour against the infidel, is in marked contrast to the carefully formulated and clearly enunciated policy of conquista y reducción pursued by the Spanish in their empire, both in America and Asia.5 The pragmatic Portuguese evidently soon realised that such an objective was neither necessary nor feasible. Certainly by the time they had reached Malacca and sailed into the waters of the Indonesian archipelago beyond, they seem to have been content to pursue purely commercial ends. King Manuel’s famous and grandiloquent title of ‘Lord of the Conquest (Conquista), Navigation and Commerce of Ethiopia, Arabia, Persia and India’ accurately describes how the Portuguese viewed their imperial enterprise and their notion of its ultimate aims. The ‘navigation and commerce’ speak for themselves; the conquista clearly meant something rather different to the Portuguese in the context of their imperial policy than it did to the Spanish. For it referred not to territorial conquest, but to a right of sovereignty derived from any legitimate act of acquisition; this could as well be by treaty, or even by purchase, as by force. The assertion by force of such a right of sovereignty was only deemed to be legitimate where, as in Portugal itself in the Middle Ages, lands that had formerly been Christian were held by the infidel and could therefore be taken back by reconquista, or where, as in parts of Muslim South East Asia, freedom to preach Christianity or engage in peaceful trade was denied. The Livro das Cidades e Fortalezas of 1581 puts the position succinctly enough:

When recently the Portuguese, by crossing this our sea (este nosso mar) discovered the East Indies, they came there with peaceful and not warlike intentions towards the rulers and peoples of those parts, signifying to them that they sought nothing from them but friendship and commercial relations . . . However, in those places where
we were ill-received and all kinds of peace and trade were denied us
we took up arms and, having conquered them by force, placed them
under our rule . . .

The numerous treaties of peace and commerce concluded between the
Estado da India and different Asian rulers proved by their existence that
the Portuguese fully recognised the legitimacy of those rulers and their right
to rule, and show that they did not seek to overthrow them and incorporate
their sovereign territories into the Estado da India.

On sea, however, the situation was rather different. Grotius’ principle of
mare liberum, which was in general concordance with the principles of
natural law as embodied in canon law and to which South East Asian
rulers, notably the sultans of Makassar, generally adhered, was quite openly
rejected by the Portuguese in Asian waters. The whole of the maritime area
of the Estado da India was declared to be mare clausum by right of quasi
possessio by the Portuguese crown. This provided the sole legal justification
for the cartaz system, whereby every Asian trading vessel had to purchase a
pass or cartaz from the Portuguese authorities, in return for which it quali­
fied for Portuguese protection. Each cartaz stated the size of the ship, listed
her crew and gave particulars of her captain. It also described the cargo and
stated for which port the vessel was bound. Every ship had to pay dues on
her cargo at the fortaleza or feitoria where the cartaz was issued and to leave
a sum as security for the payment of similar dues on her return. Certain
goods, notably spices and pepper, iron, copper and naval stores, were pro­
hibited, as was giving passage to Turks and other Muslims. Any ship that
was found to be sailing without a carta or that violated the terms of the
cartaz was automatically confiscated and her crew either killed or sent in
slavery to the galleys.

Though the sum charged for the issue of a carta was only nominal, the
cartaz system was in reality little more than a device to create another
source of income by offering opportunities for the diversion of trade to
ports that the Portuguese controlled. It was essentially a practical measure
and, though the mare clausum principle was adduced to justify imposition
of the cartaz system on the shipping of independent sovereign states in
Asian waters, it was not considered to imply that the Portuguese had any
kind of political hegemony over those states. In so far as the system required
any justification or legitimacy other than the capacity of Portuguese sea-
power to impose it, it was given this by a series of papal bulls, notably
Romanus Pontifex of Nicholas V, promulgated in 1454. It was in any case
only effective in the waters round the few ports where the Portuguese
were sufficiently in control for such protection to be guaranteed and where
they could provide a caifila or convoy, as they did, for example, on the west
coast of India for ships sailing from Goa to Gujarat or to the Malabar
coast.
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AN INTERNATIONAL HISTORY OF THE DISPUTE IN THE SOUTH CHINA SEA

Stein TØNNESSON

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The South China Sea had two ancient sailing routes. Both went in a north-south direction. The main one, as mentioned, went along the western side of the sea. The other crossed over from Taiwan to Luzon and followed Luzon down to Palawan, the Sulu Sea and Borneo. For captains navigating these routes, it was essential to stay clear of the reefs we now refer to in English as ‘the Spratlys’ and ‘the Paracels’, and which in the old days seem to have been perceived as one continuous danger zone in the middle of the sea. Ships avoided the central area and sailed along the inhabited coasts – at some distance in order to also avoid the coastal reefs and rocks. The ancient mapmakers did not apparently know the broad passage between the Paracels and Spratlys, which is now the main route for ships passing from the Indian to the Pacific Ocean.

In the old days, when heavy winds got ships off course, they would sometimes endow the reefs with an added value in the form of wrecks filled with merchandise. There were instances when emperors or kings claimed a monopoly to issue concessions for the plunder of these shipwrecks. Such claims have since been used as arguments in the quest for national sovereignty. This seems a dubious enterprise since modern international law requires not only discovery or economic exploitation but also a continuous exercise of sovereignty in order to establish a legitimate claim.

The main points made here about the ‘pre-modern’ period are: First, maritime power was volatile. The hegemony in the South China Sea shifted between several states. Second, the Spratly and Paracel Islands were mainly seen as a source of danger. And third, there was not at the time any concept of national sovereignty. Islands were discovered, described, and to some extent exploited, but they were not claimed or disputed in a legal sense.

3. The Colonial Condominium, 1842-1941

The period when Portuguese, Spanish and Dutch trade thrived in the South China Sea is best understood as a continuation of the pre-modern pattern. Only in the 19th century, when the British and French became the leading European colonisers, was there really fundamental change. New colonial states were constructed, based on the concept of territorial sovereignty. The British constructed Singapore as a port city, took Melaka from the Dutch in 1795 (permanently from 1824), launched the Opium War against China (1839-42), acquired Hong Kong as a colony and established protectorates in Malaya and northern Borneo. This prompted the Dutch to consolidate and merge their many possessions into a larger state, called ‘The Netherlands Indies’, later ‘Indonesia’, and the Spanish to strengthen their hold on the Philippines. Great Britain was the leading merchant power in the era. France, motivated by a quest for global power, a dedication to protect Christians, and an ambition to compete with Britain for the China trade, colonised Indochina (1863-84), and leased a territory on the Liaozhou peninsula (north of Hainan) from the 1890s to the 1940s. Towards the end of the 19th century, two additional powers established colonies around the South

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12 Maps from the 16th to early 19th century feature a long string of reefs or islands southwards from the Paracel Islands.
China Sea, both through victory in war. Japan won the Sino-Japanese war in 1895, thus preventing a Chinese attempt to re-establish itself as a naval power. In the peace settlement, Japan acquired Taiwan. The USA won the Spanish-American war of 1898 and took over the Philippines. This paved the way for a naval condominium in the South China Sea of five external powers: Britain, France, the Netherlands, Japan and the USA.

Japan’s power was enhanced by its 1902 alliance with Britain, its victory over the Russian navy in 1905, and by a judicious choice of allies during the European War of 1914-18. In the 1920s, however, the power relations within the five-power condominium were regulated at naval conferences, dominated by the four western nations. Japan came out as the diplomatic loser, was forced to give up its newly won possessions in China and subjected to restrictions on the number of ships she could build. The result was resentment and the emergence of an Asianist ideology, with Japan in the forefront of a struggle against Western domination. At first, Japan tried to improve on its position mainly through production and commerce, a strategy that in the South China Sea took the form of projects to exploit guano (bird dung used as fertiliser and for producing soap) from reefs and islands. After the world crisis of 1929-30, which hit Japan hard, it entered a new period of military expansion, with the occupation of Manchuria in 1932, and war with China from 1937. This entailed a crisis in the South China Sea. France, Britain, the Netherlands and the United States sought for ways to bolster their position and stem the tide of Japanese expansionism.

The colonial powers had not only brought the concept of ‘territorial sovereignty’ to the region, but also the related, although in content quite opposite, concept of ‘freedom of navigation’. On the basis of a legal tradition dating back to the Dutch scholar Hugo Grotius (1583-1645) and his work *Mare Liberum* (1609) the naval powers made a crucial distinction between land and sea. Land was to be divided into territories with mapped and demarcated borders. The sea was to be open for all, except a narrow band of territorial waters along the coasts. This did not, of course, suit the continental states of China and Thailand who were concerned with defending their coasts against foreign ships. The King in Bangkok and Emperor in Beijing were, however, obliged to open up their countries to European trade and influence, while also being invited to join the international society, which the Europeans had defined. Thus they would have the right to sign treaties of their own and act as sovereign states. Asian governments had to learn European ways, map and demarcate borders, delineate territorial waters, and plant flags or erect stone markers on islands.

At first, the Europeans and Americans, just as the Chinese and other powers in the past, did not show much interest in the tiny islets in the central part of the South China Sea, except as a source of danger. New and more accurate maps were drawn in Europe, Japan, Korea and America, showing the Paracels and Spratly as two distinct archipelagos. With motorised ships it was safe to sail between them, but certainly not through them. The eastern half of the Spratly area was continuously marked off on

13 “While there have over the centuries been many documented systems of relations between independent polities, in Africa and Asia and Europe, ‘international law’ as it exists today is the body of law initially generated by the relations between the European States during the period known as ‘modern’ (i.e., post-medieval) history. Cultural imperialism that may be, but it is an inescapable fact.” Churchill and Lowe. *The Law of the Sea*: 3-4.
British charts as "Dangerous Ground". While both commercial and naval ships continued to shun the two archipelagos, oceanographic expeditions were sent to survey them. They found that the islands were inhabited during parts of the year by nomadic fishermen, most of whom, it seems, spoke Hainanese dialects and lived in Hainan during parts of the year. British ship captains gave the islands British names, such as 'Spratly'.

In the 1870s a group of merchants in northern Borneo obtained a concession from the British governor of Labuan (an island north of Borneo) to exploit guano on Spratly and Amboyna Cay, two of the larger islands in the Spratly area. By consequence the two islands were claimed formally by the British crown in 1877. This was probably the first time that any state made a modern legal claim to any of the Paracel or Spratly Islands. From 1891 to 1933 Spratly Island and Amboyna Cay were mentioned specifically in every annual edition of the British Colonial Office list, but little was done to exploit them or exercise British sovereignty.

Although the Paracels were larger and better known than the Spratlys, and occupied a strategic position along the shipping route from Singapore to Hong Kong, no European power took any steps to formally claim the archipelago before the 1930s. In the first decades of the 20th century, only China displayed an interest in the Paracels, notably by sending a mission there in 1909, two years before the Qing dynasty succumbed to the Chinese Revolution. In the next three decades, China fell apart and was in no position to uphold its claim to these or other small islands (such as Pratas) through effective occupation or utilisation.

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14 The most recent British Admiralty Chart (originally published in 1881, with corrections made up to 2000) still calls the eastern Spratlys "Dangerous Ground", marks out the recommended sailing route along Palawan Island, and warns, "The large area northwestward of the recommended track is known to abound with dangers. No systematic surveys have been carried out and the existence of uncharted patches of coral and shoals is likely; the positions of the charted banks and shoals cannot be relied upon. Vessels are warned not to attempt to pass through this area; see Admiralty Sailing Directions." British Admiralty Chart no. 2660. For an overview of secret British surveys of "The Dangerous Ground" between 1812 and 1995, see David Hancox and Victor Prescott, Secret hydrographic surveys in the Spratly Islands. Kuala Lumpur: Maritime Institute of Malaysia, 1997.

15 In 1957, the British government studied Admiralty records and found that Chinese junks regularly visited the Paracels and that "fishermen from Hainan usually visit the [Tizard Bank in the Spratly] islands in December and January and leave again at the commencement of the South-West monsoon". P.D. Nairne (Military Branch, Admiralty) to D.C. Symon (Foreign Office), M/ND. 216/6042/56, 14.2.57, Foreign Office File FO 371/127311, Public Record Office, London (PRO).

16 In July 1932, the British Law Officers of the Crown estimated that the British claim to Spratly Island and Amboyna Cay "was of so doubtful a nature that it could only be laid before the Permanent Court of International Justice with a faint prospect of success". On this basis the British government decided not to pursue its claim and not to protest a rival French claim; and from 1934, the two islands were no longer explicitly mentioned in the Colonial Office list. Law Officers to Sir John Simon, W 8733/178/17, 29.7.32, T 161/622, PRO. See also Geoffrey Marston. "Abandonment of territorial claims: the cases of Bouvet and Spratly Islands". British Yearbook of International Law, 1986: 337-356 (349).

17 France did not protest the Chinese claim, apparently because it did not want to stir up more anti-Western nationalism in China: "M. Beauvais estime que la France aurait autant de droits sur ces îles que la Chine et qu'il nous serait facile de trouver des arguments à l'appui de nos prétentions. Mais si la chose n'en vaut pas la peine, il serait préférable, d'après lui, de fermer les yeux sur les faits actuels, car une intervention de notre part pourrait faire surgir parmi la population un nouveau mouvement de chauvinisme qui nous serait plus nuisible que la possession des îles Paracels ne nous serait utile." Beauvais (Canton) à Ministère des Affaires Etrangères, no. 92, 4 mai 1909, dossier 312, sous-série Chine, série Asie 1918-1929, Ministère des Affaires Etrangères, Paris (MAE).
The factor that would generate a much keener interest in the Paracels and Spratlys was the growing strength of Japan, notably after the invasion of Manchuria in 1932, which put Japan on a collision course with the four Western members of the naval condominium. Japanese merchant companies had for a long time competed with the Europeans and Americans in the China trade, and in the 1920s, Japanese companies in Taiwan were systematically exploiting guano both in the Paracels and Spratlys, although the Japanese government did not legally claim them. The motivation for exploiting the guano was not just commercial. The Japanese navy expected the islands to provide useful support points for an eventual southward expansion.

It was the fear of Japanese expansion that led France to claim the Spratlys and the Paracels. Attempts had been made since the 1890s by some Frenchmen to mobilise funds for the erection of lighthouses and for claiming these islands either in the name of France or the French-protected ‘Annam’, but the French government had not found it worth the cost and effort. Now, however, France wanted to forestall a Japanese move. In 1930-33, France formally claimed the Spratlys on behalf of itself, and also occupied some of them. France now also claimed the Paracels on behalf of Annam. In 1938, after the outbreak of the Sino-Japanese War, France also established a permanent presence in the Paracels, alongside the Japanese, who were already there. Britain chose not to oppose these French actions, although it did not officially abandon its own claim of 1877 to Spratly Island and Amboyna Cay. Japan, however, protested. In 1939, after having invaded Hainan, Japan established a military presence in the Spratlys. To the dismay of the British government, who had relied on France to defend the Western position, the French did not offer active resistance. Japan now also officially claimed the Spratlys as a part of the Japanese empire, placing it under the Governor General of Taiwan. France and other western powers, including the United States, delivered protests in Tokyo, but the USA did not protest on anyone else’s behalf, just against the unilateral Japanese action. In 1940, the Japanese forced the French to leave Itu Aba (the largest of the Spratly islands, which the Chinese call Taiping Dao) and started the construction of a submarine base. The island was used as one of the vantage points for the invasion of the Philippines in 1942.

What we have seen here is that for most of the colonial period, there was no dispute concerning ownership of the Paracel or Spratly islands. They continued to be seen mainly as dangers to shipping. The British claim of 1877 to Spratly Island and Amboyna Cay was not followed up through effective occupation or utilisation. The

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18 The Japanese companies sounded out authorities both in French Indochina and southern China concerning the legal status of the islands, apparently without getting clear answers. One China-based company, whose capital was Japanese, started operations in the Paracels in 1921-22 with a concession from the local government in Guangzhou. Note no. 12 du Dep. Asie-Océanie concernant “Nationalité des îles Pratas et Paracels”, 14.1.21; Le Ministre des Colonies à Président du Conseil, 10.2.21; Beauvais (Canton) à Fleuriau (Pékin) no. 78, 25.5.22, p. 77, tous dans dos. 312, sous-série Chine, série Asie 1918-1929, MAE.

19 In July 1938, France informed China that it was sending a detachment to the Paracels, adding that this was not meant to affect the legal position of the islands or prejudice the resolution of the question. Ministre des Affaires Étrangères (signé Chauvel) à Meyrier, Ambafrance Nankin, no. 87 à 90, 24.1.47, marqué PB/LD, dossier 214, sous-série Chine, fonds Asie-Océanie 1944-1955, MAE.

20 According to a later French source, the Japanese never managed to establish a naval or air base in the Paracels. Fiche particulière “Les Paracels”, 2ème Bureau, 9.5.50, dos. Iles Paracels, 10 H 913, Service Historique de l’Armée de Terre, Paris (SHAT).
Chinese claim to the Paracels in 1909 suffered the same fate. When France formally claimed a number of Spratly Islands in 1933, Britain decided not to protest and also silently dropped Spratly Island and Amboyna Cay from the Colonial Office list. What triggered the dispute in the 1930s was the Japanese military expansion. This led France to claim the Spratlys and the Paracels, and brought a contest between French and Japanese occupants in both island groups during 1938-40.

4. Decolonisation and Cold War, 1942-68

The period from 1942 to 1968 saw a complete change of the international system in the countries around the South China Sea. The colonial order was replaced by a system of new, independent states, divided against each other by opposite ideologies and cold war alliances. The period started with the British failure to defend Singapore against Japanese invasion, and ended with the British decision to withdraw from east of Suez. At the end of the period, the United States stood out as the only naval power in the region.

During 1942-45 the South China Sea was a ‘Japanese lake’. It is the only period in history when one power controlled all the countries around the South China Sea. In 1941, Japan had entered into a treaty of co-operation with the French (Vichy) regime in Indochina. This allowed Japan to use Indochina’s ports and airfields as stepping-stones for the 1942 invasion of the British and Dutch colonies. During much of the Second World War, French (in fact Vietnamese) and Japanese (in fact Taiwanese) troops lived side by side in the Paracels. Only in 1945, after the Japanese had eliminated French power in Indochina, were the French-Vietnamese troops withdrawn. By then, the United States had established itself as the dominant naval power in the Pacific. A large US fleet launched devastating strikes against the coasts of Indochina, Hainan and Taiwan in January 1945.

The main effect of the Japanese War was to destroy the colonial system, and pave the way for a new international system of independent states. Japan held out the promise of formal independence to the Philippines, Indonesia, Vietnam, Cambodia and Laos and granted it -- on paper -- towards the end of the war. The USA reconquered the Philippines in 1944-45, and quickly fulfilled a pre-war promise to give the Philippines independence, keeping only military bases. In the wake of the Japanese surrender, nationalist movements proclaimed independent republics both in Indonesia and Vietnam. Soon, however, Britain, the Netherlands and France returned to their colonies. To re-establish their claim to sovereignty, they had to fight against the armies of the newly founded republics. The Netherlands was obliged to give up in 1949 and grant sovereignty to the Indonesian Republic. Britain won its war (‘emergency’) in Malaya, leading to the establishment of a pro-British decolonised Malaya in 1957. The result of the French Indochina War was the creation in the years 1950-54 of four new independent states: Laos, Cambodia and two rival regimes in the northern and southern halves of Vietnam. A civil war began in 1959-60, leading the USA to intervene militarily with the aim of preventing the former French Indochina from ‘falling’ completely to communism. The main motivating force behind the

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Annex 274

China's Sovereignty over the South China Sea Islands: A Historical Perspective

Jianming Shen

I. Introduction

Shortly after I wrote my article on the territorial disputes over the South China Sea Islands in 1996, which was published in Hastings International and Comparative Law Review in 1997, I began to engage in follow-up studies of the same subject matter on an on-and-off basis. My plan was to undertake extensive research and writing projects that would yield a few research papers and eventually lead to a scholarly book. Largely due to the lack of funding, among other reasons, I had to cut short my plan. Nevertheless, thanks in part to a research grant from the University of Hong Kong, I was able to reduce part of my follow-up studies to three draft papers. The first of these, titled "Territorial Aspects of the South China Sea Islands Disputes," was presented at a conference in New York City in February 1997, and was later published in a book by Martinus Nijhoff Publishers in 1998. The second paper, also finished in 1997, was in Chinese, and was titled "Lun Zhongguo dui Xisha Qundao he Nansha Qundao de Zhuquan" (On China's Sovereignty over the Xisha and the Nansha Islands). The third one, drafted between 1998 and 1999, was presented at an international seminar held in Macau in April 1999 and included in a collection of conference papers. In writing the present article, I

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4 Jianming Shen, "The Essence of the Nansha and the Xisha Disputes and the Prospect of Their Settlement," Proceedings of the Luso-Asian Forum International Seminar:
have freely drawn upon my earlier research and writings, with necessary
modifications and updates, of course.

Although my projected in-depth research on the South China Sea Islands
disputes has come to a halt, I am satisfied that my past research and
writings on the subject have proved to be useful. My article in the 
Hastings Review has been not infrequently cited or referred to in non-Chinese legal
literatures. More importantly, I am pleased to have read the Chinese and
English versions of the Chinese Foreign Ministry's 2000 document on "The
Issue of South China Sea" that add affirmative support to my personal
writings and position.

Since 1996, little substantive progress, not surprisingly, has been
achieved towards the resolution of the disputes. Media attention to
The Asia-Pacific Region on the Eve of the 21st Century—Trends of Regional and
Multilateral Security, Macau, April 1999 (on file with the author).

5 See, e.g., Eric Ting-lun Huang, "The Evolution of the Concept of Self-
Determination and the Right of the People of Taiwan to Self-Determination," 14
Omar Saleem, "The Spratly Islands Dispute: China Defines the New Millennium,"
15 Am. U. Int'l L. Rev. (2000), 527; Christopher C. Joyner, "The Spratly Islands
Dispute: What Role for Normalizing Relations between China and Taiwan," 32

6 Ministry of Foreign Affairs People's Republic of China, The Issue of South China
Sea (June 2000) [hereinafter FM-PRC, The Issue of South China Sea]. The
document contains five parts:

(English); <http://www.fmprc.gov.cn/chn/5997.html> (Chinese);
(2) "Historical Evidence To Support China's Sovereignty over the Nansha
Island," <http://www.fmprc.gov.cn/eng/5765.html> (English);
[hereinafter FM-PRC, The Issue of South China Sea, Pt 2];
(3) "Jurisprudential Evidence To Support China's Sovereignty over the
Nansha Islands <http://www.fmprc.gov.cn/eng/5773.html> (English);
[hereinafter FM-PRC, The Issue of South China Sea, Pt 3]);
(4) "Basic Stance and Policy of the Chinese Government in Solving the South
China Sea Issue," <http://www.fmprc.gov.cn/eng/5747.html> (English);
<http://www.fmprc.gov.cn/chn/6000.html> (Chinese);
(5) "International Recognition Of China's Sovereignty over the Nansha
Islands," <http://www.fmprc.gov.cn/eng/5766.html> (English);

7 See, e.g., Marites Sison, "Politics: 'War on Terror' Ups U.S. Role in the
Philippines," Inter Press Serv., Mar. 24, 2002; "China denies deploying warships
commentaries on the disputes, however, have continued to flourish. Recently the journal *Ocean Development & International Law* even devotes an entire issue to the South China Sea Islands disputes. Nevertheless, the nature and essence of the territorial disputes over the South China Sea Islands, particularly as to the merits of China’s claims, continue to have been largely ignored and/or distorted, both before and after 1996. Misstatements about the South China Sea are almost everywhere. It has been stated, for example, that the Xisha (Paracel) island group “was occupied by the former regime of South Vietnam until the PRC took it by force in 1976,” although in fact the group was in Chinese control until South Vietnam began its invasions and occupations in the 1950’s through early 1970’s; further, China regained her control and occupation in 1974, not in 1976. Another example is that in June 2001 *The Washington Times* reported that “[t]he Chinese military occupation of the disputed Spratly Islands...is part of Beijing’s strategy of expanding its sovereignty claims further from its coasts as part of what...is an ‘island chain’ strategy.” In still another instance, a commentator alleges: “[China’s]
assertion of its claim over the Mischief Reef...is an educative case study of how China doggedly pursues its irredentist territorial claims - by stealth, if possible, and by other means, including force, if necessary.\textsuperscript{12} Statements such as the above tend to show, if not bias, at least the lack of knowledge of the truth.

Indeed, there seems to have been widespread anti-China propaganda among and by some politicians, commentators and journalists in the West and certain parts of Asia, possibly by reason of conspiracy, bias, misinformation, or otherwise, to have put much of the blame for the disputes on China as if it were China that was the invader or that had caused the troubles. This article, from a historical perspective, and partly based on materials newly available to me since 1996 (including some photographed pages of relevant Chinese historical books reproduced here as evidentiary exhibits), aims at neutralizing the effects of such ignorance and/or distortions by reexamining how the disputes arose, and why China possesses sound and solid sovereignty claims to the disputed areas that should prevail over the claims of competing States. By focusing on the historical aspects of China’s sovereignty over the South China Sea Islands in the present article, I am leaving for another day the other aspects of the disputes, including the claims that have been made by, and arguments that have been developed for, Vietnam, the Philippines, Malaysia and Brunei, the scope and method of delimitation of territorial seas, contiguous zones, continental shelf and exclusive economic zones in the South China Sea, as well as the legal nature and status of the remaining portions of the water areas within China’s U-shaped line of boundary.

II. Brief Overview of The Disputes

II.A. The Disputes and the Disputants

The South China Sea disputes center on two major areas: the Nansha Islands (the Spratly Islands) and the Xisha Islands (the Paracel Islands). The Nansha Islands consist of more than 230, perhaps as many as over 400, islands, cays, reefs, atolls, banks and shoals, and are dispersed over some 250,000 square km of the South China Sea. None of these islands and other features is permanently inhabitable. Sovereignty over these islands or some of them and other features has been hotly contested by five nations—China (including the local authorities in Taipei), Vietnam, the Philippines, Malaysia and Brunei. Currently, the local Taipei authorities remain in control of the Taiping Island (the Itu Aba Island), the largest island of the island group, and its surrounding


area; about seven of these islands, reefs and atolls are in the Chinese mainland’s possession; more than twenty are being occupied by Vietnam, two by Malaysia, and about eight by the Philippines. Of these contesting parties, China and Vietnam claim sovereignty of the Nansha Islands in their entirety. The Philippines lays claim to some 60 reefs, cumulatively called the Kalayaan chain, while Malaysia contests the sovereignty of seven smaller islands. The claims of the Philippines and Malaysia overlap with each other’s, as well as with those of China and Vietnam. Further, Brunei also claims a small portion of the area that overlaps with the demands of every other claimant.

The Xisha Islands consist of more than 20 islands, cays, atolls, reefs banks and shoals lying about 150 nautical miles south of Hainan Island, China. These islands, often partly inhabited with seasonal Chinese visitors and settlers, had been grounds for fishing and other economic activities by Chinese fishermen throughout history until South Vietnam’s invasion in the 1950’s the early 1970’s. This island group is claimed in its entirety by both China (including her Taiwan Province) and Vietnam, but has been firmly under Chinese control and administration since the battle at sea in 1974 between China and South Vietnam.

II.B. The Roots and Present Status of the Disputes

China’s sovereignty over the Nanshas and other island groups in the South China Sea was not challenged until the arrivals of invading powers. The Chinese government in different eras always treated these islands as China’s own. Basically speaking, China enjoyed peaceful and uninterrupted control over the South China Sea Islands and the surrounding waters until the 1930’s when France seized the opportunity to occupy and “annex” several islands in the South China Sea. This took place at a time when the Chinese government was preoccupied with internal conflicts and threatened by the full-scale Japanese aggression, and was therefore unable to effectively defend herself except for lodging the strongest possible protests to the French government time and again.13

After the Pacific War broke out, Japan replaced the French and took over the entire South China Sea chain of islands (as well as Hainan Island) in 1939,14 placing them under the jurisdiction of Taiwan, which was then administered by Japan. Following Japan’s surrender in 1945, the Chinese Government formally regained physical possession of the Nanshas and other

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14 Ibid., 43.
islands in the South China Sea in 1946.\textsuperscript{15} France, and later Vietnam, subsequently re-asserted claims to the \textit{Xisha} and \textit{Nansha} Islands, but their claims were specifically rejected by the Chinese Government.\textsuperscript{16}

It is worth noting that at the San Francisco Peace Conference held in 1951,\textsuperscript{17} Japan formally renounced all of its claims to the South China Sea Islands. China did not participate in the Conference, but Premier Zhou Enlai issued a statement reiterating China’s unquestionable sovereignty over these islands and warning against any arrangement at the Conference that might be aimed at challenging or affecting China’s sovereignty.\textsuperscript{18} In his address at the San Francisco Peace Conference on September 5, 1951, the Soviet representative, Andrei Gromyko, Deputy Foreign Minister of the then Soviet Union, appealed to recognize the “full sovereignty” of the “Chinese People’s Republic” over “Taiwan (Formosa)..., the Penhuletao Islands (the Pescadores),” the \textit{Xisha} Islands and the “the Nanshatsuntao Islands including the Spratly.”\textsuperscript{19} Both France and Vietnam were represented at the Peace Conference and made claims to the South China Sea Islands, but such claims were ignored at the conference in particular and by the international community in general.

Along with the gradual realization and recognition of the geographical, economic and strategic importance of the South China Sea, particularly the \textit{Nansha} Islands,\textsuperscript{20} the potential for confrontation around this area became

\textsuperscript{15} Ibid., 43-44.
\textsuperscript{16} Ibid., 45. See also Shen, “Territorial Aspects,” above n.2, 177-86.
\textsuperscript{17} The United States had intended to invite the Nationalist authorities in Taiwan to participate in the San Francisco Peace Conference, but the United Kingdom insisted that the Government of the People’s Republic of China should represent China at the Conference. As a compromise between the U.S. and the U.K., neither the legitimate Chinese government on the mainland nor the Nationalist regime in Taiwan was invited. China considers the Peace Conference and the resulting Peace Treaty, without the participation of China as the biggest victim and the main battle field of the Far East War, is null and invalid. India and Burma boycotted the Conference in protest of this unfair treatment. The Soviet Union attended the Conference, but its various proposals were rejected. As a result, the Soviet Union, Poland and Czechoslovakia refused to sign the Peace Treaty. See He Chunchao, ed., \textit{Guoji Guanxi Shi}, A History of International Relations—1945-1980 (1986), 142.
\textsuperscript{20} The South China Sea is important for (1) the rich fishing grounds it contains, (2) the sea lanes through the \textit{Nanshas} through which commercial and military vessels must
emerged, ultimately leading to a complex web of rivalries for and assertions of sovereignty over the Nanshas, the surrounding waters and the living and non-living resources in the area. In mid 1950s, the Philippines claimed to have discovered the so-called Kalayan islands and declared them to be Philippine territory.\(^2^1\) In the mean time, Vietnam began to occupy some islands in both the Xisha group and the Nansha group in the 1950s and 1960s.\(^2^2\) Competing claims and occupations accelerated in late 1960s, 1970s, and 1980s, with Malaysia and Brunei also joining the race.\(^2^3\) These newly emerged claims, challenges and occupations have led to a few isolated conflicts.

The battle of 1974 between China and South Vietnam around the Xishas enabled China to regain control over this island group.\(^2^4\) In February and March 1987, the Chinese and Vietnamese naval forces exchanged fire within the area of the Nansha Islands, causing casualties to both sides.\(^2^5\) In March 1988, another major military encounter occurred between China and Vietnam around the Chigua Jiao atoll (Johnson Reef) and the Yongshu Jiao reef (Fiery Cross Reef), causing the sinking of three Vietnamese vessels and the loss of 74 lives.\(^2^6\) In 1995, military confrontation took place between China and the Philippines when Filpino forces dispatched ten aircraft and three patrol boats near the Meiji Jiao Reef (Mischief Reef) area where the Chinese fishery administration was constructing shelters for Chinese fishermen who habitually engage in fishing production there.\(^2^7\) Meanwhile, despite China’s strong and persistent protests, other claimants, particularly Vietnam, the Philippines and Malaysia, have stepped up their military and nonmilitary activities in the South China Sea in order to back up their respective claims. The Philippines have on numerous occasions destroyed Chinese installations and fishing vessels on or near certain islands and reefs in the Nansha group and the Huang

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\(^2^1\) Shen, "International Law Rules," above n.1, 59-60.

\(^2^2\) Ibid., 51-52.

\(^2^3\) Ibid., 52-53, 55-56, 60-61, & 63-65.

\(^2^4\) Ibid., 53 & 67.


\(^2^6\) See Chang Pao-Min, "A New Scramble for the South Sea Islands," 12 Contemporary Southeast Asia (1990), 20.

Yan Island (Scarborough Shoal), and wounded, detained, arrested, prosecuted and/or released Chinese fishermen who use the Nansha area as their traditional fishing fields, and otherwise entered into conflicts with China’s claims.\(^\text{28}\) Malaysia is reported to have recently constructed structures on the Yuya Ansha shoal (Investigation Shoal) and the Boji Jiao reef (Erica Reef).\(^\text{29}\) Vietnam has reportedly planned to set up an administrative office on the Nansha Islands,\(^\text{30}\) and has even decided to hold elections on the islands it occupies within the Nansha group.\(^\text{31}\) While most claimants have openly proposed or supported the idea of a common code of conduct in the South China Sea,\(^\text{32}\) Vietnam, the Philippines and Malaysia have nevertheless continued to engage in various conducts inconsistent with the spirits of the proposed code. In essence, these claimants, by way of a proposed code or otherwise, appear to have always attempted to prevent China from doing something which is exactly what they have been doing.

III. Historical Analyses

As I pointed out several years ago, China’s claims to the South China Sea Islands and the adjacent waters are supported by both historical facts and rules of international law pertaining to the acquisition of territorial


sovereignty. China has always taken the Nansha Islands, the Xisha Islands, Zhongsha Islands (Macclesfield Banks) and Dongsha Islands (Pratas Reefs) and the adjacent waters as part of the Chinese territory and waters. She established and has maintained her sovereignty over these island chains by ways of discovery, naming, mapping, patrol and control, public and private use, administrative allocation of jurisdiction, and other manifestations of authority throughout history.

III.A. Discovery

China was the first to have discovered the islands in the South China Sea. Chinese history books contain numerous references to the Chinese people’s knowledge and actual use of the South China Sea throughout history.

In Yi Zhou Shu (《逸周书》, Scattered Books of the Zhou Dynasties) written in the early Qin Dynasty, it was recorded that “in the Xia Dynasty [21st century-16th century B.C.] the tributes from the South Sea [by the southern “barbarians” to the Xia rulers] were zhuji Dabei [珠玑大贝, pearl-carrying shellfish],” turtles and hawksbill turtles, and these tributes continued through the Shang Dynasty (16th century-11th century B.C.), the Zhou Dynasties (11th century-221 B.C.) (comprising the West Zhou (11th century-

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33 See Shen, “International Law Rules,” above n.1; id, “Territorial Aspects,” above n.2. My previous studies and the present article have so far referred to China’s claims to or sovereignty over the disputed islands or island groups in the South China Sea and the surrounding waters or adjacent waters. That is, I have not dealt with specific issues relating to the nature and status of the waters within China’s traditional ocean boundary in the South China Sea. For a recent and fairly balanced analysis of China’s historic rights within the U-shaped line in the South China Sea, see Zou, above n.9, 159-164.

34 The original title of the books was Zhou Shu. Books from the Qin Dynasty which were not officially adopted in the education system of the West Han Dynasty and therefore scattered among the private were called yi shu (literally “scattered books”). The Zhou Shu volumes were among such scattered Qin books. They were therefore re-titled Yi Zhou Shu. See Ci Hai, Ban (Suoyin Ben) (A Lexicographical Dictionary, literally “The Sea of Words,” [hereinafter Ci Hai] (1979), 1059.
771 B.C.) and the East Zhou (770-221 B.C.), and the Qin (221-206 B.C.) and Han (206 B.C.-220 A.D.) Dynasties (see Exhibit 1).\footnote{Yi Zhou Shou, vol. 17, 85-86 (see Exhibit 1). See Wang Hengjie, “Archaeological Discoveries of Remains of the New Stone Age, the Warring States Period, the Qin and Han Dynasties in the Xisha Islands and the History of the South China Sea,” in: Symposium on the South China Sea Islands: Selected Papers, Institute for Marine Development Strategy, State Oceanic Administration (1992) [hereinafter Selected Papers], 29-38.}

According to Yi Zhou Shu, six southern “barbarian” peoples were ordered to contribute “pearl-carrying shellfish” (珠玑, zhujī), “hawksbill turtles” (玳瑁, daimao) and other rarities to the rulers of the West Zhou Dynasty.\footnote{Ibid., 35-36.} Daimao was described in Nanzhou Yiwu Zhi (《南州异物志》, Records of Rarities of the Southern Territories) as “living in the southern sea” (生南方海中, “shēng nán fāng hǎi zhōng”), which denotes the Xisha and the

Exhibit 1

《逸周書》（補注）：17卷85-86页

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\footnote{Yi Zhou Shou, vol. 17, 85-86 (see Exhibit 1). See Wang Hengjie, “Archaeological Discoveries of Remains of the New Stone Age, the Warring States Period, the Qin and Han Dynasties in the Xisha Islands and the History of the South China Sea,” in: Symposium on the South China Sea Islands: Selected Papers, Institute for Marine Development Strategy, State Oceanic Administration (1992) [hereinafter Selected Papers], 29-38.}
Nansha Islands in the South China Sea. Indeed, zhujì, dabei and daimao are all produces of the Xisha and the Nansha Islands.

The famous Shi Jing (《诗经》) (The Classics of Poems), a collection of classics of poems of the Spring and Autumn Period (475-221 B.C.), also made a reference to the South China Sea: “Yan yu Nan Hai” (“言于南海,” orders or words [from the Chu rulers] to the South Sea), another indication that the Chinese rulers and people were at least aware of Nan Hai or the South China Sea Islands more than two thousand years ago. This knowledge (and necessarily discovery) of Nan Hai may be “corroborated” by a similar reference to it in Zuo Zhuan (《左传》, Zuo’s Commentaries), another set of classics of the Spring and Autumn Period believed to be authored by Zuo Qiuming, a well-known historian of Confucius’ contemporary. Here, it was stated that “赫赫楚国，抚有蛮夷，奄征南海，以属诸夏” (“Hehe Chu Guo, fu you man yi, yan zeng Nan Hai, yi shu zhu Xia”). Xia is the abbreviated form of Hua Xia, another name for Zhong Guo or China. When properly translated, the quoted passage means that “the illustrious Chu State appeased the barbarians to make expeditions to the South China Sea [islands], in order to make them belong to the various parts of China.”

Still another relevant set of classics of the Spring and Autumn Period titled Guo Yu (《国语》, Statements of the States), also believed to have been authored by Zuo Qiuming, which contained statements of nobles of the West Xia Dynasty and the various states in the Spring and Autumn Period, similarly referred to the South China Sea and its islands in the following words:

“赫赫楚国，而君临之，抚征南海，训及诸夏” (“Hehe Chu Guo, er jun lin zhi, fu zeng Nan Hai, xun ji zhu Xia”—meaning that “The illustrious Chu State was commanded by its emperor; it appeased [the barbarians] and made expeditions to the South China Sea [islands]; and its commands reached various parts of China”).

The above passages provide sufficient evidence that the South China Sea Islands were already destinations of Chinese expeditions and targets of conquests during the East Zhou Dynasty (770-221 B.C.), which comprised the Spring and Autumn Period (770-476 B.C.) and the Warring States Period (475-221 B.C.), suggesting that the South China Sea Islands might have been discovered by the Chinese in an even earlier era. Such discovery and

37 Ibid., 36.
38 Shi Jing (The Classics of Poems), quoted in Wang Hengjie, above n.35, 36.
40 Guo Yu (Statements of the State), quoted in Wang Hengjie, above n.35, 36.
conquest has naturally led the Chinese rulers and people to believe that the South China Sea Islands were part of China throughout history, from the Xia Dynasty (21st–16th centuries B.C.) to the Qing Dynasty (1644-1911).41

III.B. Naming

China was the first to have named the South China Sea and the island chains therein.

In the era surrounding the West and East Zhou Dynasties (1066-221 B.C.), Chinese rulers called the South China Sea Nan Hai (南海, The South Sea).42 In the Qin Dynasty, Emperor Qin Shihuang used the term “San Shen Shan” (三神山, Three Mysterious Groups of Islands) to refer to the islands and reefs in the South China Sea.43

Beginning with the East Han Dynasty (23-220), China adopted the alternative name Zhang Hai (涨海, The Rising Sea) for the South Sea, and named the island chains in the South Sea Zhanghai Qitou (涨海崎头, literally Islands and Atolls in the Rising Sea). The term qitou (崎头) was the generic name used by ancient Chinese to denote islets, reefs, shoals and the like in the oceans. Zhanghai Qitou collectively refers to the South China Sea Islands.44

In the Jin Dynasties (265-420) and pre-Jin era, the islands and reefs in the South China Sea were specifically referred to as Shanhu Zhou (珊瑚洲, Coral Islands and Reefs).45

In the Tang (618-907) and North and South Song (960-1279) Dynasties and afterwards, the Xisha and the Nansha island groups were variously referred to with the following names:

(1) Jiuru Luozhou (九乳螺洲, referring to the Xisha Islands);
(2) Qizhou Yang (七洲洋, referring to the Xisha Islands);
(3) Changsha (长沙, generally referring to the Xisha Islands);
(4) Shitang (石塘, generally referring to the Nansha Islands);
(5) Shichuang (石床, also generally referring to the Nansha Islands);
(6) Qianli Changsha (千里长沙, generally referring to the Xisha Islands);
(7) Wanli Shitang (万里石塘, generally referring to the Nansha Islands);

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42 See above n.38-40 and accompanying text.
43 See Han Zhenhua, Nanhai Zhudao Shi Di Yanjiu (Studies on the History and Geography of the South China Sea Islands) (1996) [hereinafter Han Zhenhua, 1996], 53, quoting Han Shu (《汉书》, Books of the Han), vol. 25 (Jiao Si Zhi, 郑志).
44 See FM-PRC, The Issue of South China Sea, Pt 2, above n.6.
45 See below n.78-82 and accompanying text.
(8) Qianli Shifang (千里石塘, generally referring to the Xisha Islands);
(9) Wanli Changsha (万里长沙, generally referring to the Nansha Islands).  

Depending on the context in which each term appeared, Changsha and/or its variations generally referred to the Xisha Islands, but they sometimes denoted the Nansha group; similarly, Shitang and/or its variations symbolized the Nansha island chain in most cases, although they were also used to represent the Xisha chain in some other cases. In still some other cases, a term was used to denote the entire South China Sea Islands, including the Nansha group. For example, the Chinese Foreign Ministry states:

Wang Dayuan . . . wrote about the Nansha Islands in his . . . Abridged Records of Islands and Barbarians in these words: “The base of Wanli Shitang originates from Chaozhou . . .” Wanli Shitang here refers to all the islands in the South China Sea, including the Nansha Islands.  

The Ming Dynasty continued to use some of the above-listed names for the South China Sea Islands. In an atlas entitled Hunyi Jiangli Lidai Guodu zhi Tu (《混一疆理历代国都之图》, Consolidated Map of Territories and Geography and Capitals of Past Dynasties) prepared in 1402 by Li Hui and Quan Jin of the Ming Dynasty, for instance, the South China Sea islands were all included within the boundary of China. On the map, there are three places in the South China Sea respectively marked “Shitang,” “Changsha” and another “Shitang.” “From the geographical locations [of these places] as marked on the Map,” as the Chinese Foreign Ministry properly states, the first Shitang denotes the Dongsha Islands, Changsha denotes the Xisha Islands, and “the second Shitang denotes today’s Nansha Islands.”  

In the Qing Dynasty, the South China Sea Islands continued to be known as “Qianli Changsha,” “Wanli Shitang,” or their variations, for a considerable period of time. The Chinese people even named specific islands and reefs of

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46 See below n.136-144 and accompanying text.
47 FM-PRC, The Issue of South China Sea, Pt 2, above n.6. See also below n.69-70 & 83-84 and accompanying text.
48 FM-PRC, The Issue of South China Sea, Pt 2, above n.6. See also Liu Nanwei, “The Naming of the South China Sea Islands in Ancient China,” in Selected Papers, above n.35, 83-91, at 84; Wang Liyù, “Shiyong yu Nanhai Zhudao Zhuquan Guishu Wenti de Guojifa Guize” (Rules of International Law Application to the Issue of Sovereignty over the South China Sea Islands), in Selected Papers, above n.35, 15 ff., 23 (concluding that on the same map, the mark Changsha denotes both the Xisha and Zhongsha Islands, while the two marks of Shitang respectively refer to the Dongsha and the Nansha Islands).
the Xisha and Nansha island groups. For instance, the Road Map (《更路簿》, Geng Lu Bu) drawn up in the Qing Dynasty “marks the specific locations of all the islands, reefs, shoals and isles of the Nansha Islands which fishermen of China’s Hainan Island have traditionally been frequenting, including 73 named places of the Nansha Islands.”\(^49\) Having always considered the South China Sea Islands as her own, the Qing Government exercised her right and power to rename 15 major islands and islets in the year of 1909.\(^50\) Stone markers were erected there, Chinese flags were raised and cannon-shooting ceremonies were held to re-demonstrate China’s sovereignty over the islands.\(^51\)

The above noted naming and renaming took place long before the other claimants began to even make a claim.\(^52\)

In the Republic of China era (1911-1949), the Nansha chain of islands and reefs were officially renamed Tuansha Qundao (团沙群岛) and later Nansha Qundao (南沙群岛), and the Xisha group the Xisha Qundao (西沙群岛). The Nationalist’s Government organized three rounds of large-scale survey and renaming activities respectively in 1932, 1935 and 1947. The 1935 round renamed 132 islands, reefs and banks in the South China Sea, and the 1947 round renamed 159.\(^53\)

The People’s Republic of China, since 1949, has continued to adopt the official names for the four major island groups in the South China Sea. On April 24, 1983, as part of the nation-wide process of standardization of geographic names, the Chinese Place Name Commission published an incomplete list of standard names for 287 islands, reefs, banks and shoals in the South China Sea.\(^54\) The process of renaming or standardizing the names for specific islands and other features in the South China Sea is a continuing one, and is fully within China’s sovereignty power over them.

III.C. Boat Building, Expeditions and Voyages

Thanks to her relatively advanced boat-building techniques, China was the first to have made expeditions and voyages to and across the South China Sea Islands.

\(^{49}\) FM-PRC, The Issue of South China Sea, Pt 2, above n.6.
\(^{50}\) See below n.148-149 and accompanying text.
\(^{53}\) See below n.118-119 and accompanying text.
\(^{54}\) People’s Daily, Apr. 25, 1983, 4. See also Han Zhenhua, et al., Collection of Historical Materials on the South China Sea Islands (1988) [hereinafter Han Zhenhua, et al.].
Expeditions and voyages to and through the South China Sea and the island groups therein were inseparable from China’s discovery, naming, sea lane opening and other activities in the South China Sea. It was these expeditions and voyages, despite all sorts of hardships, that made it possible for China to discover, gain and deepen knowledge about, name, patrol, regulate, utilize and otherwise display her authority over the South China Sea Islands.

Despite her slow growth in modern history, China possessed sophisticated skills and technology in the construction or making of many types of structures and tools. Not surprisingly, ancient Chinese were able to build boats strong enough to sail to the Nansha area and beyond.

The Xia Dynasty was still a primitive society. During that period of time, the Chinese people heavily relied upon natural living creatures for food, and the period is known as an “Era of Fishing and Hunting” (漁獵時代). Those close to the coast would naturally seek food from the ocean. It was thus noted:

To catch fish in the ocean, there must first be boats. Boat-building techniques of [China] began to develop in a very early age. The book Zhou Yi: Xi Ci [《周易·系辞》], completed in the Spring and Autumn era, recorded that “Fu Xi Shi carved woods into boats [伏羲氏削木为舟].”

Fu Xi Shi is believed to be the Chinese inventor of boat-building and one of the second generation kings in China’s pre-ancient era bearing the title of “Mu De Wang Tianxia” (木德王天下, Mu De King of the World). Whether Fu Xi Shi is a legendary figure or not, the ancient Chinese boat-building techniques may be independently assessed with the help of archeological discoveries. In 1975, a 7.1 meter long boat made of camphor wood (樟木) was unearthed in Fujian Province, which scientists say had been made in the New Stone Age. A similar boat of the Warring States era was unearthed in Jiangsu Province.

According to an ancient book titled Tong Dian (《通典》, General Codes), nearly 4000 thousand years ago, “the voice and instructions [i.e., sphere of rule] of Xia Yu [i.e., the Xia rulers] reached Nan Hai [the South Sea] and Jiaozhi [now northern and central Vietnam] (“夏禹声教，至南海交趾”).

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56 Ibid, 268, quoting Liu Shu, Tongjian Waiji (刘恕，《通鉴外记》).
57 Ibid, 268.
58 Tong Dian, quoted in: Xin Yejiang, ed., above n.55, 268.
To make expeditions to and beyond the South China Sea, ancient Chinese rulers would need boats large and good enough to survive sailing in the open sea. According to a history work titled *Yue Jue Shu* (越绝书) authored by Yuan Kang (袁康) of the *East Han* Dynasty, in the Spring and Autumn and Warring States Periods, China was already capable of making five types of boats and military vessels (see Exhibit 2).

Exhibit 2

...间见（伍）子胥，敢问船运之备何如？对曰：‘船名大翼，小翼、突冒、楼艹、桥艹。今船军之教比陵军 [i.e., 陆军] 之法。大翼者，当陵军之重车；小翼者，当陵军之轻车；突冒者，当陵军之冲车；楼艹者，当陵军之楼车；桥艹者，当陵军之轻足骠骑业。’ (... When Helü saw [Wu] Zixu, he asked [him]: May I ask how was your preparation for boats and transportation? [Wu Zixu] answered: "The boats are respectively named Da Yi, Xiao Yi, Ty Mao, Lou Jiang and Qiao Jiang. Nowadays the system of the navy is comparable to that of the army. Da Yis are equivalents of the heavy vehicles of the army; Xiao Yis
are like light vehicles of the army; *Tu Maos* are like the charge vehicles of the army; *Lou Chuan* are like the storied vehicles of the army; and *Qiao Chuan* are like light cavalries of the army.

The term *Da Yi* denotes heavy and large boats; *Xiao Yi* small and light boats; *Tu Mao* boats that charge forward; *Lou Chuan* boats with two or multiple levels or stories; and *Qiao Chuan* the equivalents of mosquito boats bridging between big boats or between big boats and the coast. On the size of these boats, Wu Zixu himself wrote:

大翼，一艘广一丈五尺二寸，长十丈；中翼，一艘广一丈三尺五寸，长九丈六尺；小翼，一艘广一丈二尺，长九丈。(*A Da Yi [big boat] is one zhang, five chi and two cun wide, ten zhangs long. A Zhong Yi [median sized boat] is one zhang, three chi and five cun wide, nine zhangs and six chi long. A Xiao Yi [small boat] is one zhang and two chi wide, nine zhangs long.)*

According to Xin Yejiang and his co-authors, the measure scale system of the *Zhou* Dynasties was followed in the Spring and Autumn Period. One *chi* in the *Zhou* and Spring and Autumn eras is equivalent to 19.9 cm. If this is true, the size of a big boat made in Eastern Zhou would be equivalent to more than 3 meters wide and nearly twenty (19.9) meters long. This gives us an idea how advanced the Chinese already were in the art and technology of boat making in the Spring and Autumn Period which covered the first part of the entire Eastern Zhou Dynasty era. The exact size of a big boat made for sea going at that time might well be larger than those described above.

Boat-making techniques were further developed in the Han era. In *Taiping Yu Lan* (《太平御览》), it was recorded that “large boats [built] in Yuzhang could carry one to ten thousand people; and a palace could [even] be constructed on the boat” (“豫章大船，可载万（千）人，

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59 Yuan Kang (袁康, *East Han Dynasty*), *Yue Jue Shi* (《越绝书》), quoted in: Li Fang (North Song Dynasty, 960-1127), *Taiping Yu Lan* (The Imperial Books of the Taiping Reign [of the Song Dynasty]) [hereinafter *Taiping Yu Lan*], v. 770, Section of Boats (舟部). See also Xin Yejiang, ed., above n.55, 345.


61 Xin Yejiang, ed., above n.55, 346.
Chinese Southerners living in the coastal areas of Guangdong and Guangxi were good at boat-building and ocean-going. Because of their long time use of and reliance on the South China Sea, they were “not only able to build large boats with highly developed craftsmanship, but also rich in sea sailing and navigation experience.” With the boat-making techniques being already sophisticated in the Han and pre-Han times, there is no reason why subsequent generations of the Chinese empire could not build at least equally sophisticated sea-faring boats for sailing to or through the South China Sea.

The availability of suitable boats enabled the Xia rulers to collect zhujii, dabei and daimao from the coral islands of the South China Sea, and the Chu rulers to dispatch expeditionary forces and declare the South Sea (Nan Hai) as part of their territory. Similarly, the Han Dynasty was able to make expeditions to the Malay Peninsula via the Nansha Islands, the Wu State to send envoys to India via the sea routes through the South China Sea, the Chinese shuishi (naval forces) in various dynasties to patrol the Xisha and Nansha Islands, and so on.

In the Yuan era, expeditions to and/or through the South China Sea remarkably thrived. Wang Dayuan (汪大渊), a prominent Chinese navigator in the Yuan Dynasty, made numerous voyages to the South China Sea and beyond and even made notes of his observations. Wang’s voyages were but only among other expeditions and voyages in the long history of the Yuan Empire’s existence. With respect to an expeditionary force that was dispatched to Java in 1292, for instance, Greenfield observes:

Records of the voyage report that it sailed through “Chi’chou yang” (the ocean of the seven islands) and the “Wanli shi[sic.]-t’ang” (Myriad on ten thousand li rocks). The “Chi’chou yang” [now spelled Qizhong Yang] (Seven Islands) were the seven islands of the present Paracel Islands and

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63 Xin Yejiang, ed., above n.55, 346.
64 See text accompanying above notes 34-37.
65 See text accompanying above notes 38-40.
66 See text accompanying below n.76-77.
67 See text accompanying below n.79-81.
68 See text accompanying below n.95-104.
69 See text accompanying above n.47 and below n.83-84.
“Wanli shih-t’ang” [now spelled Wanli Shitang] apparently referred to the present Spratly Islands.\(^70\)

Noteworthy is the famous Zheng He’s Seven Voyages. A well-known navigator and a high-ranking official of the Ming imperial court, Zheng He (also known as Cheng Ho, 1371-1435) led seven (or possibly eight) large-scale voyages through and beyond the South China Sea between 1405 and 1433, with each round trip taking about two years. His destinations included Southeast Asia, India, East coast of Africa and the Red Sea.\(^71\) The following observations are worth quoting:

When...Cheng Ho of the Ming Dynasty...sailed seven times through the South China Sea and the Indian Ocean between 1403 and 1433, his fleet passed through the Paracel and Spratly Islands on several occasions and the locations of these two islet groups were recorded on a detailed map drawn between 1425 and 1430 (the exact year cannot be determined). The Paracels were referred to as “Shih-t’ang” (Rocks) and “Wansheng shih-t’anyu” (Islands of ten thousand rocks), and the Spratly as “Shihsing shih-t’ang” (Stone star rocks). A subsequent Ming dynasty publication on the products and geography of the sea entitled “Haiyu” (On the Sea) also clearly described the location of these islet groups. The text explicitly states that the “Wanli changsha” (Myriad on ten thousand li sand banks) is located southeast of “Wanli shih-t’ang” (Myriad on ten thousand li rocks). The Spratly Islands are indeed located south-east of the Paracels.\(^72\)

III.D. Knowledge of Geographical and Natural Features

China was the first to know the geographical and natural features of the Nanshas and the Xishas.

As early as during the East Han Dynasty (23-220), the Chinese people already knew that waters in the South China Sea Islands area were shallow, so shallow that ships would get stranded by the “magnetic rocks” beneath. In his book titled Yiwu Zhi (《异物志》, Records of Rarities), Yang Fu (杨孚) of the East Han era described the geographical features of the South China Sea islands in these words: “Zhanghai qitou, shui qian er duo cish”

\(^71\) See Ci Hai, above n.34, 448.
\(^72\) Greenfield, above n.70, 31.
"涨海崎头，水浅而多磁石，" meaning that "There are islets, sand cays, reefs and banks in the South China Sea, the water [there] is shallow and filled with magnetic rocks or stones". As noted earlier, the term qitou refers to islets, reefs, shoals and the like in the oceans. The term cishi (磁石), literally denoting magnetite, or magnetic "rocks" or "stones," was vividly used in Yang Fu's Yiuw Zhi to refer to the fact that ancient Chinese ships sailing to the South China Sea got stranded by the reefs, shoals and banks as if the ships were attracted by lodestones or magnetic rocks.

The South China Sea islands were further described in two famous books published in the period of San Guo (Three Kingdoms) (220-280): Nanzhou Yiuw Zhi (《南州异物志》，Records of Rarities in the Southern Boundary) and Funan Zhan (《扶南传》，Journeys to and from Funan [now Cambodia]).

Nanzhou Yiuw Zhi, authored by Wan Zhen (万震) of the Wu Kingdom (222-280), and referred to in Taiping Yu Lan (《太平御览》) authored by Li Fang (李方) of the Song Dynasty, recorded the encounters of Chinese expedition sailors of the Han Dynasties (206 B.C.-220 A.D.) on their way back from the Malay Peninsula to China: "Dongbei xing, ji da qitou, chu Zhanghai, zhong qian er duo cishi " ("东北行，极大崎头，出涨海，中浅而多磁石," meaning that "Sailing northeastern, one would encounter a large number of islets, reefs, shoals and banks becoming visible and noticeable in the South China Sea, where [the water is] shallow and filled with magnetic rocks"). Elsewhere, the author made a similar reference (see Exhibit 3):

73 Yang Fu (East Han), Yiuw Zhi (Records of Rarities) (no longer in existence), quoted in Qiong Tai Zhi (Records of Hainan and Taiwan), Volume 9, written and published during the reign title of Zhengde (1506-1521) of the Ming Dynasty (1964), "Rarities, Part Two," 14. See Lin Jinzhi, below n.75, 181, n. 1. See also Han Zhenhua, et al., above n.54.

74 See text accompanying above n.44.


missions took big boats all covered with iron; when they approached the area, they could not proceed further because of the magnetic rocks).  

Exhibit 3

The Chinese people also learnt that these islands and reefs were formed by corals and even named these island chains Shanhu Zhou (Coral Islands and Reefs) in the era of San Guo and the Jin Dynasties (265-420).  

In 226 A.D., Kang Tai (康泰), a famous ancient Chinese navigator of the Wu Kingdom, and Zhu Ying (朱应) were dispatched on diplomatic missions by Emperor Huangwu (黄武帝) via the South China Sea to Funan

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Annex 274

Shen, China’s Sovereignty over the South China Sea Islands

(扶南, now Cambodia) where they met diplomatic envoys from the State of Tianzhu (天竺, now India), and numerous other states. In his Funan Zhuan, Kang Tai made the following observations during his journey to and from Funan (see Exhibit 4).

*Zhanghai zhong, dao shanhu zhou, zhoudi you panshi, shanhu sheng qi shang ye* (涨海中，到珊瑚洲，洲底有盘石，珊瑚生其上也) (In the South China Sea, there are coral islands and reefs; below these islands and reefs are rocks upon which the corals were formed).

In *Guangzhou Ji* (《广州记》, Chronicles of Guangzhou) authored by Pei Yuan (裴渊) of the Jin Dynasties (265-420), it was similarly stated:

*Shanhu Zhou, zai [Dongguan] Xian nan wubai li, xi youren yu haizhong pu yu, de shanhu* (珊瑚洲， 在县南五百里，昔有人于海中捕鱼，得珊瑚) (Shanhu Zhou [The Coral Islands and Reefs] lie five hundred li’s south from the County of Dongguan; in the old days [prior to the Jin] people were already catching fish in the [South China] Sea, and they got corals).

The above are merely the first batch of known records in history ever depicting the geographic and other natural conditions of the South China Sea Islands. The Chinese people came to learn more about the conditions of these coral islands and reefs at later times.

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79 Funan was an ancient state established in the first century in the southern part of Cambodia. In the seventh century, the Funan State was annexed by the State of Jimie (Khmer), which had been a vassal state of Funan in the northern part of Cambodia today. See Ci Hai, above n.34, 516.

80 Ibid, 859.


Exhibit 4

Wang Dayuan, who made multiple voyages to and through the South China Sea and its islands, wrote the following in his one-volume publication entitled *Dao Yi Zhi Lue* (《岛夷志略》, Abridged Records of Islands and Barbarians):

......石塘之骨，由潮洲而生，迤逦如长蛇，横亘海中，越海诸国，
俗云：万里石塘。以余推之，迄止万里而已哉......原其地脉，历历可考，一脉至爪哇，一脉至渤泥及古里地阔，一脉至西洋遐昆仑之地......避之则吉，遇之则凶。(Shitang zhi gu, you Chaozhou er sheng, yili ru chang she, heng gen hai zhong, yue hai zhu guo, su yun: Wanli Shitang. Yi yu tui zhi, qizhi wan li er yi zai. ... Yuan qi dimai, lili
The following is the translation of the above passage:

The base of Shitang originates from Chaozhou. It is tortuous as a long snake lying in the sea, and across the sea it reaches various states, and it is popularly called: Wanli Shitang. According to my estimates, it is less than ten thousand li.... Its veins can all be traced. One such vein stretches to Java, one to Boni and Gulidimen, and one to the west side of the sea toward Kunlun in the distance.... One would be safe to avoid it, and dangerous to come across it.84

Here, Boni denotes Burni, a kingdom which existed then in what is now Brunei and its vicinity on the Kalimantan Island. Gulidimen was another kingdom on the Kalimantan. Kunlun denotes the Kunlun Islands (Con Son Islands, also known as Is. de Paulo Condore) which is located outside the mouth of the Mekong River about 200 nautical miles away from Saigon. Given the description that the three veins of the Wanli Shifang each respectively extends to Kalimantan, Java and the western part of the South China Sea looking over the Kunlun Island in the distance, it is evident that Wang Dayuan meant the Nansha Islands by Shifang and Wanli Shitang.

III.E. Sea Lane Opening

China was the first to open sea lanes through the Xishas Islands and the Nanshas Islands.

Unlike on the deep open sea, voyages through the South China Sea are not at one’s will. Reefs, atolls and shoals beneath the water surface make it difficult to sail to and across the island groups even if to do so would shorten the travel distance to a large extent. Sea routes through these coral island chains would have to be explored and actually “opened” on the basis of prior experience of expeditions, voyages and other explorative activities. In this regard, ancient Chinese made great contributions in locating dangerous sailing areas and establishing safe sea lanes through the Nansha and Xisha Islands.

83 Wang Dayuan (Yuan), Dao Yi Zhi Lue (Abridged Records of Islands and Barbarians), entry of “Wanli Shitang,” 93. See also Wu Fengbin, above n.81, 109; Lin Jinzhi, above n.75, 182.

84 Ibid. (translation).
According to the late Professor Han Zhenhua, the West Han rulers established and maintained close navigational and commercial ties with Southeast Asia, Sri Lanka and India through the usage of sea-routes in the South China Sea.\(^{85}\) It took Chinese envoys of the *West Han Dynasty* only two months to sail from the Strait of Malacca back to the coast of central Vietnam by using the sea route through the *Nansha Islands* area. In contrast, sailing through the conventional sea route along the Asian coast would have taken them several months longer.\(^{86}\) Later generations either continued to utilize previously opened sea lanes, or sought to open new sea routes in order to further shorten the voyages between the Chinese mainland and destinations in and beyond the South China Sea.\(^{87}\)

*Zhu Fan Tu* (《诸蕃图》, Map[s] and Chart[s] of the Various Barbarian Peoples), a no-longer-available set of charts referred to in *Zhu Fan Zhi* (《诸蕃志》, Records of the Various Barbarian Peoples), a set of books authored by the South Song official Zhao Rukuo (赵汝适) in 1225, depicted navigational sea lanes from and to the Chinese mainland through the South China Sea Islands:

汝适被命来此[指泉州]，暇日阅《诸蕃图》，有所谓石床、长沙之险，交洋、竺屿之限。问其志，则无有焉。......宝庆元年[1225年]九月，日，朝散大夫提举福建路市舶赵汝适序。 ([I.] Rukuo was ordered to come here [i.e., Quanzhou]. In my spare time, I read *Zhu Fan Tu*, which contains the so-called reference to the following words: *Shichuang, Changsha zhi xian, Jiao Yang, Zhu Yu zhi xian* [liberally, the dangerous water areas of the *Shichuang* and *Changsha* are the outer limits of the *Jiaozhi* Sea and the Natuna Islands]. When I asked whether they had records of the barbarous peoples, they did not have any.... Preface by Zhao Rukuo, Chaosan Dafu Tiju, Fujian Lu Shibai, September __, Year One of Baoqing [of the Song Dynasty] [i.e., 1225 A.D.].\(^{87}\)

Here, *Shichuang* (Shuang) denotes the *Xisha* Islands whereas *Changsha* symbolizes the *Nansha* Islands. *Jiao Yang* (交洋) is an abbreviated form of *Jiaozhi Yang* (交趾洋, Jiaozhi Sea), the sea area west of the *Xisha* Islands. It is what is

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\(^{85}\) Han Zhenhua, 1996, above n.43, 54, citing *Han Shu*, vol. 28, pt B, Geography, entry of Yue Di (《汉书》28 巻下，地理志，粤地条末后).

\(^{86}\) Han Zhenhua, 1996, above n.43, 62, n. 19.

known as Beibu Wan or the Gulf of Tunkin. In the words Zhu Yu (竺屿), Zhu was the traditional transliteration of Datcu; Yu means islands. The combination of these two words refers to the Datcu Islands (now Natuna Islands). The above passage means that once one passes through the dangerous sea routes across the Xisha and the Nansha Islands, one would reach the sea boundaries between China and foreign countries.\(^ {88} \)

**Lingwai Daida** (《岭外代答》, literally Substitute Replies from Lingwai (now Guangdong and Guangxi)), another set of books of the Song era written by Zhou Qufei (周去非) in 1178, contained a similar depiction of the sea routes through the Nansha Islands between China and other parts of the world that conforms with that referred to above:

...诸藩国之富盛多宝货者, 莫如大食国，其次奢婆国，其次三佛齐国，其次乃诸国耳。三佛齐者，诸国海道往来之要冲也。三佛齐之来也：正北行舟，历上下竺与交洋，乃至中国之境。其欲至广者，入自屯门；欲至泉州者，入自甲子门。奢婆之来也：稍西北行舟，过十二子石，而与三佛齐海道，合于竺屿之下。大食国之来也：以小舟运而南行，至故临国，易大舟而东行，至三佛齐国，乃复如之入中国也。其他占城、真腊之属，皆近在交趾洋之南，远不及三佛齐国、奢婆之半，而三佛齐、奢婆，又不及大食国之半也。诸藩国之入中国，一岁可以往返，唯大食国必二年后可。(... Zhu fan guo zhi fusheng duo baohuo zhe, mo ru Dashi Guo, qici Shepo Guo, qici Sanfoqi Guo, qici naji zhu guo er. Sanfoqi zhe, zhu guo haidao wanglai zhi yaochong ye. Sanfoqi zhi lai ye: zheng bei xing zhou, li Shang Xia Zhu yu Jiao Yang, nai zhi Zhongguo zhi jing. Qi yu zhi Guang zhe, ru zhi Tunmen; yu zhi Quanzhou zhe, ru zhi Jiazimen. Shepo zhi lai ye: Shao xibei xing zhou, guo Shier Zishi, er yu Sanfoqi haidao, he yu Zhu Yu zhi xia. Dashi Guo zhi lai ye: yi xiao zhou yun er nan xing, zhi Gulin Guo, yi da zhou er dong xing, zhi Sanfoqi Guo, nai fu ru zhi ru Zhongguo ye. Qita Zhancheng, Zhenla zhi shu, jie jin zai Jiaozhi Yang zhi nan, yuan buji Sanfoqi Guo, Shepo zhi ban, er Sanfoqi, Shepo, you buji Dashi Guo zhi ban ye. Zhu fan guo zhi ru Zhongguo, yi sui keyi wangfan, wei Dashi Guo bi er nian er hou ke (emphasis added))\(^ {89} \)

When translated into English, the above passage reads as follows:

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\(^{88}\) See Han Zhenhua, 1991, above n.87, 311-312.

\(^{89}\) Zhou Qufei (South Song), Lingwai Daida (Substitute Replies from Lingwai), vol. 3, “Hanghai Waiyi (航海外夷)” (Voyages to the External Barbarians).
Among those foreign states which are rich in resources and treasures, none is comparable with the State of Dashi, the next is the State of Shepo, and next comes the State of Sanfoqi, followed by the other states. Sanfoqi is the strategic pass for communications between various states via sea routes. [Here is how] to travel from Sanfoqi to China: One would sail by boats northward, pass the upper and lower Datcus and the Jiaozhi Sea, and then respectively enter the territory of China [on the sea]. To reach Guangdong, one would go through Tunmen; to reach Quanzhou, he would go through Jiazimen. From Shepo to China: Sailing northwest for some distance, passing the Twelve Rock-Islets, and meeting the sea route between Sanfoqi and China right before the Datcu Islands. From the State of Dashi to China: Taking small boats southbound, reaching the State of Gulin, changing to large boats and sailing eastward, arriving at the State of Sanfoqi, and then taking the same sea route to enter China. Other tributary states such as Zhancheng and Zhenla are all close south of the Jiaozhi Sea, and their distances to China are far shorter than half of those of the State of Sanfoqi and Shepo, while the distances of Sanfoqi and Shepo to China are again shorter than half of the distance between the State of Dashi and China. To travel from the various foreign states to China, one can complete the round trip in one year, with the only exception of the State of Dashi, the round trip between which and China must take more than two years to complete.

Sanfoqi refers to the Kingdom of Sriwidjaja which existed on part of what is now Sumantra Island with Palembang as its center. Shepo State was located in Java and part of Sumantra. The State of Dashi refers to the empire of Taziks, and the word Dashi comes from the Persian word Tazi and was used since the Tang and Song Dynasties to denote the Arabian Empire. Tunmen is in Kowloon, Hongkong, and was a gateway to Guangzhou. Shi'er Zishi (Twelve Rock-Islets) refers to the small islets north of the Karimata Islands near Java. Gulin State is the Chinese transliteration of the kingdom of Kulam which existed on the southwest coast of India. Shang Xia Zhu (Upper and Lower Datcus) and Zhu Yu (Datcu Islands) both refer to the Natuna Islands. Quanzhou is located in Fujian Province. Zhancheng was a state in central-southern Vietnam and part of Cambodia with Qui Nhon as its capital. Zhenla, in most part, was what is now Cambodia.

The sea route between Sanfoqi and Guangdong and Fujian was newly opened up in the Song Dynasties. Part of the new sea route, i.e., that between Zhancheng and Guangdong and Fujian, was the same as the old one. From

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90 Emphasis added by the author in the translation.
Sanfoqi to Zhancheng, the old sea route was along the coasts of Malay Peninsula and Indo-China, while the newly developed sea route would pass the Natuna Islands and then immediately enter the domain of China in the South China Sea, namely, the Nansha Islands water area which was then called Changsha Hai (Changsha Sea). Along this new sea route, one would then exit the Chinese territory in the Changsha Sea area, passing Zhancheng on the central-southern Vietnamese coast, proceed through the Jiaozhi Sea, and then re-enter the Chinese territory in the Xisha Islands water area called Shitang Hai (Shitang Sea). The major difference between the new route and the old one is that using the new route, one would enter China’s territory on the sea twice, once in the Nansha Islands area and the other in the Xisha Islands area, whereas along the old coastal sea route between Sumantra and Zhancheng, one did not need to enter and traverse China’s Changsha Sea (the Nansha) area, instead, he only needed to enter China’s territory once in the Shitang Sea (the Xisha) area. The words “li Shang Xia Zhu yu Jiao Yang, naizi Zhongguo zhi jing” mean that by using the new sea route, one could “enter the territory of China both after passing the Upper and Lower Datcus and after traversing the Jiaozhi Sea.”

The existing and newly opened sea routes through the Xisha and Nansha areas greatly facilitated China’s interactions with the outside world. When Zheng He made his famous voyages, he followed such routes through the South China Sea Islands. The sea routes that Zheng He’s fleet followed, Swanson observes, “had been known and used for several centuries,” and, in fact, “had been systematized into two major sea lanes” since the Song era: “the East Sea Route and the West Sea Route”; and each of the routes was “subdivided into a major and minor route.” Describing one of the routes, Swanson goes on:

Following the period of intensive training, the fleet wound its way through the Taiwan Strait and sailed directly into the South China Sea, where land falls were made on Hainan Island and the Xisha Islands (Paracel Islands). From the Xishas the fleet turned westward and made for an anchorage at modern-day Qui Nhon on the Champa [i.e., southern Vietnam] coast. The total time of the Fujian-Champa transit was about ten days. Once there, provisions were taken aboard and the crews had “liberty” and “sim call.” From Qui Nhon the fleet sailed

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91 Han Zhenhua, 1991, above n.87, 312.
92 See text accompanying above n.71-72 (Zheng He’s Seven Voyages).
southward toward the west coast of Borneo, making land falls on the various islands in the southern portion of the South China Sea.\footnote{Ibid, 38.}

Having noted the above, I believe that more than enough historical records exist to link China with the opening and usage of sea routes through the South China Sea Islands.

\textbf{III.F. Naval Patrols}

China was the first to have made official naval patrols in the area surrounding the South China Sea Islands.

The practice of naval patrol, then known as \textit{xing bu Zhang Hai} (行部涨海), started in the \textit{Han} Dynasties when Admiral Ma Yuan conquered central and northern Vietnam.\footnote{Shen, “International Law Rules,” above n.1, 18.} In his \textit{Hou Han Shu} (《后汉书》, Books of the Latter \textit{Han} Dynasty), e.g., Xie Cheng (谢承) recorded that Chen Mao (陈茂), the \textit{Bijia} (别驾, a rank of officials lower than \textit{Cishi} (刺史)) of Jiaozhi Province (交趾, covering most parts of Guangdong and Guangxi as well as the central and northern parts of Vietnam) of the \textit{East Han} Dynasty, accompanied Zhou Chang (周敞), the \textit{Cishi} (the highest official of a province) of Jiaozhou Province (交州, the same area of jurisdiction as Jiaozhi which was renamed Jiaozhou at that time), in their naval inspection and patrolling cruise to the islands in the South China Sea (“\textit{xing bu Zhang Hai}”).\footnote{Xie Cheng (Wu State), \textit{Hou Han Shu} (Books of the Latter \textit{Han} Dynasty). See Liu Wenzong, above n.65, 69.}

Surviving history books and materials indicate that such practice continued, or at least existed, in later times of the Chinese history—from the \textit{Jin} Dynasties, the \textit{Song State of the Southern Dynasties}, the \textit{North Song Dynasty}, the \textit{Yuan}, \textit{Ming} and \textit{Qing} Dynasties, to the Republican era.\footnote{See Shen, “International Law Rules,” above n.1, 20-21, 24, 27-28, 31-32, 35 & 44-45.} In \textit{Guangdong Tong Zhi} (《广东通志》, The General Records of Guangdong) authored by Hao Yulin (郝玉麟), e.g., it was reported that Bao Jing (鲍靓), the Administrator of \textit{Nan Hai} (南海太守, the highest official in charge of the South China Sea affairs) of the \textit{Jin} Dynasties (265-420), went on patrolling and inspection voyages in the South China Sea (“\textit{xing bu ru hai}”) (“行部入海”).\footnote{Hao Yulin (Jin), \textit{Guangdong Tongzhi} (General Records of Guangdong), cited in: Liu Wenzong, above n.65, 69.} Similarly, there were credible records of the Chinese naval force of the \textit{Song State of Southern Dynasties} (南朝, 420-479)
patrolling the Xisha and the Nansha islands in the South China Sea area. In his Wudi Lei (《武帝诔》, In Memory of Emperor Wudi), Xie Lingyun (谢灵运, 385-433 A.D.), a poet of the Song State of the Southern Dynasties, referred to the Chinese navy’s activities in the South China Sea in the following words: “Huqi Wuxi, Zhou shi Zhanghai” (“虎骑骛隰，舟师张海”) (Brave cavalrymen galloped across the wet lowlands, while naval soldiers fought and patrolled in the Zhang Hai [South China Sea]).* In his Shui Jing Zhu (《水经注》, Commentaries on the Books of Waters), the Wei Dynasty official and geographer Li Daoyuan (郦道元) also wrote that in Year 1 of Yuanjia (元嘉) of Emperor Song Wendi (i.e., 424 A.D.), naval forces of the Song State in the Southern Dynasties era patrolled ocean areas far south of Linyi (临邑), a place in central and southern Vietnam, including the areas around the Kunlun Islands (昆仑) near the coast of southern Vietnam.*

The official Yuan Shi (《元史》, History of the Yuan Dynasty) completed in the Ming era not only contained a geographical description of the South China Sea islands, but also recorded that the Navy of the Yuan Dynasty had made inspections and patrols of the Qizhou Yang (七洲洋, the Xisha Islands) and Wanli Shitang (万里石塘, the Nansha Islands). The “Shi Bi Zhuan” (“史弼传,” History about [General] Shi Bi) section of Yuan Shi recorded the experience of Chinese naval forces led by General Shi Bi (see Exhibit 5).

十二月，弼以五千人合诸军发泉州。……过七洲洋、万里石塘，历交趾占城界……入混沌大洋、橄榄屿、假里马答、巨栏等山，驻兵伐木，造小舟。…… (Shier yue, Bi yi wuqian ren he zhu jun fu Quanzhou... Guo Qizhou Yang, Wanli Shitang, li Jiaozhi Zhancheng jie... ru Hundun Dayang, Ganlan Yu, Jialimada, Julan deng shan, zhubing fanu, zao xiao zhou....) (In December, [General Shi] Bi led five thousand combined forces, sailing from Quanzhou.... [they] sailed through Qizhou Yang [referring to the Xisha Islands] and Wanli Shitang [referring to the Nansha Islands], passing the territory of Jiaozhi and Zhancheng.... [They then] landed on such islands as Hundun Dayang, Ganlan Island, Jialimada and Julan, where they stationed and cut down lumbers to build small boats...)101

99 See Wang Liyi, above n.48, 25.

100 Li Daoyuan (郦道元, 466-527), Shui Jing Zhu (《水经注》, Commentaries on the Books of Waters), vol. 36, Records of Yushui and Linyi (郁水、林邑记), cited in: Han Zhenhua, et al., above n.54, 29.

In his *Dao Yi Zhi Lue*, Wang Dayuan recorded the Yuan naval inspection and patrol activities by noting that when the navy of the Yuan Empire was patrolling the South China Sea islands and the sea zones near Kalimantan, “there were more than a hundred sick soldiers who could not go any further and had to stay on the islands” ("you bing zu bai yu ren, buneng qu zhe, sui liu shan zhong"). Here, only the number of those soldiers who could not further take part in patrolling due to ailment was given, which was already over one hundred—there must have been more healthy sailors. The scale and magnitude of patrols by the Yuan navy in the *Nansha* area thus appeared to be substantial.

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102 Wang Dayuan, above n. 83. See Wu Fengbin, above n.81, 109.
In the Ming Dynasty, the naval arm of Hainan Garrison Force (Hainan Wei) was particularly responsible for patrolling as well as exercising jurisdiction over the South China Sea and its islands. In the official Records of Qiongshan County (《琼山县志》) compiled by Li Xi (李熙) of the Ming era, it was recorded:

......广东濒大海，海外诸国皆内属……公统兵万余，巨舰五十艘，......[巡逻]海道几万里。(...Guangdong bin da hai, hai wai zhu guo jie neishu... Gong long bing wanyu, ju jian wushi sou, ...[xunlou] hai dao ji wan li...) (...Guangdong is adjacent to the grand [South China] Sea, and the territories beyond the Sea all internally belong [to the Ming Empire]...The General led more than ten thousand soldiers and fifty huge ships to patrol several ten thousand lǐ on the South China Sea.)

During the reign of Emperor Kangxi (1662-1722) of the Qing Dynasty, the Navy of Guangdong (Canton) (广东水师) was responsible for patrolling the South China Sea. In 1710 to 1712, e.g., Wu Sheng (吴升), Vice-Admiral of the Guangdong Navy (广东水师副将, Guangdong Shuishi Fujiang), personally led his fleet to the South China Sea Islands and the vicinity to patrol the sea area:

......吴升，擢广东副将，调琼州。自琼崖，历铜鼓，经七洲洋、四更沙，周遭三千里，躬自巡视，地方宁谧。...... (...Wu Sheng, zhuo Guangdong Fujiang, diao Qiongzhou. Zi Qiongya, li Tonggu, jing Qizhou Yang and Sigeng Sha, zhou zao sanqian li gongzi xunshi, difang ningyi...) (...Wu Sheng was promoted to the position of Vice-Admiral of Guangdong [Navy], and was transferred to Qiongzhou [of Hainan]. [The fleet] started from Qiongya [of Hainan] by way of Tonggu, passing through Qizhou Yang and Sigeng Sha, traveling three thousand lǐ, with [General Wu Sheng] leading the patrol personally, leaving every place [of patrol] in peace.)

The patrol activities of various Chinese dynasties were unparalleled, and constituted an important aspect of China’s active exercise of authority over the South China Sea Islands.

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103 Wu Fengbin, above n.81, 110, citing Li Xi, Qiongshan Xian Zhi (Records of Qiongshan County), vol. 14. See also Hu Ruishu, Wan Zhou Zhi (Records of Wan Zhou Sub-Prefecture) [hereinafter Wan Zhou Zhi], vol. 4, “Bian Hai Waiguo” (The Boundary Seas and Foreign Countries).

104 Quanzhou Fu Zhi (Records of Quanzhou Prefecture). See Wang Liyü, above n.48, 25; Duanmu Zheng, ed., above n.51, 156.
III.G. Scientific Surveys

China was the first to engage in systematic scientific surveys of the South China Sea and the Xisha and the Nansha Islands.

As early as 1279, the emperor of the Yuan Dynasty (A.D. 1279-1360) dispatched the well-known high-level official and astronomer, Guo Shoujing (郭守敬), to the South China Sea to survey and measure the Xisha and the Nansha islands and the adjacent sea area. The Chinese government in the early and latter parts of the twentieth century also conducted various surveys and studies of the Nanshas and the Xishas, long before Vietnam, the Philippines, Malaysia and Brunei advanced their respective claims.

III.H. Mapping

China was the first known State to have mapped the South China Sea and its island groups, and the first to have adopted an official U-shaped line to enclose the South China Sea Islands and their adjacent waters within her defined claims.

As early as in the Song Dynasties, as well as through the Yuan, Ming and Qing Dynasties, the South China Sea Islands were referred to as Qianli Changsha, Wanli Shitang or the like in China's official maps. Zhu Fan Tu (《诸蕃图》, Maps of the Various Barbarian Peoples) of the North Song Dynasty mentioned earlier may be said to be one of the sets of ancient Chinese maps that referred to the South China Sea Islands as being subject to the Chinese rulers.

Maps published in the Yuan era invariably included the Changsha (the Xisha Islands) and the Shitang (the Nansha Islands) within the domain of Yuan. Yuandai Jiangyu Tu Xu (《元代疆域图叙》, Map of the Territory of the Yuan Dynasty Illustrated) stated that China's territory included the North Sea to the north and the South Sea to the south (北至于北海，......南至于南海). Other maps of the type included Sheng Jiao Guang Bei Tu (《声教广被图》) of 1330 by Li Zemin, the Hunyi Jiangli Tu (《混一疆理图》, Consolidated Maps of the Territory [of the Yuan Dynasty]) of 1380, and the authoritative Tu Di Tu (《舆地图》, The Maps of the Territory [of Yuan]) drawn and illustrated by Zhu Siben (Yuan), which

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108 See text accompanying above n.87-88.
109 See Wu Fengbin, above n.81, 109.
invariably included *Shitang* and *Changsha* as being within the scope of the Chinese territory.

In the *Ming* Dynasty, official Chinese maps continued to indicate China's sovereignty over the South China Sea Islands. In *Hunyi Jiangli Lidai Guodu zhi Tu* (Consolidated Map of Territories and Geography and Capitals of Past Dynasties) (1402), for example, the South China Sea Islands were all included within the boundary of China. Another *Ming* map published in the year of 1637 also included the entire South China Sea Islands as part of the *Ming* Empire's territory. Chinese maps and charts drawn up in the Ming era were convenient tools utilized by and throughout the well-known Zheng He's Seven Voyages.

In his *Haiguo Wenjian Lu* (《海国闻见录》) published in 1730, Chen Lunjiong, the *Qing* scholar, re-depicted the geographical positions of the *Xisha* Islands and *Nansha* Islands. The book contained a set of maps called "Sihai Zongtu" ("General Maps of the Four Seas"), which referred to the *Xisha* group of islets as "Qizhou Yang" and the *Nansha* group as "Shitang." Chen also identified the other groups of islands in the South China Sea: Qi or Nan’ao Qi for today’s Dongsha Islands, Shatou for the Nanxu Shayin in today’s Dongsha Islands, Qizhou Yang for the *Xisha* Islands, and Changsha for today’s Zhongsha Islands. *Qizhou Yang* was drawn in the west of the South China Sea, thereby denoting the whole or part of the *Xisha* Islands; *Shitang* was marked in the south of the South China Sea between Wenlai (Brunei) and Kunlun Islands (Con Son Islands), which roughly represents the location of the *Nansha* Islands.

Official maps of the *Qing* Dynasty invariably enclosed the *Nansha* Islands and other parts of the South China Sea Islands within the *Qing* boundary, and they were many.

1. *Da Qing Zhong Wai Tianxia Quan Tu* (The Complete Sino-Foreign Maps of the Great Qing) of 1709;
2. *Qing Zhi Sheng Fen Tu* (Individual Maps of the Provinces Directly under the Administration of the Qing Empire) of 1724;

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110 See text accompanying above n.48.
112 Greenfield, above n.70, 31.
113 Wu Fengbin, above n.81, 108; Greenfield, above n.70, 31.
114 Wu Fengbin, above n.81, 108; Greenfield, above n.70, 31-32.
(3) Huang Qing Ge Zhi Sheng Fen Tu (Individual Maps of the Provinces Directly under the Administration of the Royal Qing) of 1755;
(4) Da Qing Wan Nian Yitong Quan Tu (The Complete Maps of the Unified Great Qing for Ten Thousand Years) of 1767 charted by Zhu Xiling and revised by Huang Zhengsun;
(5) Qing Hui Fu Zhou Xian Ting Zong Tu (The Qing-Charted General Maps of the Capital Cities, Prefectures, Counties and Tings)\(^{116}\) of 1800 charted by Xiao Feng;
(6) Da Qing Wan Nian Yitong Tianxia Quan Tu (The Complete Maps of the Whole Unified Country of Great Qing for Ten Thousand Years) of 1803 charted by Yang Senzhong;
(7) Da Qing Wan Nian Yitong Dili Quan Tu (The Complete Geographical Maps of the Unified Great Qing for Ten Thousand Years) of 1810;
(8) Da Qing Yitong Tianxia Quan Tu (The Complete Maps of the Whole Unified Country of Great Qing) of 1817;
(9) Gu Jin Di Yu Quan Tu (The Complete Maps of the Lands and Territories Then and Now) of 1895;
(10) Da Qing Tianxia Zhonghua Ge Sheng Fu Zhou Xian Ting Dili Quan Tu (The Complete Geographical Maps of the Provinces, Capital Cities, Prefectures, Counties and Tings of the Whole China of the Great Qing) of 1904 charted by Wu Changfa; and
(11) Da Qing Tianxia Zhonghua Ge Sheng Fu Zhou Xian Ting Dili Quan Tu (The Complete Geographical Maps of the Provinces, Capital Cities, Prefectures, Counties and Tings of the Whole China of the Great Qing) of 1905 charted by Wang Xingshun.\(^{117}\)

While the above-mentioned ancient maps lack precision due to limitations on map drawing techniques, they do establish that China not only considered the South China Sea Islands her territory by action and words, but also illustrated her sovereignty over these areas through visual devices.

In April 1935, the Committee for the Review of Maps of Lands and Waters of the Republic of China charted and published a map entitled Zhongguo Nan Hai Ge Daoyu Tu (Map of the Islands of China in the South [China] Sea), which specifically depicted the Dongsha Islands, Xisha Islands, “Nansha Islands” (now Zhongsha Islands) and “Tuansha Islands (now Nansha Islands” [now Nansha Islands]).

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\(^{116}\) Tings were created in the Qing Dynasty as an administrative locale at both the prefecture level and the county level in newly established provinces. The prefecture-level Tings were called Zhili Ting (Tings Directly under Provinces) which were parallel to the capital cities (Fus) and prefectures (Zhous or Zhili Zhous); the county-level Tings were called San Ting (Scattered Tings or sub-Tings) which were parallel to counties (Xians) and sub-prefectures (San Zhou). See Ci Hai, above n.34, 146.

\(^{117}\) See Wu Fengbin, above n.81, 111; Wang Liyü, above n.48, 26-27.
Islands), among others, as within the boundary of the Chinese territory, with
detailed and specific names and locations of some 135 major islands, cays,
reefs, banks and shoals. This was the first official map of the kind published by
the Republic of China.

In January 1948, the Chinese Ministry of Interior published the Map of
Locations of South China Sea Islands (Nan Hai Zhudao Weizhi Tu) with a U-
shaped intermittent line to indicate the traditional boundary of China’s
territory in the South China Sea. The 1948 Map, with newly standardized
names of most specific islands and other features, encloses all the island groups
in the South China Sea that are considered to be under Chinese sovereignty,
i.e., the Dongsha Islands, the Zhongsha Islands, Xisha Islands, and the Nansha
Islands. Later maps published before 1949 continued to adopt the less
ambiguous U-shaped line (vis-à-vis previous maps) to delimit China’s
traditional ocean boundary.

Since 1949, the People’s Republic of China has invariably adopted the
same U-shaped intermittent line in all of her official maps covering the South
China Sea area. By continuing the U-shaped line on her official maps,

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118 Ibid.
119 See Han Zhenhua, et al., above n.54.
120 Ibid.
121 Ibid.
122 See, e.g., Map of the People’s Republic of China (Zhonghua Renmin Gonghe Guo
Ditu) (1971); World Atlas (Shijie Ditu Ce) (1972), 2 (World), 3 (Asia), 4 (China), 6
(Eastern and Southern China), 12 (Vietnam, Laos, and Cambodia), 14 (Malaysia,
etc.), & 15 (the Philippines, etc.); Topographic Map of the People’s Republic of
China (Zhonghua Renmin Gonghe Guo Dixing Tu) (1989); Map of the People’s
Republic of China (Zhonghua Renmin Gonghe Guo Ditu) (1991); Atlas of
Transportation of China (Zhongguo Jiaotong Tu Ce) (1998), 2, 4, 6, 8, 10, & 98.
Once again, neither the post-1949 Chinese Government, nor her predecessor, has
delineated or clarified the exact legal meaning, nature and consequence of the
U-shaped intermittent line. Lawyers and scholars on both sides of the Taiwan Strait
are in disagreement with respect to these difficult issues, basically with some
considering the entire-enclosed water area as China’s historic water, and others
favoring a less rigid concept of priority rights in the area. For a study on China’s
historic rights in the area enclosed by the U-shaped line, see Zou, above n.9,
159-164 (discussing the concept of historic rights in light of its reference in China’s
1998 Law on the Exclusive Economic Zone and Continental Shelf [see below
n.20], and suggesting preference of historic rights in the enclosed area over simply
historic waters). See also Fu Kuen-Chen, Nan (Zhongguo) Hai Falü Diwei zhi
China’s priority rights and obligations in the U-shaped line-enclosed water area as
China’s historic waters); Yann-huei Song & Peter Kien-hong Yu, “China’s ‘Historic
China has been able not only to demonstrate China's sovereignty over the South China Sea Islands, but also to tell the world public, with a considerable degree of relative certainty, where China's territorial claims end.

III.I. Fishing and Other Private and Public Uses

China was the first to make use of the South China Sea Islands, not only for fishing and other private ends, but also for public and official purposes.

The Chinese people and their rulers had a history of more than two thousand years in making economic, navigational and other uses of the South China Sea and the Nansha and the Xisha Islands.

Rarities and other valuable items collected from these island groups were used as official tributes to the Chinese rulers, a practice that started in the Xia Dynasty more than three thousand years ago. The words "Yan yu Nan Hai" in Shi Jing indicate that the Chinese rulers and people at least were also making use of the South China Sea and the islands and banks therein during the East Zhou era.

According to the Chinese Foreign Ministry, "fishermen from Haikou Port, Pujian Port, Qinglan Port and Wenchang County [of the Ming Empire] went to the Nansha Islands to fish sea cucumber and other sea produce." Indeed, Chinese fishermen from Guangdong, Hainan and other coastal areas have habitually taken the South China Sea Islands area as their fishing grounds. They would also take some of the atolls and islands as shelters and/or stopping spots en route to and from remote fishing grounds. Seasonal Chinese settlers would also engage in some forms of plantation in the Nansha Islands, a practice that was started no later than the Ming Dynasty.

The economic activities of Chinese fishermen on the Xisha and Nansha Islands have been lively spotted and vividly described by foreign visitors to these islands. For instance, the 1868 edition of China Sea Directory published by the London Hydrographic Office contains the following observations made in the Qing era:

Fishermen from Hainan Island went to Zhenghe Isles and Reefs and lived on sea cucumber and shells they got there. The footmarks of

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83-101 (assessing the difficulty of meeting the criteria of historic waters and favoring focusing on the "ownership of South China Sea Islands").


124 See text accompanying above n.38.

125 FM-PRC, The Issue of South China Sea, Pt 2, above n.6.

fishermen could be found in every isle of the [Spratly] Islands and some of the fishermen would even live there for a long period of time. Every year, there were small boats departing from Hainan Island for the Nansha Islands to exchange rice and other daily necessities for sea cucumber and shells from the fishermen there. The ships used to leave Hainan Island in December or January every year and return when the southwesterly monsoon started.\textsuperscript{127}

Traditions of Chinese people conducting economic activities in the Nansha and Xisha Islands have been carried on generations upon generations. Since the Qing Dynasty, as the Chinese Foreign Ministry observes, “fishermen from Hainan Island and Leizhou Peninsula of China have kept going for fishing on the Nansha Islands. Most of the fishermen come from Wenchang County and Qionghai County. One or two dozens of fishing boats from these two counties alone would go to the Nansha Islands every year.”\textsuperscript{128}

The Chinese development and productive activities in the South China Sea Islands during the Republic of China era may be reflected upon in the following observations:

Mr. Okura Unosuke of Japan wrote about his expedition trip to Beizi Island [i.e., Northeast Cay] in 1918 in his book Stormy Islands, which reads: “[H]e saw three people from Haikou of Wenchang County when the expedition team he organized arrived in Beizi Island.” In 1933, Miyoshi and Matuo of Japan saw two Chinese people on the Beizi Island and three Chinese people on the Nanzi Island [i.e., Southwest Cay] when they made an investigation trip to the Nansha Islands. It is also recorded in A Survey of the New South Islands published in Japan that [Chinese] “fishermen planted sweet potato on Zhongye Island [i.e., Thitu Island] [and that] fishermen from the Republic of China resided on the islands and grew coconuts, papaya, sweet potato and vegetables there.”\textsuperscript{129}

Private use of the South China Sea Islands was generally with the blessing, permission, encouragement or support of the Chinese central or local


\textsuperscript{128} FM-PRC, The Issue of South China Sea, Pt 2, above n.6 (emphasis added). The Chinese version contains the words “jin cong...,” meaning “from...alone.”

\textsuperscript{129} Ibid.
government, and, not infrequently, even organized by the government itself.\footnote{See, e.g., Shen, “Territorial Aspects,” above n.2, 183-184; id, “International Law Rules,” above n.1, 45-47.}

In the imperial periods of time, Chinese fishermen and other sea-going people making use of the South China Sea Islands would pay tributes and taxes to the Chinese government in kind or otherwise out of the proceeds of their fishing and other production activities in that area.\footnote{See text accompanying notes 34-37 & 123.} Since the end of the imperial era, both private and government licensed or sponsored fishing and other economic activities have been conducted in the Xisha and Nansha Islands areas.\footnote{See Shen, “Territorial Aspects,” above n.2, 174 ff. & 183 ff.}

\section*{III.J. Jurisdictional Allocations}

China was the first to officially place the South China Sea Islands under the jurisdiction of her national and/or local governments.

China had regarded the South China Sea and the islands therein to be subject to her authority and control since no later than the Han Dynasties.\footnote{Shen, “International Law Rules,” above n.1, 17-18.} In the Tang Dynasty, the Xisha and the Nansha Islands were placed under the jurisdiction and authority of the Qiongzhou Prefecture (now Hainan).\footnote{Liu Rongzi, “The Fishery Resources in the Nansha Islands Area Should be Considered China’s State-owned Resources,” in Selected Papers, above n.35, 96-99. 96.} Various official records of Guangdong, Hainan and some of their lower level administrative prefectures and counties prepared in the periods from the North Song Dynasty to the Qing Dynasty invariably confirm that China intended to, and did, exercise jurisdiction over the Nanshas and the Xishas and their adjacent waters.\footnote{Shen, “International Law Rules,” above n.1, 21 ff.}

In an official chronicle book published in the South Song Dynasty (1127-1279) titled Qiong Guan Zhi (《琼管志》, Records of the Qiong Prefecture and its Jurisdiction), it was specifically mentioned that the Qianti Changsha (now the Xisha Islands) and Wanli Shifang (now the Nansha Islands) were under the jurisdiction of the Qiong Prefecture (now Hainan Province).\footnote{See Wang Liyiu, above n.48, 24.} Similar references can also be found in such Song-related books as Song Hui Yao Ji Gao
(《宋会要辑稿》, Selected Manuscripts of the Digests of the Song Dynasties),\(^{137}\) Song Shi (《宋史》, The History of the Song Dynasties),\(^{138}\) and Zhu Fan Tu (《诸蕃图》, Maps of the Various Barbarian Peoples, the North Song Dynasty).\(^{139}\)

Tang Zhou (唐胄) of the Ming Dynasty recorded in his Zhengde Qiong Tai Zhi (《正德琼台志》, Records of Qiongzhou and Taiwan During the Reign of Emperor Zhengde) that the sphere of jurisdiction of the Qiongzhou Prefecture included the Qianli Changsha and Wanli Shitang, which respectively referred to the Xisha Islands and the Nansha Islands.\(^{140}\) Qiong Guan Gu Zhi (《琼管古志》, Ancient Records on the Jurisdiction of Qiongzhou Fu), also written in the Ming era, provides the same evidence.\(^{141}\)

In the Qing Dynasty, the official Records of Wanzhou Subprefecture (《万州志》) stated that within the sphere of jurisdiction of Wanzhou, there were Qianli Changsha and Wanli Shitang (万州有千里长沙、万里石塘), and that “sea boats would be smashed when encountering atolls [in the Xisha area], and wouldn’t be able to come out once entering the reefs [in the Nansha area]” (“海舟触沙立破，入塘无出理，人不敢近”). Similarly, the Records of Qiongzhou Prefecture (《琼州府志》) recorded that “Wanzhou has jurisdiction over Qianli Shitang, Wanli Changsha, which are the most dangerous areas of the Qiong Ocean [i.e., the South China Sea]” (“万州有千里石塘，万里长沙，为琼洋最险之处”).\(^{142}\) Here, Qianli Shitang refers to the Xisha Islands, while Wanli Changsha denotes the Nansha area.

More importantly, the Chinese Government in the Ming and Qing Dynasties invariably considered itself to have sovereignty over both the South China Sea Islands and their adjacent seas. According to Guangdong Tong Zhi (《广东通志》, General Records of Guangdong) prepared by Jin Guangzu

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\(^{137}\) Xu Song (1781-1848, Qing), ed., Song Hui Yao Ji Gao (Selected Manuscripts of the Digests of the Song Dynasties), 366 vols., vol. “Fan Yi” (The Barbarian Peoples), Pt. 4, Sec. 99 (reprinted in 1936).

\(^{138}\) Tuo Tuo (1314-1355, Yuan), Alu Tu (also Yuan), & Ouyang Xuan (1274-1358, Yuan), eds., Song Shi, 496 vols., vol. 489: “Zhancheng Zhi” (Chronology of Zhancheng [now part of Guangdong, Guangxi and Vietnam]).

\(^{139}\) See Han Zhenhua, 1991, above n.87, 305 & 311-312.

\(^{140}\) Tang Zhou (Ming), Zhengde Qiong Tai Zhi (Records of Qiongzhou and Taiwan During the Zhengde Reign), entry of “Jiangyu” (Territory or Scope of Domain). See Wu Fengbin, above n.81, 110.

\(^{141}\) See Wu Fengbin, above n.81, 110.

\(^{142}\) Wan Zhou Zhi, above n.103, vol. 3, entries of “Changsha Hai and Shitang Hai” (长沙海、石塘海).

\(^{143}\) Ming Yi (Qing), Qiongzhou Fu Zhi (Records of Qiongzhou Prefecture), quoted in: Wu Fengbin, above n.81, 110.
(金光祖) of the Qing Dynasty, in the Ming and Qing era, Qiongzhou Prefecture and its Wanzhou Subprefecture had jurisdiction not only over Qianli Changsha (the Xisha Islands) and Wanli Shitang (the Nansha Islands), but also over the "Changsha Hai, Wantang Hai" (长沙海、万塘海, Changsha Sea and Wantang Sea), i.e., the sea areas respectively surrounding the Xisha Islands and the Nansha Islands. Subsequent governments of China have followed basically the same ownership claim and pattern of jurisdictional allocation.

It deserves emphasizing that China's persisting claim to the South China Sea Islands has never been changed or interrupted in spite of modern and contemporary intervening events such as the French and Japanese occupations, and the current demands of and occupations by the other claimants. From the first time the South China Sea Islands became the targets of foreign assertions to the present, China has persistently and resolutely reiterated her sovereignty and opposed all forms of foreign claims, occupation and interference.  

III.K. Other Acts of Sovereignty

China has exercised various other sovereign rights and performed various other sovereign duties in the South China Sea.

Throughout history, China has performed various other acts not covered above that amount to active display of sovereign authority. These sovereign activities include the installation of facilities for fishing, forecasting and navigation, rescues of Chinese and foreign vessels in mishaps, granting and revoking licenses to private companies for the exploration and exploitation of natural resources, and organizing large scale fishing and other production activities around the Xishas and the Nanshas.

Between 1862 and 1874, the Qing Customs and General Revenue Office made plans to erect lighthouses in the Dongsha Islands for facilitating navigation in the South China Sea. In 1908, the Qing Customs Office

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144 Jin Guangzu (Qing), Guangdong Tong Zhi (General Records of Guangdong), vol. 13, "Shanchuan: Wan Zhou" (Land: Wan Zhou [Sub-Prefecture]). See Wu Fengbin, above n.81, 110. The Wan Sub-Prefecture was a zhou level local administration in the southeast part of Hainan Island, covering areas such as Wanning County and Lingshui County.

145 See text accompanying below n.167-212 (China’s protests against foreign encroachments).

146 Qing Ji Waijiao Shi Liao (Historic Materials on the Diplomacy of the Qing Dynasty). See Lin Jinzhi, above n.75, 188.
similarly planned to build lighthouses on the Xisha Islands upon the request of foreign countries.\(^{147}\)

In 1909, the Governor of Guangdong and Guangxi, Zhang Renjun, sent the naval officer-in-charge Li Zhun (李准) to the Xisha and Nansha Islands area. An anti-China and pro-Vietnam website states: "The first time China sent its stationed troop to Nansha Islands (Taiping) is 1910 by the navy minister Li Zhun. Due to the Xin Hai Revolution of 1911, they starved there soon."\(^{148}\)

It is not clear what happened to Li Zhun’s troop later on, but it is certainly wrong to regard Li Zhun’s dispatch of troop to the Nansha Islands as China’s first attempt to do so. Nevertheless, the above quoted passage at least acknowledges that Li Zhun’s crew did sail to the Nansha Islands (in addition to the Xisha Islands) to demonstrate sovereignty on behalf of the Qing Government. Further, Li Zhun’s mission identified and renamed 15 islands and islets, where his crew erected stone markers, raised Chinese flags, and held cannon-shooting ceremonies. These acts were performed in order to re-demonstrate China’s sovereignty over the entire South China Sea island groups.\(^{149}\)

In 1910, the Qing Government decided to invite Chinese merchants to contract for administering the development and exploitative affairs of the South China Sea Islands. Meanwhile, it demanded that "guan wei bao hu weichi, yi zhong lingtu, er bao quan li" ("the government shall provide protection and maintenance in order to strengthen [Qing’s] territorial sovereignty and to protect [Qing’s] titles and interests").\(^{150}\)

After the 1911 Revolution, the New Government of Guangdong Province made redistribution of jurisdictional spheres by placing the Xisha Islands under the jurisdiction of the Ya Xian (Ya County) of Hainan Prefecture instead of being directly under the Prefecture itself.\(^{151}\) In 1921, the Southern Military Government affirmed and adopted the 1911 decision.\(^{152}\) To be sure, these decisions do not mean that China merely had sovereignty over the Xisha Islands. Instead, they simply meant that starting with 1911, the Ya County of Hainan, rather than the higher level government or governments, would have

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\(^{147}\) Lin Jinzhi, above n.75, 188.

\(^{148}\) "Paracels Forum: Questions about History?" <http://members.tripod.com/paracels74/>.

\(^{149}\) Duanmu Zheng, ed., above n.51, 156; Lin Jinzhi, above n.75, 188 & 189.

\(^{150}\) Li Zhun (Qing), ed., Guangdong Shuishi Guofang Yaosai Tushuo (Strategic Defense Fortresses of the Guangdong Navy Illustrated) (1910). See Lin Jinzhi, above n.75, 188.

\(^{151}\) Liu Wenzong, above n.65, 70; Lin Jinzhi, above n.75, 191.

\(^{152}\) Lin Jinzhi, above n.75, 191.
original administrative and other authoritative jurisdiction over the Xisha Islands, while China's sovereignty over the Nansha Islands and other islands in the South China Sea would remain to be exercised directly by the relevant governments at the prefecture, provincial and central level.

In her initial decades, the Republic of China put more emphases on encouraging Chinese companies and businesses to participate in the development of the Xisha Islands. There were numerous examples of the Chinese Government granting licenses or taking other measures for developing the Xisha island group.¹³³ The Nansha Islands are much more difficult to sustain year-round human inhabitation than the Xisha Islands. Further, the Xisha Islands are closer to Hainan Island and the Chinese mainland. The Xisha group’s geographical and other natural conditions, still primitive, are more favorable than those of the Nansha Islands. Consequently, development and exploitation of the latter group naturally became China’s priority in the South China Sea. Nevertheless, such priority programs by no means suggest that China ever had any intention of ignoring or abandoning the Nansha Islands.

China’s civil wars and the war of resistance against the Japanese aggressors to a large extent interrupted China’s exercise of sovereignty over the South China Sea Islands. Nevertheless, the Chinese Government, far from “forgetting” these island groups, took every opportunity it could to exhibit China’s sovereignty over the Xisha Islands and Nansha Islands throughout the 1930’s and 1940’s.¹³⁴

III. L. Recovery from Japan

China is the only State to have accepted the Japanese surrender and gained legal recovery over the robbed or stolen territory in the South China Sea.

During the Second World War, Japan invaded and occupied not only a large part of the Chinese mainland, but also some major islands in the South China Sea in 1939. It renamed the Nansha island chain Shinnam Gunto (新南群岛, New South Islands), and placed these islands under the jurisdiction of Taiwan, which had been under Japanese rule since 1895.¹³⁵ The Chinese people and Government engaged in relentless struggles of resistance against the Japanese occupation of China’s territories, including Taiwan and the

South China Sea Islands, which in substantial part led to China's victory and Japan's surrender and withdrawal in 1945. It was these relentless efforts that culminated in China's resumption of her physical exercise of sovereignty over these islands and the adjacent waters:

...China made unremitting efforts for the recovery of these islands from the Japanese occupation. In 1943, China, the United States and the United Kingdom announced in the Cairo Declaration that all the territories that Japan had stolen from China should be "restored to China," including "Manchuria, Taiwan and the Penghu Islands." At that time, Japan put the Nansha Islands under the jurisdiction of Taiwan. The territories to be restored to China...naturally included the Nansha Islands. The 1945 Potsdam Proclamation confirmed once again that the stolen territories should be restored to China. [In accordance with] the Cairo Declaration and Potsdam Proclamation, China recovered the Nansha Islands in 1946. At the same time it went through a series of legal procedures and announced to the whole world that China had resumed the exercise of sovereignty over the Nansha Islands. Subsequently, the Chinese Government held a take-over ceremony and sent troops to the islands on garrison duty. An official map of the Nansha Islands was drawn and printed, the Nansha Islands were renamed, collectively and individually, and the earliest book of the physical geography of the Nansha Islands was also compiled and printed.\textsuperscript{156}

Writing about China's recovery of the South China Sea Islands, Swanson observes that "one of the first operations carried out by the ex-British ship [the Fubo] was the reoccupation of the Xisha (Paracel) and Nansha (Spratly) islands. In October and November 1946, a Chinese naval squadron visited these islands and assisted in setting up radio and meteorological stations."\textsuperscript{157} Along with the naval contingent went officials from the Ministry of Internal Affairs to carry out survey and other administrative functions with regard to selected islands and reefs of both island groups.\textsuperscript{158} The Chinese Government stationed troops on the largest island in the Nansha Group, the Taiping Island, to oversee and patrol neighboring islands and adjacent waters, and constructed a weather station on the island.\textsuperscript{159}

\textsuperscript{156} FM-PRC, The Issue of South China Sea, Pt 3, above n.6.
\textsuperscript{157} Swanson, above n.93, 169.
\textsuperscript{158} Ibid.
\textsuperscript{159} Ibid.
It is interesting to note that prior to the Japanese takeover, Japan had recognized China's sovereignty over the South China Sea Islands. In 1938, for example, Japan found and declared it “unjustifiable” for France to claim title to the Xisha island group given the fact that both France and the United Kingdom had previously recognized the Xisha Islands as part of China’s Hainan Administrative Prefecture.\(^{160}\) Needless to say, Japan’s declaration must have been out of its own interest-driven considerations. To deny the French claims by recognizing China’s sovereignty would give Japan justification and latitude to occupy and “annex” the South China Sea Islands vis-à-vis France and the West in the near future.

While the West regarded Japan as the administrator of the entire South China Sea Islands for the period of its occupation, it is highly questionable whether Japan established its title to these island groups at all, because invasion and occupation *per se* do not suffice to acquire title to territory. In this regard, Japan was in a like position as France—the mere presence of claims and physical occupation, over China’s persistent objections, would establish title neither for France, nor for Japan. Upon Japan’s defeat at the end of the Second World War, it was only logical and natural for China as the legitimate title-holder to recover the South China Sea Islands from Japan. Indeed, China was the only country that dispatched naval forces and government officials to the Xisha and the Nansha areas to formally accept the Japanese surrender and withdrawal in the South China Sea areas and to declare her recovery of the entire South China Sea Islands.\(^{161}\) For China, the status of the Nansha and Xisha Islands after Japan’s surrender would not and should not depend on Japan’s renunciation of claims and/or any international scheme of disposition; because Japan never acquired title to the islands from China—it merely acquired physical control. China, and China only, would be entitled to recover what she considers to be inalienable parts of her territory irrespective of how a peace treaty with Japan would provide. On this point, Premier Zhou Enlai made it very clear in his “Statement on the United States’ and Great Britain’s Draft Treaty of Peace with Japan and the San Francisco Conference” of 1951: China’s inviolable sovereignty over the Nansha and Xisha Islands would not be affected by the draft peace treaty, regardless of whether and how it provides for their status.\(^{162}\)

\(^{160}\) Shen, “Territorial Aspects,” above n.2, 181 & 211.
\(^{162}\) See text accompanying below n.181.
have established its title to the disputed area, subsequent events would still allow China to legally restore her sovereignty over the Dongsha, Zhongsha, Xisha, and Nansha Islands. Under the unconditional 1943 Cairo Declaration and the 1945 Potsdam Proclamation, Japan was to return to China all territories that it had stolen from China during and prior to the war, which indisputably included the Xisha and Nansha Islands. More specifically, under Article 2 of the San Francisco Peace Treaty of September 8, 1951, “Japan renounces all right, title and claim to the Spratly Islands and to the Paracel Islands.” The fact that the Treaty does not specifically provide that these islands be returned to China is insignificant; such express provision is not required.

In the first place, the return by Japan of all stolen territories to China was already guaranteed under the Cairo Declaration and the Potsdam Proclamation.

Secondly, the provision of specific recipients of territories formerly occupied by a defeated power is necessary only where the territory concerned was terra nullius or otherwise not falling under the jurisdiction of any other State prior to the occupation. Where an occupied territory was formerly under the sovereignty of another State, renunciation of all claims by the defeated State to the territory would automatically restore ownership and control to the former titleholder. Since China was the sole legitimate titleholder of the Xisha and Nansha Islands before Japan’s occupation (note that France never acquired any title interest in the island groups), Japan’s de facto and de jure renunciation of its claims to the South China Sea Islands would only lead to China’s full recovery.

Thirdly, Japan’s prior recognition of China’s ownership of the South China Sea Islands, and its implied or express intention to return them to China, were important factors in re-establishing China’s ownership. Japan’s intention to return the island groups to China is strongly indicated in a Japanese map published in 1952, the Map of Southeast Asia of the Standard World Atlas, the first Japanese official world atlas after the 1951 San Francisco Peace Treaty. The atlas (and the map in question), endorsed by the


164 Proclamation Defining Terms For Japanese Surrender, July 26, 1946, 13 Dep’t St. Bull. (1945), 137.

then Japanese Foreign Minister, Cats Okazaki, with his signature, clearly marks the entire Xisha and Nansha island groups as part of China.\(^{166}\)

Lastly, it is significant to observe that neither France, nor Vietnam, nor the Philippines, nor any other country advanced any protests or objections when China resumed her sovereignty and control over the Nansha and Xisha Islands in 1946. Nor was there any objection on the part of any country when China renamed the island groups and published a list of standardized names for each of the major islands, reefs, banks, atolls and banks.

**III.M. Persistent Sovereign Claims and Protests against Foreign Encroachments**

Having always treated the South China Sea Islands as her own, China has persistently and consistently reiterated her "indisputable" sovereignty over them, and has opposed any form of foreign encroachments, invasions and occupations.

Because foreign powers generally recognized and respected China’s sovereignty over the South China Sea Islands, there were few instances that would give rise to the need for China to make formal protests. Whenever foreign encroachments, invasions and occupations take place or continue, however, China has invariably declared her oppositions by way of protests, reiteration of China’s sovereignty and/or otherwise.

**III.M.i. The Qing Government**

Since no foreign claims to the South China Sea Islands were known to the Qing Government and her predecessors, there was no felt need for the Central Kingdom to declare to the outside world that these islands and their adjacent waters were China’s historic territories and waters. Still less were there circumstances requiring the then Chinese Government to make any objection to a foreign party absent any competing claim. When such a chance did arise, however, China wasted no time in taking responsive actions. Such was the case in 1883 when the Qing Government lodged strong protests against Germany upon learning that the Germans were conducting survey activities in the Xisha and the Nansha areas without China’s permission. It was reportedly because of such protests that the Germans terminated their survey activities.\(^{167}\)

\(^{166}\) Ministry of Foreign Affairs of the People’s Republic of China, China’s Sovereignty over the Xisha Islands and Nansha Islands Indisputable (Jan. 30, 1980), People’s Daily, Jan. 31, 1980.

\(^{167}\) Duanmu Zheng, ed., above n.51, 156.
III.M.ii. The Republic of China

When the French laid claims to and forcibly occupied nine islands in the Nansha group, the Chinese people and Government in various forms demonstrated their strong protests and resistance. As the Chinese Foreign Ministry stated in 2000:

In 1933, France invaded and occupied 9 of the Nansha Islands, including Taiping and Zhongye Islands. The Chinese fishermen who lived and worked on the Nansha Islands immediately made a firm resistance against the invasion and the Chinese Government lodged a strong protest with the French Government.168

The following account written in 1933 by a Chinese historian and geographer, Ling Chunsheng (凌纯声), as translated by the present author, not only evidences Chinese fishermen’s resistance against the French claims, but also demonstrates China’s traditional links with and entitlement to the Nansha Islands:

(1) Amboyna Cay [i.e., Anbo Shazhou]...There is no natural water on the cay, nor plant. Yet, traces of fishermen temporarily living on the Cay are everywhere.

(2) Is. Tempete, Storm Island, also known as Spratly Island [i.e., Nanwei Island]...There are plants on the island. French men raised the French flag on the island in 1930, and the flag post remains there. However, the flag on the post has been replaced with a new [Chinese] flag that the Chinese [residents] on the island bought from Hainan. When the French vessel, The Malisieuse, arrived here in 1930, there were already four Chinese men on the island, who had dig a well of natural water, and planted coconut trees, banana trees,...and vegetables. Their main occupations were to catch sea turtles...

(3) Itu Aba Island [i.e., Taiping Island]...The largest island of the [Nansha] Islands... There are plenty of plants on the island, including newly grown meng trees and coconut trees. There are currently no residents on the island, but there are many traces of inhabitation. People used to exploit phosphate deposits in 1920... There are three wells, one of them being natural water well. There is also a water tank. Buildings are very sloppy... Plants and trees include coconuts, bananas, pineapples, fan gua, etc. The above...suffices to indicate that fishermen recently lived here...

168 FM-PRC, The Issue of South China Sea, Pt 2, above n.6.
(4) Loaïta Island [i.e., Nanyue Island]...Plants on the island include meng trees, coconut trees and other trees. There are no residents for the time being, but vestiges of human inhabitation remain fresh. Fragrant joss sticks placed before a shrine are still there. Under a big tree is a thatched cottage, beside which there is a teakettle and a furnace...

(5) Thitu Island [i.e., Zhongye Island]...There are meng trees, one coconut tree and several other big trees on the island. Five fishermen from China’s Hainan Island are living here this year. There is one well of natural water, yielding enough water for the five men to drink. Besides fishing, these men plant coconuts, bananas and fan gwa, and also exploit phosphate deposits.

(6) Shuang Islands [literally Twin Islands, also known as Two Islands], the northernmost islands in the [Nansha] Islands....The Northeast Island has been named Is. Allette [the North East Cay, i.e., Beizi Island]. Phosphate deposits on the island have not been exploited. No one is currently living here. There are only a few thatched cottages left. The French wrote the following large words on a cottage with white powders: “French vessels have been here and raised the French flag. France has occupied the two islands. Chinese fishermen were fishing here, but that already became past history.”

(7) On the Southwest Island [South West Cay, i.e., Nanzi Island], there are seven Chinese people, including two children, all from Hainan Island. Food supplying boats did not come last year, but food deposits are still enough. [The Chinese] are raising tens of chicken...

In addition to the above seven islands, there are also...two small islands, the Nam Yit Island [now the Hongxiu Island] neighboring the Itu Aba Island, and the [West York, now Xiyue] Island near Loaïta Island. There are all together nine islands [claimed by France], three of which are currently inhabited by Chinese. The other islands are also frequented by Chinese from time to time. Whether these inhabited islands are the so-called terra nullius under international law, and whether France could unilaterally occupy and claim as its own, are seriously questionable.169

The resistance of Chinese residents on the French-claimed islands in the Nansha group is also evidenced in the interviews of some Chinese fishermen of Hainan Island conducted by the late Professor Han Zhenhua and his team during the 1970's. Here's the notes taken during one of the interviews:

On June 30, 1977, we interviewed the old fisherman Fu Guohe (72 years old) of the Xingguang Village of Longlou Commune, Wenchang County, Hainan Island. He recalled: When he was in his 20's and 30's, he spent a total of seven to eight years fishing in the Nansha Islands. His fellow village man Fu Hongguang (deceased in 1976) not only refused to raise the foreign flag which the foreigners (i.e., the Frenchmen) gave him and requested him to raise on the Niaozi Zhi (now the Nanwei Island), but also tore it up afterwards, in order to show his resolute resistance...

More importantly, when and after the French invasions of some of the islands in the Xisha and Nansha Islands took place, the Chinese Government repeatedly reaffirmed her title to the South China Sea Islands and lodged her protests against the French actions. According to a Chinese newspaper, the Chinese Foreign Ministry Spokesman, on July 26, 1933, made the following statement:

The coral islands between the Philippines and Vietnam have been inhabited by Chinese fishermen only, and have been recognized by the international community as China’s territories. We are shocked to have received the official French journal announcing France’s formal occupation. The French Government makes no justification for its actions. This [Foreign] Ministry, in addition to instructing by wire the Chinese Embassy in France to make inquiries for clarifications, is also actively considering countermeasures together with the Ministry of Navy, and will put forward serious protests over the French actions.

Meanwhile, the Guangdong Provincial Government, which was charged with special responsibility to deal with the French authorities because of Guangdong’s jurisdiction over the South China Sea Islands and its proximity

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170 Han Zhenhua, et al., above n.54.
172 “France Occupies Nine Islands in Yue Hai [i.e., the South China Sea]; Foreign Ministry Protests,” Shen Bao [《申报》], July 27, 1933, quoted in Han Zhenhua, et al., above n.54.
to Vietnam, also lodged a strong protest to the French authorities. The same newspaper reported:

The Southwest Commissioner is seriously concerned with the incidents of France occupying the coral islands, and will do everything he can to preserve China's sovereignty over these island groups. Xiao Focheng [, the identity of whom is unclear.] states today that the Yue [i.e., Guangdong] Provincial Government, upon instructions, has already lodged protests to the French authorities. The Southwest Commissioner is submitting this matter to the world public in request for justice.173

On August 4, 1933, China notified the French Government that China reserved her rights to the coral islands in question pending an investigation. The diplomatic note, delivered by the Chinese Ministry of Foreign Affairs to the Minister of the French Legation in Nanjing, stated:

The Chinese Government is very much concerned with this matter [i.e., the French-declared occupation of and sovereignty over nine islands in the South China Sea]. She hereby requests Your Excellency, the Minister of the French Legation, to inquire into and ascertain the name, the exact location and the longitude and latitude of each island and report the same to the Chinese Government. Pending such investigation and verification, the Chinese Government reserves her titles vis-à-vis the afore-mentioned declaration of the French Government.174

When the names and locations of the nine islands claimed and occupied by the French later became known, it was apparent that these islands were in fact among China's Nansha Islands (then known as Wanli Shitang and various other names), Ambassador Wellington Koo (Gu Weijun) of China to France, subsequently delivered China's protest against the French occupation, stating that those islands and the entire Spratly Islands (Nansha Islands) were the territory of the Republic of China.175

173 Shen Bao, Aug. 2, 1933, quoted in Han Zhenhua, et al., above n.54.
175 Hungdah Chiu & Choon-Ho Park, Legal Status of the Paracel and Spratly Islands, 3 Ocean Dev. & Int'l LJ. (1975), 1, 12. See Tao Cheng, South China Sea, above n.157, 268-269.
Shortly after the Second World War, France once again laid claims to some of the islands in the South China Sea. The Chinese Government repeatedly rejected the French claims by reiterating China’s sovereignty over those islands. On January 19, 1947, for example, in response to a re-emerging French claim to the Xisha Islands, the Chinese Embassy in France issued a public notice, stating that the Xisha Islands are China’s territory. On January 21 of the same year, the Chinese Foreign Ministry delivered a diplomatic note to the French Embassy in Nanjing to reject the French claims, stating that the Xisha Islands belong to China. On January 28, 1947, upon learning of France’s invasion and occupation of the Shanhu Island, the Chinese Foreign Ministry delivered another diplomatic note to the French Embassy in strong protest of the French action.

In November 1947, the Chinese Ministry of Internal Affairs renamed many of the islands on the basis of comprehensive surveys conducted jointly by the navy and the Ministry of Internal Affairs officials.

III.M.iii. The People’s Republic of China

Since 1949, the Chinese Government has on numerous occasions repeated her indisputable sovereignty over the entire four island groups in the South China Sea, issued various declarations and statements protesting against each and every foreign claim to and invasion of any part of the South China Sea Islands within the sphere of China’s claimed boundary, and invariably declared that any foreign occupation of, or any foreign action concerning the ownership of the South China Sea Islands, particularly the Nansha and Xisha groups, would be illegal and invalid.

Several important facts in the history of the PRC are worth mentioning here. The first of such facts was Premier and Foreign Minister Zhou Enlai’s “Statement on the United States’ and Great Britain’s Draft Treaty of Peace with Japan and the San Francisco Conference” issued on August 15, 1951. The Statement states, in part:

The Xisha Islands and Nansha Islands, like the Dongsha and Zhongsha Islands, have always been China’s territory. China’s sovereignty over the

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176 Lin Jinzhi, above n.75, 193.
177 Ibid.
178 Ibid.
179 Ibid.
Xisha Islands and Nansha Islands shall not be affected no matter whether the U.S./U.K. Draft Peace Treaty with Japan would contain provisions [pertaining to these islands] and how it would provide [for them].

On May 29, 1956, in protest of the Philippines’ claims of May 1956 to some islands in the Nansha island group, the Chinese Foreign Ministry issued a Declaration of Sovereignty over the Nansha Islands to the effect that the Taiping Island and Nanwei Island in the South China Sea, together with the small islands in their vicinity, are known in aggregate as the Nansha Islands. These islands have always been a part of Chinese territory. The PRC has indisputable, legitimate sovereignty over these islands. The Declaration emphasized that “China’s legitimate sovereignty over the Nansha Islands shall under no circumstances be violated by any country on any ground or by any means.”

On September 4, 1958, the Chinese Government issued the PRC’s Declaration on Territorial Sea. Articles 1 and 4 of the Declaration expressly stated that the Xisha Islands and Nansha Islands, as well as the Dongsha and Zhongsha Islands, are China’s territory since ancient times, and that the principles of the Declaration shall equally apply to these island groups.

On February 27, 1959, in protest of South Vietnam’s continuing encroachments upon some of the islands in the Xisha Group and its abduction of Chinese fishermen off Chenhang Island (Duncan Island), the Chinese Foreign Ministry lodged a strong protest, reiterating that “the Xisha Islands are China’s territory.”

On July 16, 1971, in protest of increased encroaching activities of Vietnam, the Philippines and Malaysia in the South China Sea Islands, the Chief of the General Staff of the PLA stated that “the Xisha and Nansha Islands have always been China’s territory.”

In response to South Vietnam’s increased occupations of and claims to islands in the South China Sea in 1973, the spokesman of the Chinese Foreign

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182 FM-PRC Documents, above n.181, vol. 4, 62. See also Greenfield, above n.70, 33.
183 Ibid.
186 People’s Daily, July 17, 1971, 5.
Ministry issued a statement on January 11, 1974, warning against South Vietnam’s territorial claims over the Taiping Island, the Nanwei Island and more than 10 other islands, and reiterating China’s indisputable sovereignty over the Nansha, Xisha, Zhongsha and Dongsha Islands.\footnote{Ibid, Jan. 12, 1974, 1.}

Ignoring China’s “repeated warnings,” troops of the “Saigon South Vietnam regime,” starting from January 15, 1974, constantly intruded into China’s territory, territorial waters and air space around and over the Xisha Islands. On January 17, the Saigon troops forcibly occupied the Ganquan Island (Robert Island) and Jinjin Island (Money Island), and removed Chinese flags on the islands. On January 18, the Saigon forces attacked Chinese Fishing Vessels No. 402 and 407, totally disabling Fishing Vessel No. 407 near the Lingyang Reef (Antelope Reef). On January 19, 1974, at about 7:00 am, the Vietnamese forces attempted to occupy the Chenhang Island (Duncan Island), fired at Chinese fishermen on the island, causing a number of deaths and wounds. The Chinese fishermen and militia were forced to fight back in self-defense, expelling the intruders’ attacks. At 10:20 am the same day, South Vietnamese naval vessels began firing at the Chenhang Island. At 10:30 am, four Vietnamese military airplanes bombed and raked the Chenhang Island. At the same time, four South Vietnamese naval forces opened fires at patrolling PLA vessels in the Xisha Islands.\footnote{“China’s Fishermen and Navel Vessels Forced to Fight Back in Self-Defense against the Saigon South Vietnam Regime Outrageous Encroachments upon China’s Xisha Islands,” People’s Daily, Jan. 20, 1974, 1.} The Chinese naval patrollers had no choice but to fight back “in self-defense against invading South Vietnamese troops,” sinking one Vietnamese navel vessel and repulsing three others.\footnote{Ibid.} By January 20, 1974, the Chinese soldiers, with the help and cooperation of local Chinese fishermen and militia, had recovered the Ganquan Island, the Jinjin Island, and the Shanhu Island (Pattle Island), completely defeating the intruding South Vietnamese forces.\footnote{People’s Daily, Jan. 21, 1974, 1.}

The Chinese Foreign Ministry, in its declaration of January 20, 1974, reiterated that the “Xisha Islands, Nansha Islands...have always been China’s territory.”\footnote{Ibid, Jan. 21, 1974, 1.} On February 4, 1974, the spokesman of the Chinese Foreign Ministry, in his declaration in strong protest against the South Vietnamese intrusion and occupation of the Nanzi Island (South West Cay) and several others of the Nansha Islands, once again pointed out: “The Nansha Islands, Xisha Islands, Zhongsha Islands and Dongsha Islands, are all part of Chinese
territory. The People’s Republic of China has undisputable sovereignty over these islands and their surrounding sea area.”

At the second meeting between Chinese Vice Foreign Minister Han Nianlong and his Vietnamese counterpart on April 26, 1979, the Chinese Vice Foreign Minister made the following statement:

The Xisha Islands and Nansha Islands have always been an inalienable part of Chinese territory. The Vietnamese part should come back to its original position of recognizing that fact, respect China’s sovereignty over these two sets of islands, and withdraw all its personnel from those islands of the Nansha Islands which it occupies.

In his statement of September 26, 1979, the spokesman of the Chinese Foreign Ministry reiterated that China has undisputable sovereignty over the Xisha Islands and Nansha Islands and their surrounding sea areas. He emphasized that the natural resources in these areas are China’s property.

On January 30, 1980, the Chinese Foreign Ministry issued an official document titled “China’s Sovereignty over the Xisha Islands and Nansha Islands Indisputable.” The document cited a significant amount of historical material, records, maps, and cultural relics to demonstrate that these islands have been China’s territory since no later than the Song Dynasty.

On November 14, 1983, Qi Huaiyuan, the Head of the Press Division of the Chinese Foreign Ministry, made the following statement at a press conference:

Recently, the Danwan Reef located within China’s Nansha Islands was illegally occupied by foreign armed forces; some other countries subsequently made territorial claims towards certain islands and reefs of China’s Nansha Islands. China has undisputable sovereignty over the Nansha Islands and the surrounding sea areas, and the natural resources within such areas are China’s property. China’s legitimate sovereignty over the Nansha Islands is under no circumstances allowed to be violated by any country on any ground by any means. Any and all occupations,

194 Ibid, Sept. 27, 5.
exploration, exploitation and other activities in the Nansha Islands areas by any foreign country are all illegal and impermissible.\footnote{Ibid, Sept. 15, 1983, 1.} 

In May 1987, the PLA dispatched naval vessels to the Nansha Islands area to perform patrols.\footnote{Lin Jinzhi, above n.75, 196.} On February 12, 1988, the spokesman of the Chinese Foreign Ministry stated that China’s normal patrols and other operations in some of the Nansha Islands and their surrounding waters are matters which are entirely within China’s sovereign rights, and that Vietnam had no right to interfere.\footnote{People’s Daily, Feb. 23, 1988.} On March 14, 1988, Vietnamese naval vessels opened fire at China’s naval patrol forces which were conducting surveys on the Chigua Jiao Reef (Johnson Reef; also known as Mabini Reef). The Chinese forces were compelled to return fire in self-defense.\footnote{Ibid, March 16, 1988.}


On May 11, 1995, in reference to the Philippines’ encroaching activities in the Nansha Islands, Shen Guofang, the spokesman of the Chinese Foreign Ministry, accused the Philippines of these moves, and reiterated China’s “irrefutable sovereignty” over the Nansha Islands.\footnote{China slams U.S. over interference in Spratlys issue, Asian Political News, May 15, 1995, available at 1995 WL 2225274.} Shen stressed that “China is an independent state and is a country which will stick to its principles and will not bend down in the face of any pressure. China will not give limitless
tolerance to these encroachments and provocations on China's sovereignty and dignity.”

On May 15, 1996, the Standing Committee of the NPC of China passed a Decision to Ratify the United Nations Convention on the Law of the Sea. The Decision declares that China reiterates its titles and rights to the various islands referred to in Article 2 of the 1992 Law on Territorial Sea and Contiguous Zone, which include the Xisha and Nansha Islands. Meanwhile, China issued her “Declaration...on the Baselines of the Territorial Sea of the People's Republic of China.” The Declaration announces the baselines “of part of [China's] territorial sea adjacent to the mainland and those of the territorial sea adjacent to [the] Xisha Islands,” and states that the baselines for the Nansha Islands and other islands of China are to be issued separately.

On June 329, 1999, Zhang Qiuye, Spokeswoman for the Chinese Foreign Ministry, commented on the reportedly Malaysian construction of facilities on the Yuye Ansha (Investigation Shoal) and Boji Jiao (Erica Reef) of the Nansha island group. She said China has irrefutable sovereignty over the Nansha Islands and their adjacent waters, and that the construction of facilities on the Yuye Ansha and Boji Jiao, by whatever other country for whatever purposes, had already constituted an encroachment upon China's territorial sovereignty, and would therefore be illegal and null and void. She added that the Chinese Government had sent a diplomatic Note of Protest to Malaysia, demanding the latter to undo what it had been doing, and stop its encroachments upon China's territory.

On March 2, 1999, the Chinese Foreign Ministry Spokesman, Zhu Bangzao, expressed China's strong protests over the Philippines' construction of airport runways and other military installations on the Zhongye Island (Thi Tu Island). Reiterating that the Zhongye Island is an integral part of the entire Nansha island group, over which China has indisputable sovereignty, he said the Philippines' conduct constituted a grave violation of China's territorial

203 Ibid.
sovereignty. 207 On January 27, 2000, the Chinese Foreign Ministry spokesman reiterated China’s indisputable sovereignty over the Nansha Islands, and “warned the Philippines not to create any new ‘trouble’ in the South China Sea.” 208

On February 13, 2001, the Chinese Foreign Ministry spokesman, Zhu Bangzao, reiterated China’s “indisputable sovereignty over the Nansha Islands and the adjacent waters” when expressing China’s “serious concerns” over reports that Vietnam was planning to install an administrative function in the Nansha area. 209 “Any unilateral act by any other country concerning the Islands,” he stated, “will constitute an infringement upon China’s territorial sovereignty and will be illegal and null and void.” 210

On March 20, 2001, when rejecting the Philippines’ claim of March 15, 2001 to the Huang Yan Island (Scarborough Shoal), the Chinese Foreign Ministry spokesperson made the following remarks:

The Huang Yan Island is China’s innate territory and the waters around it is the traditional fishing area for the Chinese fishermen, for which China has abundant historical and jurisprudence backings. Ever since the ancient times, numerous documents on the Chinese history have put down definitely in writing that the Huang Yan Island belongs to China’s territory. The fact that China has sovereign right and exercises jurisdiction over the Huang Yan Island is widely respected by the international community.

The Huang Yan Island has never been within the territorial limits of the Philippines. A series of treaties on the delimitation of the Philippine territory have stipulated explicitly that the demarcation line in the west of the territorial limits of the Philippines is at 118 degree east longitude while the Huang Yan Island is to the west of it and a component part of China’s Zhongsha Islands. The map published by the government of the Philippines also clearly indicates that the Huang Yan Island is not within the Philippine territorial limits. 211

210 Ibid.
211 People’s Daily, Mar. 21, 2001, 1.
When commenting on the Philippine navy’s boarding some 10 Chinese fishing boats near the Huang Yan Island and confiscating some fishing equipment and catches a week earlier, the spokesperson stated that since the Huang Yan Island is an innate part of the Chinese territory and its adjacent waters is a traditional fishing area for Chinese fishermen, the fishing activities of the Chinese fishermen in the waters near the Huang Yan Island were “proper and normal.” The spokesperson added that the Philippines “has no right whatsoever to go aboard the Chinese boats in the waters around the Huang Yan Island for inspection and take any measure.”

The above are but some examples of China’s efforts in protecting and maintaining China’s sovereignty over the South China Sea Islands. The Chinese claims of sovereignty and objections to foreign assertions concerning the South China Sea Islands have been persistent and consistent throughout history, and such claims and efforts are continuing.

IV. Conclusions

The above analysis shows that China has strong and convincing evidence of sovereignty over the Xisha and Nansha Islands. Nevertheless, over the years since I became interested in the issue of the sovereignty over the South China Sea islands, I have read and heard scholars and non-scholars questioning the historical bases of China’s sovereign claims to the Xisha and Nansha Islands. For example, Joyner, citing the Legal Status of Eastern Greenland case, writes that “discovery only creates inchoate title, which must be perfected by subsequent continuous and effective acts of occupation, [i.e.]...permanent settlement,” and that “[e]vidence of such permanent settlement is not compelling in the case of China’s claim to the Spratlys.” Clagett, in his opinion paper commissioned by Vietnam, took a similar line of argument. Finally, an unsigned commentary published on the web also took a similar line, and seized upon an alleged Chinese government report published in 1928 that allegedly did not mention the Nansha (Spratly)
This unsigned commentary gives no citation to this alleged report, nor does it mention which office issued it, or what purpose the report served.

What Joyner, like others, relies upon is the general rule of modern international law on the acquisition and perfection of territorial title. The general rule had been earlier outlined in the Island of Palmas Arbitration, which is regarded a landmark case containing a more authoritative statement of the general rule, but to which Joyner makes no reference. He, like many commentators, fails to consider the other side of the Legal Status of Eastern Greenland case that states an important exception to the general standard, an exception which governs the acquisition of title to thinly populated or unsettled territory, and which I will discuss shortly.

It is true that, surviving historical records, judged against the above-referred-to general rule governing the acquisition of titles in normal territorial situations, when viewed piece by piece, may seem less than overwhelming. However, a single piece of evidence, no matter how probative, does not necessarily in itself suffice to lead to a conclusion in one direction or the other. One cannot look at the largely scattered pieces of evidence in isolation from one another, nor can he or she neglect to ask the questions of what types of territorial situations are at issue and therefore what rules of law (or exceptions thereto) should be the governing law.

What I mean is as follows. In the first place, we must weigh the evidence in its totality rather than in a piece meal fashion. Putting aside the question of which side has genuine and reliable historical records, an issue I intend to specifically deal with at a later time, and assuming that all evidence put forward by the claimants is genuine and credible, we must decide in whose favor the totality of the evidence weighs on the balance. As far as I am aware, none of the other claimants to the South China Sea Islands, according to the Eastern Greenland standard, has made out a "superior" claim over that of China's—their claims came rather too late to defeat China's title. In the absence of more compelling contrary evidence, the afore-discussed lines of historical materials, which by no means are exhaustive, do constitute in their entirety an abundance of overwhelming evidence sufficient to make the

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216 Quoted in: <http://members.tripod.com/paracels74/chinaargument.htm> (Paracels Forum) (author and source of publication unspecified).
218 See text accompanying below n.226.
219 See text accompanying below n.227.
balance in China’s favor. This is so even under the general international law rule governing the acquisition of territorial title in normal situations.220

Secondly, assuming the alleged 1928 Chinese report mentioned in the unsigned commentary mentioned above did exist, the existence of which nevertheless needs to be verified, such alleged evidence, even coupled with other China-disfavored evidence, if any, in no sense appears to reach a level sufficient to chip away at the totality of the evidence in China’s favor.

If such a neglect did exist, it could only be inadvertent, and thus not meaningful, and could not constitute any abandonment or disclaimer of China’s sovereignty over the areas in question by any scale. The unnamed author did not tell us which government office issued the report or for what purpose the report was issued. Without such information, one cannot give the report any value, even under normal circumstances. Besides, China was constantly at civil wars in the first half of the 20th century, particularly in the 1910’s, 1920’s, and 1930’s, resulting in a China with one country and two and sometimes several governments, none of which at times could speak for the entire country. If, for the sake of argument, any maps and publications published during these periods did neglect to mention the South China Sea Islands, even if under official color, they could hardly be considered to represent the true and real official position of China as a country. Indeed, the very first relevant official map approved by the Chinese central authorities after the 1911 Revolution was not published until 1935,221 a fact that places the alleged 1928 Chinese “official” report in serious doubt.

Most importantly, neither Vietnam, nor the Philippines, nor any other contender to the South China Sea Islands, has presented any “superior” map or other document covering the same period of time in history as China does. Regardless of the existence or non-existence of the alleged 1928 report, and absent any “superior” map or claim by other claimant in light of the standard outlined in the Eastern Greenland case,222 the abundance of Chinese maps and other documents in China’s favor suffices to support China’s claims to the South China Sea Islands.

Thirdly, the principle of inter-temporal law requires that when dealing with territorial disputes, the applicable law is not the law that is in effect when the disputes arise or are submitted for resolution; rather, the law that was in effect at the time of alleged acquisition governs. Under pre-18th century rules of international law, discovery alone, or at most discovery along with some

221 See text accompanying above n.118-119.
222 See text accompanying below n.227.
form of symbolic acts, was all that was required to establish title to territory. Under the then applicable law, China had long before discovered the South China Sea Islands, and had done more than mere symbolic acts to display her authorities. Therefore, China had unquestionably acquired title to the South China Sea Islands before any foreign claims arose, regardless of whether China was aware of the existence of *general* rules of international law at that time.\(^{223}\)

Fourthly, while the general rules requiring actual and continuous display of authority in *regular* and *normal* territorial situations, as were typically outlined in the *Palmas* and the *Eastern Greenland* cases,\(^{224}\) continue to be the general law, one must take into account the enormous *irregularity* and *abnormality* of the South China Sea Islands as well as an important exception to the general rule, *i.e.*, the exception that governs the establishment of sovereignty over *abnormal* territories requiring little actual display of authority. This exception to the general rules of present-day international law has been well delineated in a number of holdings of international tribunals, and widely supported by State practice and scholarly writings.\(^{225}\)

The Permanent Court of Arbitration in the *Palmas* case, while mainly discussing the general rule, wasted no time in recognizing the exception. It held that the displays of “territorial sovereignty assume...different forms, according to conditions of time and place,” that while “continuous in principle, sovereignty cannot be exercised in fact at every moment on every point of a territory,” and that “the intermittence and discontinuity compatible with the maintenance of the right necessarily differ according as [sic] inhabited or uninhabited regions are involved...”\(^{226}\)

In the *Legal Status of Eastern Greenland* case, the Permanent Court of International Justice similarly observed and upheld that “in many cases the tribunal is often satisfied with very little in the way of the actual exercise of sovereign rights, provided that the other state could not make out a superior claim,” and that “[t]his is particularly true in the case of claims to sovereignty over areas in thinly populated or unsettled countries.”\(^{227}\)

The *Clipperton Arbitration* tribunal stated this exception to the general rule in crystal clear tones: Although the exercise of effective sovereignty *normally* required the establishment of an administration “capable of securing respect of

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\(^{224}\) Ibid, 10-11.
\(^{225}\) Ibid, 11-15.
\(^{226}\) Island of Palmas, above n.215.
\(^{227}\) Eastern Greenland, above n.213.
the sovereign’s rights, this was not necessary in the case of uninhabited territory at occupying state’s absolute and undisputed disposition.”

The International Court of Justice, in the *Western Sahara* advisory opinion, similarly held that even an “insignificant display of sovereignty” can establish sovereignty over an unpopulated or barely inhabited area. Indeed, as has been rightly stated, “[i]n a remote, uninhabited territory the degree of authority actually displayed may be relatively small, whereas in a populated area the degree must be greater.”

Few territorial features in the world, perhaps, can more adequately be described as “remote” and/or “uninhabited” than the South China Sea Islands. Except for a few in the *Xisha* Islands, the South China Sea Islands are so hard to sustain human settlement on a permanent basis that they are virtually entirely uninhabitable. Even the Yongxing Island (Woody Island) in the *Xisha* group, the very largest one, did not have potable water until 1996. Given the high *abnormity* and *uninhabitability* of the South China Sea Islands that China undeniably discovered, it is clear that the general rule of territorial acquisition does not apply; rather, the exception to the general rule governs. In other words, China did not, and does not, need to display such extensive acts of sovereignty as required by the general rule, e.g., transporting migrants, setting up administrations and/or stationing troops, in order to perfect or maintain her already established sovereignty over the *Xisha* and *Nansha* Islands and their adjacent seas. All that may be required of China under the exception to the general rule of international law is to exhibit some form of symbolic authority over these self-discovered uninhabitable territories, a test which China has far more than satisfied over a period of more than two thousand years.

Before concluding, I feel compelled to come back to the allegations that China was making expansions in the South China Sea, or that China was claiming or occupying parts of the *Nansha* island group by stealth or force. As demonstrated in the above analysis of historical evidence, these areas have already been within Chinese control and under her sovereignty since ancient times. Any allegation that China was making expansions in the South China Sea, or that China was claiming or occupying parts of the *Nansha* island group

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231 See text accompanying above n.11-12.
by stealth or force falls apart. To the contrary, China has simply been safeguarding what’s rightfully her own.

As a peace-loving nation, China has exercised an extreme degree of forbearance, tolerance and self-restraint in the face of frequent and offensive foreign claims, intrusions and occupations, so as to avoid armed conflicts and maintain peace and stability in the region and good relationship with the other claimant parties. This high degree of self-restraint, however, should not be interpreted as a limitless one. Nor should it be read to mean that forcible recovery could never be an option. As the titleholder, China has the right to decide whether, when and how to utilize these island chains and natural resources therein, to make and maintain physical presence there, and to install military and non-military facilities for the purpose of self-defense and/or protection of Chinese fishing and other economic and non-economic activities. She has the right to maintain peace and order in the area within her jurisdiction. She also has the right, if she so wishes and when she deems it necessary, to expel invading foreign occupiers as an alternative to diplomatic and political measures, although whether and when to exercise such right is entirely at China’s discretion as the titleholder. Peaceful settlement through negotiation, adjudication or otherwise, as all parties seem to prefer, must, of course, remain the desirable means.
Annex 275

The Dotted Line on the Chinese Map of the South China Sea: A Note

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In 1947, the then-Chinese government produced The Location Map of the South China Sea Islands (Nanhai zhudao weizhi tu, in Chinese). A discontinuous dotted line was on this map. This contribution looks at both the history of the creation of the dotted line and the opinions that have been expressed concerning the juridical status of the dotted line. Special attention is given to the historic title assertion.

Keywords historic rights, People’s Republic of China, South China Sea

Introduction

One of the continuing uncertainties impacting upon the island and ocean area sovereignty disputes in the South China Sea is the “dotted line” found on Chinese maps dating back to 1947. The dotted line is usually referred to as the “nine-dotted line” (since it is composed of nine dashes) or the “U-shaped line” in the South China Sea since this reflects the shape of the dotted line (see Figure 1). The dotted line encloses the main island features of the South China Sea: the Pratas Islands, the Paracel Islands, the Macclesfield Bank, and the Spratly Islands. The dotted line also captures James Shoal which is as far south as 4 degrees north latitude.

The purpose of this brief note is twofold: (i) to provide some detail on the history of the Chinese dotted line; and (ii) to provide a canvass of the opinion of scholars and others regarding the dotted line.

The Origin of the Dotted Line Marked on the Chinese Maps of the South China Sea

At the beginning of the 1930s, most Chinese maps were reproductions or based upon older maps. New fieldwork had not been undertaken for many years. These maps contained errors and some, without analysis, were copies of foreign-produced maps. As a result, Chinese ocean and land boundaries were not consistently shown on the various maps.
Figure 1. The nine-dotted line on the Chinese map of the South China Sea. (Source: Hasjim Djalal, “Conflicting Territorial and Jurisdictional Claims in South China Sea,” The Indonesian Quarterly, vol. 7, no. 1 (1979), 36 at 52.)
maps. This was obviously problematic for China as regards its sovereignty in the South China Sea.

To respond to this, in January 1930 the Chinese government promulgated The Inspection Regulations of Land and Water Maps (Shuilu ditu shencha tiaoli). Consultation between the Ministry of Internal Affairs, the Foreign Ministry, the Marine Ministry, the Ministry of Education, and the Committee of Mongolia and Tibet led to an extension and revision of the above regulations in September 1931 with The Revised Inspection Regulations of Land and Water Maps (Xiuzheng shuilu ditu shencha tiaoli). Following further consultations, a Land and Water Maps Inspection Committee, whose members were representatives sent by the relevant institutions and departments, was formed and started work on June 7, 1933.

The Land and Water Maps Inspection Committee made significant contributions to the defense of China’s sovereignty in the South China Sea. At the 25th meeting held on December 21, 1934, the Committee examined and approved both Chinese and English names for all of the Chinese islands and reefs in the South China Sea. In the first issue of the Committee’s journal published in January 1935, they listed the names of 132 islands, reefs, and low tide elevations in the South China Sea, of which 28 were in the Paracel Islands archipelago and 96 in the Spratly Islands archipelago. At the 29th meeting held on March 12, 1935, based on the various questions raised by the Ya Xin Di Xueshe, the Committee stipulated that “except on the large-scale national administrative maps of China that should delineate the Pratas Islands, the Paracel Islands, the Macclesfield Bank and the Spratly Islands, other maps need not mark or note these islands if the locations of the islands were beyond the extent of the maps.”

The Map of Chinese Islands in the South China Sea (Zhongguo nanhai daoyu tu) published by the Committee in April 1935 declared that China’s southernmost boundary should reach the 4º northern latitude. Thus the James Shoal was marked as being within the Chinese boundary. On the second map, The Map of Chinese Domain in the South China Sea (Haijiang nan zhan hou zhi zhongguo quantu) in the book The New Map of Chinese Construction (Zhongguo jianshe xin ditu), edited by Bai Meichu in 1936, the Pratas Islands, the Paracel Islands, the Macclesfield Bank, and the Spratly Islands were drawn as being within Chinese territory in the South China Sea. The boundaries of the islands were marked by national boundary lines showing that these islands belong to China. The southernmost national boundary line of the South China Sea Islands area was indicated as being the 4º northern latitude. The James Shoal was indicated as being within the national boundary. In the annotation of the map, the mapmaker states:

The six isles occupied by France in July 1933 together with the Macclesfield Bank and the Spratly Islands measured afterwards by the Nautical Bureau of the Marine were the living places of Chinese fishermen. The sovereignty, of course, belonged to China. In April 1935, the Chinese Central Inspection Committee of Land and Water Maps issued The Map of Chinese Islands in the South China Sea (Zhongguo nanhai daoyu tu) in its journal. The southern coastal areas extended to the James Shoal in the Spratly Islands, which was just at the 4º northern latitude. This was China’s southernmost coastal boundary in the South China Sea.

After the Second World War, the Chinese government regained possession of the Paracel and the Spratly Islands. In order to define and declare the extent of Chinese sovereignty around the Paracel and the Spratly Islands, at the beginning of 1947 the
Chinese Ministry of Internal Affairs adjusted the names of all the South China Sea Islands. The Spratly and the Paracel Islands were renamed on the basis of their geographic location in the South China Sea, and the names of the islands and reefs in other areas of the South China Sea were checked and announced by the Geography Department in the Ministry of Internal Affairs. The Ministry of Internal Affairs held discussions with other concerned departments on April 14, 1947.

There were three results of these discussions. First, the southernmost point of Chinese territory in the South China Sea was reaffirmed as being the James Shoal. This had become the standard adopted in the publications of Chinese government organizations, schools, and the press. Second, it was decided that the Ministry of Internal Affairs should demonstrate authority over the Paracel and the Spratly Islands by providing a detailed description of the islands, promulgate Chinese sovereignty over the islands, and ensure public notice of China’s authority over the islands. In addition, the Navy should try its best to station personnel on the islands. Third, when the fishing season around the Paracel and the Spratly Islands came, the Navy and the government of Guangdong Province should protect the fishermen who went out to the island areas and provide them with transportation and communication facilities. All of these actions manifest that the Chinese government of the time had defined the Chinese territorial sphere in the South China Sea.

For the purpose of specifying China’s territorial sphere in the South China Sea, the Geography Department of the Ministry of Internal Affairs printed *The Location Map of the South China Sea Islands* (Nanhai zhudao weizhi tu) in 1947. On this map, the Pratas Islands, the Paracel Islands, the Macclesfield Bank, and the Spratly Islands were shown as being part of China with the use of an 11-dotted line. The southernmost boundary was marked at 4º northern latitude. According to Wang Xiguang, who participated in the compilation of maps at the Geography Department of the Ministry of Internal Affairs, “the dotted national boundary line was drawn as the median line between China and the adjacent states.”

In February 1948, the Geography Department in the Ministry of Internal Affairs published *The Administrative Division Map of the Republic of China* (Zhonghua minguo xingzheng quyu tu) edited by Fu Jiaojin and compiled by Wang Xiguang and others. On the Map of China and its attached map—*The Location Map of the South China Sea Islands* (Nanhai zhudao weizhi tu)—the Pratas Islands, the Paracel Islands, the Macclesfield Bank, and the Spratly Islands were indicated as being part of the Republic of China’s territory. An eleven-dotted line was drawn around the above four features in the South China Sea and the southernmost line was about the 4º northern latitude. It was the first time that a map marked with the dotted line in the South China Sea was officially issued during the Kuomintang (KMT) period.

On the Map of China produced after the creation of the People’s Republic of China in 1949, the eleven-dotted line in the South China Sea appears to follow the old maps. It was not until 1953, after Premier Zhou Enlai’s approval, that the two-dotted line portion in the Gulf of Tonkin was deleted. Chinese maps published since 1953 have shown the nine-dotted line in the South China Sea.

Upon the declaration of the nine-dotted line, the international community at no time expressed dissent. None of the adjacent states presented a diplomatic protest. This silence in the face of a public declaration may be said to amount to acquiescence, and it can be asserted that the dotted line has been recognized for half a century. In recent years, however, several Southeast Asian countries, which have been involved in sovereignty disputes of the South China Sea, have questioned the juridical status of the nine-dotted line.
Opinions Concerning the “Dotted Line”

There is a wide variety of legal and political opinion concerning the legal effect of China’s dotted line in the South China Sea. The following canvass indicates that some take the view that the dotted line relates only to the enclosed islands, others believe that it asserts Chinese sovereignty over the waters, and still others link the dotted line to a claim of historic title over the waters.

Professor Gao Zhiguo, the director of the Institute for Marine Development Strategy, State Oceanic Administration, considers the nine-dotted line on the Chinese map as delineating ownership of islands rather than being a maritime boundary. He has concluded that, “[a] careful study of Chinese documents reveals that China never has claimed the entire water column of the South China Sea, but only the islands and their surrounding waters within the lines.” Professor Zhao Lihai of the Law Department of Beijing University has concluded that the nine-dotted line indicates clearly Chinese territory and sovereignty of the four islands in the South China Sea and confirm China’s maritime boundary of the South China Sea Islands that have been included in Chinese domain at least since the 15th century. All the islands and their adjacent waters within the boundary line should be under the jurisdiction and control of China.

Professor Zhao Guocai of Taiwan Politics University has written that, “The U-shaped line declared by the government of China is China’s maritime boundary line in the South China Sea.”

Zou Keyuan, a Research Fellow at the East Asian Institute of the National University of Singapore, has written:

On the one hand, it seems that China does not claim everything within the line as can be seen from its diplomatic notes, relevant laws and public statements. What China claims are the islands and their adjacent waters within the line (. . .) On the other hand, a number of factors may give people the impression that China regards the line as its maritime boundary line.

Another statement of note is from a senior diplomat from Indonesia, Hasjim Djalal, who has questioned the dotted line and stated that, “There was no definition of those dotted lines, nor were their co-ordinates stated. Therefore, the legality and the precise locations of those lines were not clear.” He went on to comment that, “It was presumed, however, that what China was claiming, at least originally, was limited to the islands and the rocks, but not the whole sea enclosed by those undefined dotted lines.”

Pan Shiying, the late marine strategy expert, wrote, “It is beyond question that the ‘9-discontinued-and-dotted line’ marked on the Chinese map of the South China Sea is the sign/designation of China’s ‘historic title.’” Much of the debate over China’s “dotted line” has focused on the historic title issue; as a result, this issue will be explored in more detail.

Although there is no exact definition in international law for the concept of historic title, its existence as a concept and legitimate basis for claiming sovereignty over land and water is well recognized. For example, Article 15 of the 1982 United Nations Convention on the Law of the Sea stipulates that the delineation rule for overlapping territorial sea claims “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.”

According to Yehuda Z. Blum, “the term ‘historic rights’ denotes the possession by a State, over certain land or maritime areas, of rights that would not have been acquired by that State through a process of historical consolidation.” He further explains that “historic rights are a product of a lengthy process comprising a long series of acts, omissions and patterns of behavior which, in their entirety, and through their cumulative effect, bring such rights into being and consolidate them into rights valid in international law.” Another scholar has noted that the concept of historic waters rests upon customary law. It was not dealt with in either the 1958 Territorial Sea Convention or the 1982 CLOS and discussion of the issue was quite limited at both UNCLOS I and III. Although disagreement remains on the scope and interpretation of the doctrine, the three elements generally considered to be involved in establishment of historic title are effective exercise of sovereignty, prolonged usage and the toleration of other states. These three elements are the factors required for a state to successfully assert a claim to historic waters: (1) states which claim historic title should exercise sovereignty in the waters; (2) the exercise of sovereignty should have been continuous for a long time and should have become the usage; and (3) it should be tolerated by other states. These three factors were mentioned in the document Juridical Regime of Historic Waters, Including Historic Bays, provided to the International Law Committee by the United Nations Secretariat on March 9, 1962.

Where an historic waters claim is successful, the jurisdiction within the area is exclusive. Claiming states can treat them as internal waters or territorial seas. Since the 1947 announcement of the dotted line in the South China Sea, the government of China has seldom practiced this kind of exclusive rights over the waters within the line. The occasional exercise of exclusivity is only focused on the islands within the line, but not the waters. Foreign vessels still sail or fish without control in waters within the line. So it has been doubted whether the waters within the line can be called historic waters. A Vietnamese scholar once questioned thus:

The historic waters, according to the International Law of the Sea, mean waters that follow the system of internal waters. States which own the historic waters exercise the highest and full sovereignty in the waters, just as in their land territories. From the reality of the South China Sea, China has never exercised national sovereignty here at any time, especially in waters within the “9-discontinued-and-dotted line.” The obvious fact is that States within and without this region have navigated freely in the region’s waters for a long time.

Taiwan has reportedly deemed “the entire area within the U-shaped line to be China’s historical waters.” A Taiwan scholar has explained:

Since the declaration of the 9-discontinued-and-dotted line, the international society at that time had not put forward any dissents. Neither had the adjacent States raised any diplomatic protests on the 9-dotted line. These amounted to acquiescence. After that, quite a lot of maps produced abroad were all
delineated in this way and indicated as pertaining to China. China owns the historic right of islands, reefs, shoals, banks, and waters within the 9-dotted line. The South China Sea is regarded as the historic waters of China, which was universally acknowledged at that time. So far it has lasted for half a century.18

More than half a century has passed since the production of the discontinuous and dotted line in the South China Sea. For over half a century, the Chinese government has continuously reasserted through domestic legislation that the islands within the line are part of Chinese territory. On the basis of Blum’s quote, after such a long time China can be said to have historic rights as regards the islands in this region. The 1998 PRC EEZ/Continental Shelf Law stipulates: “The provision of the Law will not affect the People’s Republic of China’s claim of historic rights.” The Law does not further interpret the precise meaning of the phrase “historic rights,” but we can imagine that it is related to the historic rights of the region within the dotted line of the South China Sea. The containing of historic rights in the EEZ/Continental Shelf Law manifests that the rights do not derive from historic waters. It also shows that China no longer regards the waters within the dotted line as historic waters, because historic waters can only be treated as internal waters or territorial seas, but cannot be included in exclusive economic zones and continental shelves.

Zou Keyuan, in a recent article, noted that historic rights are divided into two types: one exclusive with complete sovereignty, e.g., historic waters and historic bays; the other nonexclusive without complete sovereignty, e.g., historic fishing rights in high seas.19 This scholar deems that the historic rights claimed by China are unique and different from the above-mentioned two types, with the result that China’s claim should not be considered as “a claim of historic waters in the traditional sense,” for it is connected with the exclusive economic zone (EEZ)/continental shelf regimes.20 He calls China’s claim of historic rights as “historic rights with tempered sovereignty,” and thinks this kind of claim contains sovereign rights and jurisdiction, but not complete sovereignty. He writes:

Such sovereign rights are exclusive for the purpose of development of natural resources in the sea areas and jurisdiction in respect of marine scientific research, installation of artificial islands, and protection of the marine environment. It is obvious that such a claim to historic rights is not only a right to fisheries, but to other resources and activities as well.21

Though some states object to China’s claim of historic rights and criticize it as not being in conformity with international regulations, the above scholar has stated: “China has set a precedent in the state practice relating to historic rights. It is not clear whether China’s practice establishes a rule in international law, but it may already be influencing the development of the concept of historic rights.”22

Conclusion

The views herein, as supported by the evidence, is that the dotted line has a dual nature. In April 1947, the Chinese Ministry of Internal Affairs of the Republic of China, in a transmission of the results of their discussions with the representatives of other departments to the government of Guangdong Province noted that “the southernmost Chinese territory sphere in the South China Sea should reach the James Shoal.” The transmission
continued: “Please note and act according to the official document on the definition and declaration of the sphere and sovereignty of the Paracel and the Spratly Islands.” It was evident from this that the dotted line then defined the sphere and the sovereignty, or the ownership, of the Paracel and the Spratly Islands. Nevertheless, the dotted line shown on the Chinese map is also China’s maritime boundary in the South China Sea because of two characteristics of the dotted line. First, the location of the dotted line followed the international principles regarding maritime boundaries then in existence in that it was drawn as an equidistance/median line between the isles and reefs at the outer edge of China’s South China Sea islands and the coastline of neighboring adjacent states. Second, the dotted line was the manner of designating a claimed national boundary line. Thus, “the nine-dotted line” had a dual nature. Not only did it define China’s sovereignty over the South China Sea Islands, but it also played the role of China’s claimed ocean boundary in the South China Sea. The lines therefore can be called the Chinese traditional maritime boundary line in the South China Sea.

Notes

4. See Celiang xisha nansha qundao shatoujiao zhongying jieshi [The Sino-British Terminus in Shatoujiao of the Measurement of The Paracel and the Spratly Islands], the Governmental Archives of Guangdong Province.
13. Ibid., at 121.


18. See Zhao Guocai, supra note 8, at 22.


20. Ibid.

21. Ibid.

22. Ibid.

23. See Han Zehua, supra note 3, at 181.